

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA



NOTIFICATION TO THE PARTIES

BIENNIAL REPORT CROATIA

2007-2008

A. General information

Party	CROATIA
Period covered in this report: 1 January 2003 to 31 December 2004	1 January 2007 to 31 December 2008
Details of agency preparing this report	Ministry of Culture
	Nature Protection Directorate (further in the text - MC-NPD).
	Runjaninova 2
	HR-10000 Zagreb
Contributing agencies, organizations or individuals	Directorate for Nature Protection Inspection in Ministry of Culture

B. Legislative and regulatory measures

1	Has information on CITES-relevant legislation already	Yes (fully)	\boxtimes				
	been provided under the CITES National Legislation	Yes (partly)					
	Project?	No					
	If yes, ignore questions 2, 3 and 4.	No information/unknown					
2	If any CITES-relevant legislation has been planned, draft following details:	ed or enacted, please provid	e the				
	Nature Protection Act (Official Gazette 70/05, 134/08)						
	Ordinance concerning the conditions of keeping protected animals in captivity, marking methods and keeping records thereof (Official Gazette 146/05)(entered into force on 20th December 2005)						
	Ordinance on proclamation of wild taxa as protected or strictly protected (Official Gazette 7/06) (entered into force on 24th January 2006)						
Ordinance on transboundary movement and trade in protected sp 34/06) (entered into force on 3rd April 2006)		otected species (Official Ga	zette				
	Title and date: Status:						

Brief description of contents:

Nature Protection Act (NPA) (Official Gazette 70/05, 134/08) - the MC-NPD is responsible for :

- granting authorisation for taking out, introduction, export or import and introduction from the sea of wild taxa, parts and derivatives thereof produced under NPA (Art. 101);
- keeping the register of natural or legal persons that become owners of protected animals with the purpose of keeping them in captivity (Art. 104)
- granting authorisation to natural or legal persons who intend to keep animals of indigenous or alien wild taxa in captivity with the scope of displaying those to general public in zoos, aquaria, terrariums or similar spaces (Art. 105);
- granting authorization to natural and legal persons who intend to breed indigenous or alien wild taxa, if those taxa are not a subject to lex specialis (like Hunting Act)(Art. 106);
- granting authorization to legal and natural persons who use live animals of indigenous or alien wild taxa for commercial purposes (Art. 107)
- granting authorization for keeping in captivity, breeding, selling and purchasing of certain specimens of strictly protected wild animal taxa, under specific conditions (Art. 99)
- granting authorization for placing on the market or export and import for trade purposes of certain strictly protected animals, fungi and plants
- granting authorization for export and import of certain strictly protected animals, fungi and plants for scientific purposes, for exchange, exhibiting and similar (Art. 99).

Ordinance on designation of wild taxa as protected or strictly protected (OG 7/06) providing: the list of strictly protected native species (Annex I) and strictly protected foreign species (Annex II), and the list of protected native species (Annex III) and protected foreign species (Annexes IV, V and VI)

Ordinance on conditions for keeping protected animals in captivity, marking methods and keeping records thereof (OG 146/05) lays down conditions to be met as regards manner of keeping protected animals in captivity, marking methods and record keeping procedures. For the purpose of this Ordinance, protected animals are animals of native and non-native wild species, protected as defined in Nature Protection Act, including pets that belong to wild species which are held as companion animals. The provisions of this Ordinance do not apply to the transport and quarantine conditions stipulated by special veterinary regulations.

Ordinance on transboundary movement and trade in protected species (OG 34/06) establishes the procedure and conditions for issuance of permits for taking out, introduction, import or export and introduction from the sea of wild taxa listed in Annexes I to X which constitute an integral part of this Ordinance, manner of marking of live animals and shipments, manner of surveillance and record keeping, as well as conditions for trade and breeding.

3	Is enacted legislation available in one of the working			Yes					
	languages of the Conv	ention?			No				
					No information				
4	If yes, please attach a	copy of t	he full le	gislative text or	legisl	\boxtimes			
	key legislative provisio	ons that were gazetted.			provided previously				
					not a	vailable	, will send		
					later				
5	Which of the following	issues ar	e addres	sed by any stric	ter	Т	ick all applic	able	
	domestic measures ad	•		sted species (in	accordar	nce			
	with Article XIV of the	Convent	on)?						
		Th	e condit	ions for:	The co	mplete	prohibition (of:	
	Issue	Yes	No	No	Yes	No	No informa	tion	
				information					
	Trade	\boxtimes							
	Taking								
	Possession	\boxtimes				\boxtimes			
	Transport								
	Other (specify)								
	Additional comments Some of the native protected species have stricter protection								
	which reflects on prof	nibition of	comme	rcial trade and	any taki	ng of a	nimals form	the	
	nature.								
	As the condidate country for isining the ELL Creatis has become visual training								
	As the candidate country for joining the EU, Croatia has harmonised national legislation with relevant Acquis Communautaire regarding transboundary movement and trade in								
		protected species. Some stricter measures than in CITES have enetered into force							
	(example: stricter prote								
	Appendix II species)			•			-		

6	What were the results of any review or assessment of the effectiveness of CITES legislation, with regard to the following items?					
	Item	Adequate	Partially Inadequate	Inadequate	No information	
	Powers of CITES authorities	\boxtimes				
	Clarity of legal obligations	\boxtimes				
	Control over CITES trade	\boxtimes				
	Consistency with existing policy on wildlife management and use					
	Coverage of law for all types of offences					
	Coverage of law for all types of penalties					
	Implementing regulations	\boxtimes				
	Coherence within legislation	\boxtimes				
	Other (please specify):					
	Please provide details if available	e:				
7	for the next reporting period? No No information Please provide details if available: In 2007 and 2008 MC-NPD has been implementing					
	the project "Implementation of Environmental Acquis related to the protection of wild fauna and flora by regulating trade therein". Project is financed by the Government of the Netherlands as one of the Netherlands Pre-accession Programmes. The project aimed to contribute to the accession of Croatia to the European Union and in particular the project aims to assist Croatia with the implementation of its tasks with regard to the trade in endangered species of wild flora and fauna. One of the results was the analysis and improvement of CITES legislation in Croatia. In period 2007-2008 fur assessment of existing CITES legislation has been done.					
8	Has there been any review of le in relation to implementation of	-	_	bjects Ti	ck all applicable	
	Subject		Yes	No	No information	
	Access to or ownership of natu	ral resources				
	Harvesting					
	Transporting of live specimens					
	Handling and housing of live spe	ecimens				
	Please provide details if availabl	e: See under 7	7			
9	Please provide details of any ad	ditional measu	ıres taken:			

C. Compliance and enforcement measures

		Yes	No		No rmation
1	Have any of the following compliance monitoring operat	ions been u	ndertak	en?	
	Review of reports and other information provided by traders and producers:				
	Inspections of traders, producers, markets	\boxtimes			
	Border controls				
	Other (specify)				
2	Have any administrative measures (e.g. fines, bans, suspensions) been imposed for CITES-related violations?			**************************************	
3	If Yes, please indicate how many and for what types of attach details. 2007	f violations	? If ava	ilable	, please
	10 attempts to smuggle CITES species, in total 19.0 specimens of date mussel) were confiscated. Result: 10 decisions for 4 cases - fines for the offenders. (See Table 2008 22 attempts to smuggle, keep and offer for sale CITES sthereof. In total 9260 CITES specimens (9230 specimer confiscated. Result: 8 misdemeanors and 12 offences (2 offenders (See Table 2 – annex)) misdemeal e 1 – annex species and ns of date m	nors off () parts ar nussel) v	ence	es. Court erivats
4	Have any significant seizures, confiscations and forfeitures of CITES specimens been made?				
5	If information available: Significant seizures/confiscations Total seizures/confiscations If possible, please specify per group of species or attach details.	tortoises (2007) Amount	specimer specime	s a Mad ate ns ii	
6	Have there been any criminal prosecutions of significant CITES-related violations?				
7	If Yes, how many and for what types of violations? If a	vailable, ple	ase atta	ich d	letails as

	Annex.		
	Prosecuted offence for chameleons and tortoises case		
	Date Mussel cases are offences according to the Act on marine	e fisheries	
8	Have there been any other court actions of CITES-related violations?		
9	If Yes, what were the violations involved and what were the results as Annex.	ılts? Please attach	details
10	How were the confiscated specimens usually disposed of?	Tick if app	licable
	 Return to country of export 	\boxtimes	
	 Public zoos or botanical gardens 	\boxtimes	
	 Designated rescue centres 	\boxtimes	
	 Approved, private facilities 	\boxtimes	
	– Euthanasia		
	- Other (specify)		
	Comments:		
11	Has detailed information been provided to the Secretariat on	Yes	
	significant cases of illegal trade (e.g. through an ECOMESSAGE or other means), or information on convicted	No	
	illegal traders and persistent offenders?	Not applicable	
		No information	
	Comments: Information on confiscations is forwarded in Information on all bigger cases has been send "case by case" to		twork.
12	Have there been any cooperative enforcement activities with	Yes	\boxtimes
	other countries	No	
	(e.g. exchange of intelligence, technical support, investigative assistance, joint operation, etc.)?	No information	
13	If Yes, please give a brief description: Sending information using	ng the eutwix netv	vork
14	Have any incentives been offered to local communities to	Yes	
	assist in the enforcement of CITES legislation, e.g. leading to	No	\boxtimes
	the arrest and conviction of offenders?	No information	
15	If Yes, please describe:		
16	Has there been any review or assessment of CITES-related	Yes	\boxtimes
	enforcement?	No	
		Not applicable	
		No information	

	Comments: As a part of project "Implementation of Environmental Acquis related to the protection of wild fauna and flora by regulating trade therein" (see details on the project under B7) working procedures have been revised and upgraded by enforcement agencies involved in CITES issues.
17	Please provide details of any additional measures taken:

D. Administrative measures

D1 Management Authority (MA)

1	Have there been any changes in the designation of or	Yes	
	contact information for the MA(s) which are not yet reflected in the CITES Directory?	No	\boxtimes
	Tenected in the Cites Directory:	No information	
2	If Yes, please use the opportunity to provide those changes have	ere.	
3	If there is more than one MA in your country, has a lead MA	Yes	
	been designated?	No	\boxtimes
		No information	
4	If Yes, please name that MA and indicate whether it is identificITES Directory.	ied as the lead MA i	n the
5	How many staff work in each MA? In the Ministry of Culture, Directorate, the CITES is within the responsibility Division for International Conventions, there 3 experts part of their time wissues.	Implementation of	d
6	Can you estimate the percentage of time they spend on	Yes	\boxtimes
	CITES-related matters?	No	
	If yes, please give estimation 50%	No information	
7	What are the skills/expertise of staff within the MA(s)?	Tick if appl	icable
	- Administration		
	- Biology		\boxtimes
	Economics/trade		
	Law/policy		
	- Other (specify)		
	 No information 		
8	Have the MA(s) undertaken or supported any research	Yes	
	activities in relation to CITES species or technical issues	No	\boxtimes
	(e.g. labelling, tagging, species identification) not covered in D2(8) and D2(9)?	No information	

9	If Yes, please give the species name and provide details of the kind of research involved.
10	Please provide details of any additional measures taken:

D2 Scientific Authority (SA)

1	Have there been any changes in the designation of or	Yes	
	contact information for the SA(s) which are not yet reflected	No	\boxtimes
	in the CITES Directory?	No information	
2	If Yes, please use the opportunity to provide those changes he	ere.	
			_
3	Is the designated Scientific Authority independent from the	Yes	\boxtimes
	Management Authority?	No	
		No information	
4	What is the structure of the SA(s)?	Tick if app	licable
	 Government institution 		\boxtimes
	 Academic or research institution 		\boxtimes
	 Permanent committee 		
	 Pool of individuals with certain expertise 		\boxtimes
	- Other (specify)		\boxtimes
5	How many staff work in each SA on CITES issues? Depending experts, specialists in different field	on the SA, one or	more
6	Can you estimate the percentage of time they spend on	Yes	
	CITES-related matters	No	\boxtimes
	If yes, please give estimation	No information	
7	What are the skills/expertise of staff within the SA(s)?	Tick if app	licable
	- Botany		
	- Ecology		\boxtimes
	- Fisheries		\boxtimes
	- Forestry		
	- Welfare		
	- Zoology		
	- Other (specify)		
	- No information		
8	Have any research activities been undertaken by the SA(s) in	Yes	
	relation to CITES species?	No	
		No information	

9	If Yes, please give the species name and provide details of the kind of research involved.						
	Species name	Populations	Distribution	Off take	Legal trade	Illegal trade	Other (specify)
	Ursus arctos						
	Canis Iupus						
	Lynx lynx						
	[Please co	ontinue on separ	ate sheet, as ne	ecessary.]		No informa	tion
10	Have any project proposals for scientific research been submitted to the Secretariat under Resolution Conf. 12.2? No No information						
11	Please provide details of any additional measures taken: For questions 8&9 we are attaching to this document Management Plans for large carnivores in Croatia (Ursus arctos (game species – hunting quota established) and strictly protected species Canis lupus and Lynx lynx, including all details required under 9. Brown bear management plan was revised in 2008, wolf and lynx management plans are under revision. Croatia is assisting with all scientific available data different countries in regards to submitting proposals under Resolution 12.8.						

D3 Enforcement Authorities

1	Has the Secretariat been informed of any enforcement	Yes	
	authorities that have been designated for the receipt of confidential enforcement information related to CITES?	No 🗌	
	confidential emorcement information related to CITES?	No information	
2	If No, please designate them here (with address, phone, fax a	and email).	
	1. Ministry of Culture, Directorate for Nature Protection Insp	ection	
	Runjaninova 2 , HR-10000 ZAGREB		
	- Kresimir Ilic, Director		
	Tel: +385 1 486 61 92, Fax: +385 1 486 61 91, Email: kre	esimir.ilic@min-kulture.hr	
	- Zeljko Vukovic, Head of Department for Nature Protection	n Inspection	
	Tel: +385 31 821 851, Fax: +385 1 486 61 91, Email: zelj	ko.vukovic@min-kulture.hr	
2. Ministry of Finance, Custom directorate – Central office			
Service for supervision, Department for prevention of smuggling			
	Alexandera von Humboldta 4a, HR-10000 ZAGREB		
	- Ivana JAVOR, Head of Department for prevention of smu	ggling	
	Tel: + 385 1 6102 439, Fax: + 385 1 6154 187, Email: iva	ana.javor@carina.hr	
	- Igor Jakupić, Inspector in Department for prevention of si	muggling	
	Tel: +385 1 6012 485, Fax: +385 1 6154 187, Email: igor	.jakupic@carina.hr	
	3. Ministry of the Interior of the Republic of Croatia		
	General Directorate, Criminal Police Directorate, General Crim	e Department	
	Ilica 335, HR-10000 ZAGREB		
	- Hrvoje Filipic, Police Adviser,		
	Tel: +385 (1) 3788 123, Fax: +385 (1) 3788 422, Email: h	filipic@mup.hr	
3	Is there a specialized unit responsible for CITES-related	Yes	
	enforcement (e.g. within the wildlife department, Customs, the police, public prosecutor's office)?	No 🗵	
	Table period, passes producted to conso,.	Under consideration	
		No information	

No

information

4	If Yes, please star	te whic	h is the le	ead agend	cy for	enforc	ement:			
5	Please provide de	tails of	any addi	tional me	asure	s taken	:			
04 Co	mmunication, inform	nation	managem	nent and e	excha	nge				
1	To what extent is	CITES	informati	ion comp	uteriz	ed?	Tick if applicable			
	Monitoring and	l report	ing of dat	ta on lega	l trad	e				
	 Monitoring and reporting of data on illegal trade 									
	- Permit issuance	е								
	 Not at all 									
	- Other (specify)									
2	Do the following	authorit	ties have	access to	the I	nternet	? Tick if applicable			
	Authority	Yes, continuous and unrestricted	Yes, but only through a dial-up connection	Yes, but only through a different office	Some offices only	Not at all	Please provide details where appropriate			
	Management Authority	\boxtimes								
	Scientific Authority	\boxtimes								
	Enforcement Authority	\boxtimes								
3	Is there an electro on CITES species		ormation	system p	rovidi	ng info	rmation Yes 🖂			

4	If Yes, does it provide information on:			Tick if applicab	ole
	 Legislation (national, regional or interr 			\boxtimes	
	- Conservation status (national, regiona	al, international)?		[
	- Other (please specify)?			[
5	Is it available through the Internet:		Ye	es [\boxtimes
			No	о [
			No	ot applicable [
			No	о [
			in	formation	
	Please provide URL: Web-based databas	e with limited ac	cess.		
6	Do the authorities indicated have access publications?	to the following		Tick if applicable	le
	Publication	Management Authority	Scientific Authority	Enforcement Authority	t
	2003 Checklist of CITES Species (book)	\boxtimes			
	2003 Checklist of CITES Species and Annotated Appendices (CD-ROM)				
	Identification Manual				
	CITES Handbook				
7	If not, what problems have been encoun	tered to access 1	this informat	ion?	
8	Have enforcement authorities reported to Authority on:	o the Manageme	nt	Tick if applica	ıble
	– Mortality in transport?			[
	- Seizures and confiscations?				\boxtimes
	 Discrepancies in number of items in p actually traded? 	ermits and numb	er of items	[\boxtimes
	Comments:				
	Since the 1 January 2008 Croatia has be (in accordance with the EU legislation information required above. So far then life animals in trade in Croatia. Regard data - for 2008 it has been 50 % return	n) which include re has been no ling the customs	es field for mortality of s feed back		
9	Is there a government website with info	rmation on CITES	and Yes	- <u>-</u>	\boxtimes
	its requirements?		No	[
			No	information [
	If Yes, please give the URL: Yes partly. Ministry you can find the information (legislation contacts of MA, Nature	in Croatian) on	CITES		

	information on CITES confiscations ect. www.m	nin-kulture	.hr		
10	Have CITES authorities been involved in any of tactivities to bring about better accessibility to an understanding of the Convention's requirements public?	Tick if applic	cable		
	- Press releases/conferences				
	 Newspaper articles, radio/television appeara 	nces			\boxtimes
	- Brochures, leaflets				\boxtimes
	- Presentations				
	– Displays				\boxtimes
	 Information at border crossing points 				
	- Telephone hotline				
	- Other (specify)				
	Please attach copies of any items. Few example to this report	es attache	d		
11	Please provide details of any additional measures	s taken:			
D5 Pei	rmitting and registration procedures				
1	Have any changes in permit format or the design	ation and		Yes	\boxtimes
	signatures of officials empowered to sign CITES permits/certificates been reported previously to the signature.	he Secreta	ariat?	No	出
	pormito, our timoteur bour reported providedry to the	110 0001010	ariac.	Not applicable No information	片
	If no, please provide details of any:			No illioillation	
	Changes in permit format: Yes, in April 2006				
	on Transboundary Movement and Trade in Pr (Official Gazette No. 34/2006) came into force.		•		
	format is the part of the Ordinance (Annex 11)	1110 11011	01120		
	Changes in designation or signatures of re	elevant of	fficials:		
	To date has your according developed contitues a	:4	l	Tiele if emplicable	
2	To date, has your country developed written perifor any of the following?	procec	ures	Tick if applicable	,
		Yes	No	No information	on
	Permit issuance/acceptance				
	Registration of traders				
	Registration of producers				

3	Please indicate how many CITES documents were issued and denied in the two year period? (Note that actual trade is reported in the Annual Report by some Parties. This question refers to issued documents).								
	Year 1	Import or introduction from the sea	Export	Re- export	Other	Comments			
	How many documents were issued?								
	How many applications were denied because of serious omissions or misinformation?	-							
	Year 2 How many documents were issued?								
	How many applications were denied because of serious omissions or misinformation?	-							
4	Were any CITES documer replaced because of serio				ed and	Yes No No information			
5	If Yes, please give the r D5 -3/4 will be provided Republic of Croatia has so the information for retroactively filled in the search option by which can be acquired easily.	to the Secreta a new electron the years 20 database. The	riat by th ically pe 007 -20 databas	ne end of rmitting s 108 has e has ad	2009. system, to be vanced				
6	Please give the reasons for other countries.	or rejection of C	CITES do	cuments	from	Tick if appli	cable		
	Rea	ason		Yes	No No	No information	on		
	Technical violations								
	Suspected fraud								
	Insufficient basis for findi	ng of non-detri	ment						
	Insufficient basis for findi	ng of legal acq	uisition						
	Other (specify)								
7	Are harvest and/or export procedure for issuance of	-	anageme	ent tool in	the	Yes No No information			
	Comments Hunting quot please see Brown Bea document.								

8	How many times has the Scientific Authority been requested to provide opinic According to the Ordinance on Transboundary Movement and Trade in Protected Spe (Official Gazette No. 34/2006) the import, export and re-export permit can bee iss only when the competent scientific authority, on the basis of the available documentation, has established that:	cies ued
	- introduction into the Republic of Croatia would not have a harmful effect on conservation status of these species or on the extent of the territory occupied by relevant population of the species (import) / the competent scientific authority, based available data has established in writing that the capture or collection of the specim in the wild or their export will not have a harmful effect on the conservation status of species or on the extent of the territory occupied by the relevant population of species (export/re-export)	the I on ens the
	- introduction into the Republic of Croatia is necessary for:	
	a) scientific progress and conducting of indispensable bio-medical research, in case proved that those are the only species suitable for the stated purposes and that there no other specimens bred in captivity or artificially propagated, or	
	b) breeding or propagation for the purpose of conservation of species, or	
	c) research and education for the purpose of conservation of species, or	
	d) other needs which are not harmful for survival of species.	
	- that the intended accommodation for a live specimen and the place of destination adequately equipped to conserve and care for it properly;	ı is
9	Has the MA charged fees for permit issuance, registration or related CITES activities?	ble
	- Issuance of CITES documents:	\boxtimes
	 Licensing or registration of operations that produce CITES species: 	\boxtimes
	- Harvesting of CITES-listed species :	\boxtimes
	- Use of CITES-listed species:	\boxtimes
	Assignment of quotas for CITES-listed species:	
	- Importing of CITES-listed species:	$\overline{\mathbb{X}}$
	- Other (specify):	
10	If Yes, please provide the amounts of such fees. 70 kuna (10 EUR)	
11	Have revenues from fees been used for the implementation of CITES or wildlife conservation?	ble

	- Entirely: - Partly:							
	- Not at all:							\boxtimes
	- Not relevant:							
	Comments: The fee is transferred to not specified that it should be used sector for nature conservation purports.	by na	-	-				
12	Please provide details of any add	litional	measu	ıres tal	ken:			
D6 Ca	pacity building							
1	Have any of the following activities effectiveness of CITES implementate					ince	Tick if applic	cable
	Increased budget for activities		Impro	vement orks	t of n	ation	nal	
	Hiring of more staff		1	ase of [.] oring/e			equipment for nt	
	Development of implementation tools		Comp	uteriza	tion			
	- Other (specify) new electronical	ly pern	nitting s	system				
2	Have the CITES authorities receive building activities provided by exte			from a	any o	f the	following capacit	:y
	Please tick boxes to indicate which target group and which activity.	Oral or written advice/guidance	Technical assistance	Financial assistance	Training	Other (specify)	What were the external source	
	Target group Staff of Management Authority							
	Staff of Scientific Authority						2 years G2G pr with the Kingdo Netherlands	-
	Staff of enforcement authorities	\boxtimes	\boxtimes				i ve ti lel la l'us	
	Traders							
	NGOs							
	Public							
	Other (specify)							

3	Have the CITES authorities been the activities?	e <i>provi</i>	ders of	any of	the	follo	wing capacity building	
	Please tick boxes to indicate which target group and which activity. Target group	Oral or written advice/guidance	Technical assistance	Financial assistance	Training	Other (specify)	Details	
	Staff of Management Authority							
	Staff of Scientific Authority						seminars for customs and police	
	Staff of enforcement authorities							
	Traders							
	NGOs							
	Public							
	Other parties/International							
	meetings Other (specify)							
4	Please provide details of any addition	nal me) LU	taken:				
4	licase provide details of any addition	mai mic	,asui cs	taken.				
D7 Co	Is there an inter-agency or inter-sec	otoral (too on	CITE	:02	Yes 🖂	
'	is there an inter-agency of inter-sec	Clorar C	JOHIHHU	tee on	CITE	3!	No \square	
							_	
2	If Yes, which agencies are represented and how often does it meet? In 2003 MA initiated the establishment of the Committee for CITES implementation under the Nature Protection Directorate. The Committee has 13 members (3 from the MA, 2 Nature Protectin Inspectors, 2 from the SAs, 2 from the Crime Police Directorate, 2 from the Central Customs office, 1 fitosanitary border inspector and 1 veterinary border inspector). The exchange of the information between Ministry of Culture (MA) and SAs is performed through the meetings of the							
	Committee for CITES implementation Between the meetings Ministry of the SAs exchange information who case-by case basis. The Committee the preparation of expert base for statements.	Cultur en eve ee has	e and er is ne an im	scientis eded a portant	sts fr nd o t role	rom n a		

З	If No, please indicated the frequency of meetings or consultancies used by the Management Authority to ensure co-ordination among CITES authorities (e.g. other MAs, SAs, Customs, police, others):							
		Daily	Weekly	Monthly	Annually	None	No information	Other (specify)
	Meetings							
	Consultations							
4	At the national collaborate with		ive there l	been any e	efforts to	Tick if	applicable	Details if available
	Agencies for de	velopm	ent and tr	rade			\boxtimes	
	Provincial, state	I, state or territorial authorities						Croatian Associatio n for Singing Birds
	Local authoritie	s or cor	nmunities					
	Indigenous peo	ples						natural or legal persons who keep and breed CITES listed species
	Trade or other p	orivate	sector ass	ociations				
	NGOs							
	Other (specify)							
5	To date, have a arrangements for agreed between agencies?	or instit	utional co	operation	related to C	ITES be		if applicable
	Scientific Author	ority						
	Customs							
	Police							
	Other border au	ıthoritie	s (specify)				
	Other governme	ent age	ncies					
	Private sector b	odies						
	NGOs							
	Other (specify)							

6	Have Government staff participated in any regional activities related to CITES? Workshops	Tick if appli	cable
	Meetings		
	Other (specify) Responsible persons from the CITES MA and criminal police of the Republic of Slovenia participated at the CITES training seminars for Croatian customs, criminal police and border police in Croatia.		
7	Has there been any effort to encourage any non-Party to	Yes	
	accede to the Convention?	No	
		No information	
8	If Yes, which one(s) and in what way?		
9	Has technical or financial assistance been provided to	Yes	
	another country in relation to CITES?	No	\boxtimes
		No information	
10	If Yes, which country(ies) and what kind of assistance was prov	vided?	
11	Has any data been provided for inclusion in the CITES	Yes	
	Identification Manual?	No	
		No information	
12	If Yes, please give a brief description.		
13	Have measures been taken to achieve co-ordination and	Yes	\boxtimes
	reduce duplication of activities between the national authorities for CITES and other multilateral environmental	No	
	agreements (e.g. the biodiversity-related Conventions)?	No information	
14	If Yes, please give a brief description. Ministry of Culture is nature protection in Croatia and implementation of different confor implementation of different conventions are coordinated by the Ministry.	nferences, so activ	vates
15	Please provide details of any additional measures taken:		

D8 Areas for future work

1	Are any of the following activities needed to enhance effection implementation at the national level and what is the respection			
	Activity	High	Medium	Low
	Increased budget for activities			
	Hiring of more staff			
	Development of implementation tools			
	Improvement of national networks			
	Purchase of new technical equipment for monitoring and enforcement			
	Computerization			
	Other (specify)			
2	Were any difficulties encountered in implementing specific Resolutions or Decisions adopted by the Conference of the Parties?	Yes No		
	raities:	No info	rmation	
3	If Yes, which one(s) and what is the main difficulty?			
4	Have any constraints to implementation of the Convention	Yes		
	arisen in your country requiring attention or assistance?	No		
	If Yes, please describe the constraint and the type of atte		rmation	
	 insufficient number of staff within the Ministry of Cultur a daily basis, 	e dealing v	with this is	ssue on
	insufficient number of staff dealing with CITES in all stake			
	 insufficient control within the country because of unders 	•		
	 practical problems at border crossings (lack of spec specialised determination softer that could help custom office for temporary keeping of confiscated specimens at the border 	ers, lack o		
	 Croatia has a border with non CITES party (Bosnia and still non-party, now new party without defined MA) 	d Herzegov	vina) (in 2	007/08
	newly adapted CITES related legislation (April 2006) has	not jet live	ed up in pr	actice
	long-term financial mechanism is not established			
	tourist unaware of CITES legislation			
6	Have any measures, procedures or mechanisms been identified within the Convention that would benefit from review and/or simplification?	Yes No No info	rmation	
7	If Yes, please give a brief description.	TNO IIIIO	mation	
ı '				

8 Please provide details of any additional measures taken:

E. General feedback

Please provide any additional comments you would like to make, including comments on this format.

Thank you for completing the form. Please remember to include relevant attachments, referred to in the report. For convenience these are listed again below:

Question	Item		
B4	Copy of full text of CITES-relevant legislation	Enclosed	\boxtimes
		Not available	
		Not relevant	
C3	Details of violations and administrative measures imposed	Enclosed	\boxtimes
		Not available	
		Not relevant	
C5	Details of specimens seized, confiscated or forfeited	Enclosed	\boxtimes
		Not available	
		Not relevant	
C7	Details of violations and results of prosecutions	Enclosed	\boxtimes
		Not available	
		Not relevant	
С9	Details of violations and results of court actions	Enclosed	
		Not available	
		Not relevant	
D4(10)	Details of nationally produced brochures or leaflets on CITES	Enclosed	
	produced for educational or public awareness purposes	Not available	
		Not relevant	
	Comments		

THE CROATIAN PARLIAMENT

3887

Pursuant to Article 88 of the Constitution of the Republic of Croatia, I hereby issue the

DECISION

PROMULGATING THE ACT ON AMENDMENTS TO THE NATURE PROTECTION ACT

I hereby promulgate the Act on Amendments to the Nature Protection Act passed by the Croatian Parliament at its session on 21 November 2008.

Class: 011-01/08-01/151 Reg. No.: 71-05-03/1-08-2 Zagreb, 27 November 2008

> The President of the Republic of Croatia **Stjepan Mesić,** m.p.

ACT

ON AMENDMENTS TO THE NATURE PROTECTION ACT

Article 1

In the Nature Protection Act (Official Gazette 70/05) the Article 7, item 5 is amended to read:

"5. wild taxa of plants, fungi and animals means any species and subspecies not produced under control of man as the result of artificial selection (selection and breeding for the purpose of producing domesticated animal breeds and cultivated plant varieties) or genetic modification of hereditary material using the techniques of modern biotechnology,".

In item 7 after the words: "biological diversity" the words: "that consists of ecologically important areas for the Republic of Croatia which also include ecologically important areas of the European Union Natura 2000," are added.

After item 13, item 13a is added and reads:

"13a. *geological diversity* (*geodiversity*) means any types of rocks, minerals, fossils and relief formations, as well as the processes that formed them through geological periods,".

After item 15, items 15a and 15b are added and read:

"15a. landscape means an area, as perceived by the human eye, whose character is the result of the interaction of natural and/or human factors, such as natural or cultivated land region or

land and sea region,

15b. *compensation terms* are measures that are established for the purpose of ensuring the overall coherence of the ecological network.".

After item 25, item 25a is added and reads:

"25a. plans and programmes means any plans or programmes which are subject to preparation and/or adoption at the national, regional or local level, or which are prepared by an executive body for adoption in the legislative procedure by the Croatian Parliament or the Government of the Republic of Croatia and which are governed by laws and their implementing regulations, including plans and programmes on amendments thereto.".

After item 29, item 29a is added and reads:

"29a. *overriding public interest* means the interest in nature protection issues expressed by the State, or a local or regional self-government unit in accordance with its by-laws,".

After item 41, item 41a is added and reads:

"41a. *trade* means sale and purchase, acquisition for commercial purposes, public display for the purpose of gain, use for the purpose of gain, keeping for sale, offer for sale or transport for sale, and rent and exchange of protected wild taxa."

Article 2

In Article 25, paragraph 1, the words: "according to the procedure stipulated for passing the act on designation of the protection" are replaced by the words: "which is not required when the act on cessation of protection is passed by virtue of an act or Government regulation."

Article 3

In Article 26, after paragraph 1, paragraph 2 is added and reads:

"(2) When the underlying phenomenon of the area which is being placed under protection is water, the decision referred to in paragraph 1 of this Article shall be issued by the Ministry subject to the prior expert opinion of the central state administration body competent for water management."

The former paragraphs 2, 3 and 4 become paragraphs 3, 4 and 5.

Article 4

In Article 30, after paragraph 5, paragraph 6 is added and reads:

"(6) The entries in the Register, changes and deletion thereof shall be published in the Official Gazette."

Article 5

The subheading above Article 35 is amended to read: "Ecological network impact assessment and interventions in nature".

Article 35 is amended to read:

- "(1) Ecological network impact assessment means a procedure used to assess whether there is a probability that the implementation of a plan, programme or intervention in the ecological network area, which by itself or in combination with other plans, programmes or interventions, may have a significant impact on the conservation objectives and integrity of the ecological network area in respect of its structure and functionality.
- (2) Ecological network impact assessment shall not be required if a plan, programme or intervention is directly related to the management of the ecological network area."

Article 6

Article 36 is amended to read:

- "(1) In the case of a planned intervention in the ecological network area, which by itself or in combination with other interventions, may have a significant impact on the conservation objectives and integrity of the ecological network area, its impact on ecological network shall be assessed pursuant to this Act.
- (2) In the case of interventions where *lex specialis* governing environmental impact assessment prescribes mandatory environmental impact assessment or in the case of interventions where the need for assessment was established in the evaluation of the need for assessment, the main assessment within the ecological network impact assessment relating to the conservation objectives and integrity of the ecological network area shall be carried out within the context of mandatory environmental impact assessment.
- (3) In the case of plans and programmes the implementation of which may have a significant impact on the conservation objectives and integrity of the ecological network area, an ecological network impact assessment shall be mandatory.
- (4) In the case of plans and programmes where the act governing environmental protection prescribes mandatory strategic assessment and in the case of plans and programmes where the need for strategic assessment was established in the evaluation of the need for that assessment, the main assessment within the ecological network impact assessment relating to the conservation objectives and integrity of the ecological network area shall be carried out within the context of mandatory strategic environmental assessment of plans and programmes.
- (5) The content, deadline and method of establishing the ecological network impact assessment relating to the conservation objectives and integrity of the network area and the method of informing the general public shall be laid down in an ordinance issued by the Minister, subject to prior approval of the head of the central state administration body competent for environmental protection and physical planning."

Article 7

Article 37 is amended to read:

"The ecological network impact assessment consists of: prior screening of admissibility (hereinafter referred to as: the screening), main assessment with the assessment of other feasible options (hereinafter referred to as: the main assessment), establishment of overriding public interest and compensation terms."

Article 8

After Article 37, the following Articles 37a, 37b, 37c, 37d, 37e, 37f and 37g are added:

"Article 37a

- (1) The Ministry shall carry out the screening for the ecological network area if it is also a protected area belonging to the category of national park, nature park, special nature reserve, nature monument and for interventions carried out in the area of two or more counties or the City of Zagreb and a county as well as for interventions for which the central state administration body competent for environmental protection, physical planning and construction carries out environmental impact assessment and evaluation of the need for environmental impact assessment pursuant to *lex specialis*.
- (2) The administrative body in the county or the City of Zagreb competent for nature protection activities (hereinafter referred to as: the administrative body), on the territory where the ecological network area is located, shall carry out the screening for the ecological network area that includes protected areas belonging to the category of regional park, important landscape, forest park and park architecture monument as well as for interventions in an area that is not specially protected and for which the administrative body carries out environmental impact assessment and evaluation of the need for environmental impact assessment pursuant to *lex specialis*. In the screening procedure, the administrative body shall request the prior opinion of the Institute.
- (3) Insofar as the screening procedure referred to in paragraphs 1 and 2 of this Article establishes that a planned intervention does not have a significant impact on the ecological network area, the Ministry or the administrative body shall issue a certificate on the admissibility of the intervention. Insofar as it is established that an intervention may have a significant impact on the ecological network area, the Ministry or the administrative body shall issue a decision prescribing the implementation of the main assessment procedure. The decision shall be submitted to the Ministry.
- (4) The decision referred to in paragraph 3 of this Article shall not be issued in case when *leges speciales* in the field of environmental protection prescribe mandatory environmental impact assessment or evaluation of the need for assessment. In that case, the Ministry or the administrative body shall, instead of the decision, issue an opinion on the obligation to carry out the main assessment. In the procedure that will be carried out pursuant to *leges speciales* in the field of environmental protection, this opinion shall be binding for issuing the decision on the evaluation of the need for environmental impact assessment.
- (5) Particular content of the acts referred to in this Article shall be prescribed pursuant to the ordinance referred to in Article 36, paragraph 5 of this Act.

Article 37b

- (1) The main assessment shall be carried out by the Ministry or the administrative body.
- (2) Insofar as the main assessment establishes that the planned intervention does not have an adverse impact on the conservation objectives and integrity of the ecological network area, the Ministry or the administrative body shall issue a decision authorising the planned intervention. The decision shall establish measures for mitigation of harmful effects on the ecological network.
- (3) In the main assessment procedure, the administrative body shall request a prior opinion of the Institute and the decision referred to in paragraph 2 of this Article shall be submitted to the Ministry.
- (4) Insofar as the ecological network impact assessment establishes that the planned intervention has an adverse impact on the conservation objectives and integrity of the network area, the Ministry or the administrative body shall issue a decision refusing the request to carry out the intervention. The administrative body shall submit its decision to the Ministry.
- (5) In the case that the main assessment is carried out as part of the procedure of environmental impact assessment pursuant to the act governing environmental protection, the main assessment shall not be carried out as a separate procedure in accordance with this Act. In that case, the environmental impact study must contain all the information prescribed for the main assessment for the ecological network, pursuant to the ordinance referred to in Article 36, paragraph 5 of this Act.
- (6) The decision referred to in paragraphs 2 and 4 shall not be issued in case, pursuant to *leges speciales* in the field of environmental protection, the environmental impact assessment is carried out. In that case, the decision on the environmental acceptability of the intervention shall also contain the ecological network impact assessment pursuant to this Act.

Article 37c

- (1) Insofar as the ecological network impact assessment establishes that the planned intervention has an adverse impact on the network and that there are no other feasible options, the intervention may still be carried out in the case of imperative reasons of overriding public interest, including those of a social or economic nature.
- (2) A party in the procedure or an interested party may submit to the Ministry a request to initiate the procedure of establishing overriding public interest and compensation terms.
- (3) Insofar as the existence of overriding public interest referred to in paragraph 1 of this Article is established, the Ministry shall issue a decision authorising the planned intervention. The decision shall establish compensation terms for the purpose of ensuring the overall coherence of the ecological network.
- (4) Insofar as the compensation terms referred to in paragraph 3 of this Article relate to the international ecologically important area referred to in Article 60 of this Act, the Ministry shall inform the European Commission of the compensation terms.
- (5) Insofar as the existence of overriding public interest is not established, the Ministry shall issue a decision refusing the request to carry out the intervention.

- (6) By way of derogation, if the ecological network area hosts a habitat type and/or taxon referred to in the List of critically endangered and important habitat types and taxa, the overriding public interest owing to which the planned intervention is being accepted may relate only to protecting human health and public safety, or to establishing significantly more favourable conditions of primary environmental concern, or to other imperative reasons of overriding public interest, about which a decision shall be passed by the Government of the Republic of Croatia along with participation by the public. The decision shall establish compensation terms for the purpose of ensuring coherence of the ecological network. Insofar as the existence of other imperative reasons of overriding public interest is established, and the planned intervention will have an adverse impact on the international ecologically important area referred to in Article 60 of this Act, the Government may authorise the intervention subject to prior opinion of the European Commission.
- (7) By way of derogation, in the case that, pursuant to *leges speciales* in the field of environmental protection, the environmental impact assessment is carried out, the administrative bodies referred to in paragraphs 3, 5 and 6 of this Article shall not issue a decision on the overriding public interest and compensation terms pursuant to this Act, but issue opinions which are binding in the procedure of environmental impact assessment ..
- (8) The List referred to in paragraph 6 of this Article shall be established by the Minister.

Article 37d

- (1) In the case of plans and programmes where the act governing environmental protection prescribes that the strategic assessment and evaluation of the need for strategic assessment is not mandatory, and the implementation of which may have a significant impact on the conservation objectives and integrity of the ecological network area, the ecological network impact assessment shall be carried out by the Ministry.
- (2) In the case of plans and programmes referred to in paragraph 1 of this Article, the ecological network impact assessment shall be carried out within the procedure for issuing requirements, measures and prior approval pursuant to Articles 123, 124 and 125 of this Act.
- (3) In the case of plans and programmes where the act governing environmental protection prescribes mandatory strategic assessment and evaluation of the need for strategic assessment, the ecological network impact assessment in relation to the conservation objectives and integrity of the network area shall be carried out in accordance with Article 36, paragraph 4 and Article 37e of this Act.

Article 37e

- (1) In the case of plans and programmes referred to in Article 37d, paragraph 3 of this Act, for which the act governing environmental protection prescribes mandatory strategic assessment, the screening of the ecological network area shall be carried out by the Ministry.
- (2) In the case of plans and programmes referred to in Article 37d, paragraph 3 of this Act, for which the act governing environmental protection prescribes mandatory evaluation of the need for strategic assessment, the screening of the ecological network area shall be carried out

within evaluation of the need for strategic assessment pursuant to *lex specialis* in the field of environmental protection.

- (3) Insofar as the screening of a plan and programme referred to in paragraphs 1 and 2 of this Article establishes that it may have a significant impact on the ecological network area, the Ministry shall issue an opinion establishing the need to carry out the main assessment for the ecological network.
- (4) The main assessment for the ecological network area shall be carried out within the context of strategic assessment pursuant to *lex specialis* in the field of environmental protection.

Article 37f

- (1) Insofar as the contractor does not carry out the mitigation measures referred to in Article 37b, paragraph 2 and the compensation terms referred to in Article 37c, paragraphs 3 and 6 of this Act, the competent body shall carry them out at his/her expense.
- (2) The competent body shall, by issuing a decision, determine the contractor's obligation to remunerate the costs and execution expenses.
- (3) An appeal submitted against the decision referred to in paragraph 2 of this Article shall not postpone its enforcement.

Article 37g

- (1) Interventions in nature shall be planned in such a manner so as to avoid or minimise the degradation of nature.
- (2) In carrying out an intervention, the contractor must act in such a manner so as to impart the least possible damage to nature, and upon completing the intervention the contractor shall have to restore or bring the state of the natural environment close to that which prevailed prior to the intervention."

Article 9

In Article 38, paragraph 1, the words: "of importance for the Republic of Croatia established under *lex specialis*" are replaced by the words: "for which the central state administration body competent for environmental protection and physical planning and construction issues a location and/or building permit pursuant to *lex specialis*".

Article 10

Article 39 is amended to read:

- "(1) Compensation terms shall be defined depending on the anticipated or incurred damage to the ecological network area as well as on the possibility of recovery of the near-nature state.
- (2) In selecting compensation terms preference shall be given to compensating by the area having characteristics which are identical or similar to those of the degraded ecological network area for which the compensation is effected, thereby ensuring coherence and integrity

of the ecological network.

- (3) The types of compensation terms are as follows:
- establishing the compensation area the characteristics of which are identical or similar to those of the degraded ecological network area,
- establishing another ecological network area,
- payment of the amount equivalent to the estimated damage inflicted to the ecological network area in the case that it is not possible to apply compensation terms.
- (4) For the ecologically important area of the European Union Natura 2000, the compensation term may only be the establishment of an area the characteristics of which are identical or similar to those of the degraded network area in respect of the conservation objectives, structure and functionality of the ecological network area.
- (5) The Ministry shall define compensation terms. The compensation amount shall be paid in favour of the state budget."

Article 11

In Article 40, paragraph 2, is amended to read:

"(2) Should the contractor carrying out the intervention in nature or the user of natural resources not eliminate the harmful effects pursuant to paragraph 1 of this Article, the competent body shall eliminate them at his own expense."

After paragraph 2, paragraphs 3 and 4 are added and read:

- "(3) The competent body shall establish the obligation of the contractor carrying out the intervention in nature or the user of natural resources to remunerate the costs and the amount of execution costs by a decision.
- (4) An appeal submitted against the decision referred to in paragraph 3 of this Article shall not postpone its enforcement."

Article 12

In Article 42, paragraphs 4 and 5 are amended to read:

- "(4) A programme for the protection of forest ecosystems comprising measures for their protection and improvement based on monitoring shall be developed for protected areas in which economic utilisation of natural resources is not permitted.
- (5) The programme for the protection of forest ecosystems referred to in paragraph 4 of this Article shall be drafted and implemented by the public entity managing the protected area and shall be adopted pursuant to *lex specialis* governing forest management, with the approval of the Ministry."

In Article 58, after paragraph 3, paragraph 4 is added and reads:

"(4) Actions that may result in the destruction or any other substantial or permanent damage to an ecologically important area shall not be permitted."

Article 14

Article 59 is deleted.

Article 15

In Article 60, paragraph 1 is amended to read:

(1) The ecologically important area of the European Union NATURA 2000 shall be the area of importance for wild bird species and other wild animal and plant species, their habitats and habitat types established as such pursuant to international standards, by a regulation adopted by the Government of the Republic of Croatia, pursuant to the provisions of this Act. The regulation shall also prescribe conservation objectives for the ecologically important area of the European Union, guidelines for the maintenance or restoration, at a favourable conservation status, of wild species, their habitats and habitat types, method of management, monitoring and other rules of procedure required for conservation of the ecologically important area of the European Union."

In paragraph 2, the word: "international" is deleted.

In paragraph 3, the words: "international important ecological areas" are replaced by the words: "ecologically important areas of the European Union NATURA 2000".

In paragraph 4, the words: "international ecologically important area" are replaced by the words: "ecologically important area of the European Union NATURA 2000".

After paragraph 4, paragraph 5 is added and reads:

"(5) In the case of plans, programmes and/or interventions, which by themselves or in combination with other plans, programmes and/or interventions, may have a significant impact on the conservation objectives and integrity of the ecologically important area referred to in paragraph 1 of this Article, the ecological network impact assessment shall be carried out pursuant to Articles 36 to 37f of this Act."

Article 16

The subheading above Article 65 is amended to read: "6. Inventory, research and monitoring"

Article 17

In Article 65, paragraph 1 is amended to read:

"(1) The Institute shall establish and keep an inventory of all the components of biological,

geological and landscape diversity (taxa, habitat types, geosites and landscape types), map endangered taxa, geosites and habitat types, as well as perform their continuous and timely updating."

Article 18

Article 67 is amended to read:

- "(1) Research of protected natural assets and speleological objects may be carried out based on a decision from the Ministry. The decision authorising research shall establish requirements under which it may be carried out.
- (2) The owner or holder of rights to use land or aquatic surfaces shall allow research of protected natural assets to a person who holds the decision referred to in paragraph 1 of this Article. The owner shall not have the right to compensation for restrictions, except in cases when it is demonstrated that he/she suffered material damage due to those restrictions.
- (3) The person who carried out research must report the results of the research to the Ministry and Institute within thirty days from the date of research completion.
- (4) For exporting from the Republic of Croatia wild taxa and parts thereof that are not a protected natural asset within the meaning of this Act for scientific purposes, it shall be necessary to secure a decision from the Ministry."

Article 19

After Article 70, Article 70a is added and reads:

"Article 70a

- (1) In strict nature reserves, national parks, special nature reserves, nature parks, regional parks, important landscapes, forest parks and park architecture monuments, it shall be prohibited to:
- perform underwater activities without authorisation from the Ministry or administrative body,
- anchor and/or berth vessels outside locations designated by the spatial plan,
- perform recreational fishing without a licence or contrary to the conditions laid down in the issued licence.
- damage and/or destroy signs and/or information boards,
- make a fire outside the settlements and/or locations specially designated for that purpose,
- film or photograph for commercial purposes without authorisation from the Ministry or administrative body,
- fly hang gliders or paragliding wings without authorisation from the Ministry or

administrative body,

- post information boards, advertising and/or other boards without authorisation from the Ministry or administrative body,
- visit and/or tour without a ticket when the ticket is mandatory,
- deposit waste outside the designated and marked area,
- swim outside the location designated by the public entity.".

Article 20

In Article 76, paragraph 3, the words: "the county council or Council of the City of Zagreb, or the city or municipal council" are replaced by the words: "the county prefect or mayor of the City of Zagreb, or the mayor or head of municipality".

In paragraph 4 the words: "of the council" are deleted.

Article 21

In Article 78, paragraph 2 is amended to read:

"(2) Any person who meets the requirements defined in the charter of a public entity may be appointed to the post of technical manager of the public entity."

Article 22

In Article 82, paragraph 2 is amended to read:

"(2) Where a speleological object is located outside the protected area or is not provided special protection, the performance of activities relating to visiting and touring the speleological object may be conferred to a legal or natural person pursuant to a concession."

Article 23

In Article 89, paragraph 2 is amended to read:

"(2) The operations referred to in this Article may be carried out subject to the approval of the owner or holder of the right on natural resources."

Article 24

Article 90 is deleted.

Article 25

In Article 91, paragraphs 4 and 7 are amended to read:

"(4) The Ministry shall issue the decision referred to in paragraph 3 of this Article on the basis

of a study on assessment of the risk resulting from introduction into nature, subject to prior approval of the central state administration body competent for agriculture, forestry, hunting, sea and freshwater fisheries.

(7) The method of performing risk assessment and developing the study on assessment of the risk resulting from introduction, reintroduction and breeding and the procedure for issuing authorisations as well as the method of procuring the public opinion shall be prescribed in an ordinance issued by the Minister."

Article 26

In Article 96, paragraph 2, the words: "by decree" are replaced by the words: "by management plans with action plans."

Article 27

In Article 97, paragraph 3 is amended to read:

- "(3) Strictly protected free-living animals shall not be:
- taken from the wild,
- deliberately captured and/or killed,
- deliberately harmed and/or their evolution forms, nests or broods destroyed,
- deliberately disturbed, particularly during the time of breeding, rearing young, migration and hibernation, should such disturbance prove significant with regard to the objectives of protection,
- their eggs deliberately destroyed and/or taken from the natural environment or kept empty,
- their reproduction or resting sites damaged or destroyed, and
- hidden, kept, bred, traded in, imported, exported, transported and alienated or in any other way acquired and stuffed."

Article 28

In Article 98, paragraph 1 in the opening sentence, the words: "justified public interest" are replaced by the words: "non-existence of other feasible options".

Subparagraph 1 is amended to read:

"- protection of plants, fungi and animals as well as protection of natural habitats,"

Article 29

In Article 99, paragraph 1, after subparagraph 1, subparagraph 2 is added and reads:

"- such specimens have been legally acquired in the Republic of Croatia"

In the former subparagraph 2 which becomes subparagraph 3, the word: "legally" is deleted.

The former subparagraph 3 becomes subparagraph 4.

After paragraph 7, paragraph 8 is added and reads:

"(8) The authorisations referred to in paragraphs 1, 2, 5 and 6 of this Article shall be issued in the form of a decision."

Article 30

Article 101 is amended to read:

- "(1) The Ministry shall issue a decision for introduction, taking out, export or import and introduction from the sea, and a re-export certificate for wild taxa, parts and derivatives thereof protected under this Act.
- (2) The decision and certificate referred to in paragraph 1 of this Article shall be issued only under the condition that it does not endanger wild populations of animals, fungi or plants to which it refers.
- (3) The decision and certificate referred to in paragraph 1 of this Article shall also be secured in the case of a hybrid where one or both parents belong to a protected wild taxon.
- (4) The taxa for which the decision and certificate referred to in paragraph 1 of this Article is issued, the procedure and terms for issuing decisions and certificates, content and method of submitting a request, content and method of submitting an import notification, general and special restrictions on import, method of marking animals or consignments, method of accommodation of seized specimens, bodies competent for enforcement and control, the method of exercising control, keeping records and producing reports as well as other conditions required for conducting transboundary movement of wild taxa, pursuant to the international treaty the Republic of Croatia is a party to, shall be prescribed by ordinance by the Minister.
- (5) During the activities referred to in paragraph 1 of this Article and/or during transit of live animals, for which the ordinance referred to in paragraph 4 of this Article prescribes so, must be transported and attended to in a manner that minimizes the likelihood of injury, harm to health or inhumane conduct, pursuant to *leges speciales*.
- (6) By way of derogation from paragraph 1 of this Article, the wild taxa, for which the ordinance referred to in paragraph 4 of this Article prescribes so, shall not require an import permit, but an import notification shall be submitted to the competent body for the purpose of import.
- (7) The decisions, certificates and other acts issued under this Act for the purpose of transboundary movement of protected wild taxa may be used exclusively for specimens to whom they refer.

(8) The transit of protected taxa through the territory of the Republic of Croatia shall be carried out on the basis of a valid act on export or re-export issued by the competent body of the exporting or re-exporting country."

Article 31

In Article 102, paragraphs 2 and 3 are amended to read:

- "(2) Veterinary health check and control of consignments referred to in paragraph 1 of this Article under the competence of the border veterinary inspection shall be pursued under *leges* speciales.
- (3) Protected wild taxa, parts and derivatives thereof may be exported, imported, transited, introduced or taken out only through designated border crossings where phytosanitary and border veterinary inspections are established."

Article 32

In Article 105, paragraph 1, after the words: "wild taxa" the words: "protected under the Act" are added".

Article 33

Article 107 is amended to read:

- "(1) A legal and natural person trading in protected indigenous or alien wild taxa, for which it is specially prescribed by the ordinance referred to in paragraph 4 of this Article, shall obtain a certificate from the Ministry. In the case of refusal of a request, a decision shall be issued.
- (2) Trading may be conducted only with specimens bred in a registered establishment or with specimens holding a document on authorised origin, provided the specimen or consignment is properly labelled.
- (3) In trading in protected animals, the seller or the owner shall:
- provide for suitable conditions for keeping the animals pursuant to this Act and other regulations,
- keep records on trading with animals and
- issue a certificate of origin of the animal to the new owner.
- (4) The conditions for trade and issuance of a trade certificate, contents of a request and certificate, keeping trade records and control shall be prescribed by the Minister by the ordinance referred to in Article 101, paragraph 4 of this Act.
- (5) The certificates and other acts issued under this Act for the purpose of trade in wild taxa may be used exclusively for specimens to whom they refer."

Article 34

In Article 108, paragraph 2 is amended to read:

"(2) Seized specimens referred to in paragraph 1 of this Article shall be given accommodation at the expense of the Ministry temporarily or permanently with natural or legal persons authorised by the Ministry."

Article 35

After Article 108, Article 108a is added and reads:

"Article 108a

- (1) The provisions and conditions laid down in permits, certificates and other acts issued by the Ministry for the purpose of introduction, taking out, export, import, introduction from the sea, re-export, trade and other proceedings involving wild taxa, parts and derivatives thereof, protected under this Act and international treaties the Republic of Croatia is a party to, must be complied with for the entire duration of permits, certificates and other acts.
- (2) The holder of the permit, certificate or other act referred to in paragraph 1 of this Article, shall immediately notify the Ministry of any changes and new circumstances that affect or may affect the duration of the permit, and in particular with a view to:
- non-compliance with the requirements under which the permit, certificate or other act was issued,
- death of a specimen of an animal and/or plant taxon,
- destruction of a specimen of an animal and/or plant taxon,
- escape of a specimen of an animal taxon and
- other circumstances due to which the content of a permit, certificate or other act differs from the actual state.
- (3) The compliance with the requirements determined in the permit, certificate or other act referred to in paragraph 1 of this Article as well as the changes and new circumstances referred to in the previous paragraph of this Article shall be checked by the Ministry during the entire duration of a permit or certificate."

Article 36

In Article 119, paragraph 2, the full stop is replaced with a comma and the words: "or no later than three days from the date of occurrence of damage caused to domestic animals by strictly protected large wild animals." are added.

Article 37

Article 124 is amended to read:

- "(1) In the procedure of producing the spatial plan of the area distinguished by particular features, the spatial plan of a county or the City of Zagreb, major city, city and municipality, the Ministry shall issue to the body responsible for drawing up the spatial plan the requirements for producing the plan (data, planning instructions, prescribed documents, nature protection requirements and measures, guidelines for conservation of the ecological network area with a cartographic presentation).
- (2) In the procedure of producing urban development plans and detailed development plans in the area of a national park and nature park, the Ministry shall issue to the body responsible for drawing up the spatial plan the requirements for producing the spatial plan (data, planning instructions, prescribed documents, nature protection requirements and measures, guidelines for conservation of the ecological network area with a cartographic presentation).
- (3) The physical planning documents referred to in paragraph 1 of this Article involving a protected area the implementation of which may have a significant impact on the conservation objectives and integrity of the ecological network area shall be adopted subject to the prior approval of the Ministry.

Article 125 is amended to read:

"Natural resource management plans that include a protected area and the implementation of which may have a significant impact on the conservation objectives and integrity of the ecological network area shall be adopted subject to the prior approval of the Ministry."

Article 39

In Article 134, paragraph 2, the words: "The Concessions Act and" are added to the beginning of the sentence.

Article 40

In Article 135, paragraph 2, the words: "in this Act" are replaced by the words: "by law".

Article 41

Article 136 is amended to read:

- "(1) Concession shall be granted by virtue of a completed public bidding procedure.
- (2) In addition to information prescribed by the Concessions Act, a notice on the intention of granting a concession shall also contain the nature protection requirements established by the Ministry.
- (3) Nature protection requirements shall constitute an integral part of the decision on the selection of the preferred bidder and the concession contract.
- (4) Concessions shall be registered in the Register administered by the Ministry and the Register of Concessions administered by the Ministry of Finance."

Article 137 is amended to read:

- "(1) In addition to information prescribed by the Concessions Act, the decision on the selection of the preferred bidder shall contain in particular:
- protected area, other protected natural asset, or speleological object the concession is granted for,
- designated purposes the concession is granted for,
- nature protection requirements.
- (2) The decision on the selection of the preferred bidder shall be issued by the Ministry for:
- national parks and special nature reserves,
- nature parks unless lex specialis provides for otherwise,
- speleological objects.
- (3) For other protected areas the decision on the selection of the preferred bidder shall be passed by the competent body of a county or the City of Zagreb subject to prior approval of the Ministry."

Article 43

Article 138 is amended to read:

- "(1) By virtue of the decision on the selection of the preferred bidder, the concession provider and the selected preferred bidder shall conclude a concession contract that must be in accordance with this Act and the Concessions Act.
- (2) The amount of concession fee shall be established depending on the intended purpose, extent and amount of necessary investments, privileges and material effects accomplished by the concession, restrictions which the concessionaire is subjected to under the prescribed nature protection requirements, as well as other standards and market conditions established by the concession provider, and also the criteria prescribed by the Concessions Act."

Article 44

Article 139 is deleted.

Article 45

Article 140 is amended to read:

"A concession contract shall cease to be valid under conditions prescribed by the Concessions Act and if a change of protection regime of the protected area in which the concession is granted results in reasons that prevent the granting or the use of concession on that area."

Article 46

Article 141 is deleted.

Article 47

Article 144 is amended to read:

"The concession fee granted by the Ministry shall be the income of the State Budget, while the concession fee granted by the competent body of a county or the City of Zagreb shall be the income of the county budget or that of the City of Zagreb."

Article 48

In Article 145, paragraphs 2 and 3 are deleted.

Article 49

In Article 160, paragraph 2 is amended to read:

"(2) Any person who acquired the academic title of professional master or professional specialist in the field of natural sciences, biotechnology or biomedicine and has at least five years of professional experience as well as meets other requirements set out in the charter of the Institute may be appointed technical manager of the Institute."

Article 50

In Article 172, paragraph 1, the words: "protected animals" are replaced by the words: "strictly protected animals".

Article 51

In Article 174, paragraph 3, the words: "a two-year post-secondary education degree or university degree in natural sciences" are replaced by the words: "the academic title of professional or university bachelor or professional master in the field of natural sciences, biotechnology, biomedicine or social sciences".

In paragraph 5, the words: "of protected area they inspect" are replaced by the words: "of a public entity managing the area."

Article 52

In Article 177, after paragraph 1, paragraph 2 is added and reads:

"(2) Inspectional supervision referred to in paragraph 1 of this Article at sea may also be carried out by authorised officials of the Coast Guard of the Republic of Croatia."

The former paragraphs 2, 3, 4 and 5 become paragraphs 3, 4, 5 and 6.

Article 53

In Article 178, paragraph 1, the words: "holding a university degree in the field of natural sciences" are replaced by the words: "who acquired the academic title of professional master or professional specialist in the field of natural sciences, biotechnology, biomedicine or social sciences".

In paragraph 2, the words: "holding a university degree in the field of natural sciences" are replaced by the words: "who acquired the academic title of professional master or professional specialist in the field of natural sciences, biotechnology, biomedicine or social sciences".

Article 54

In Article 187, paragraphs 2 and 3 are deleted.

The former paragraph 4 becomes paragraph 2.

Article 55

Article 188 is amended to read:

"When the requirements for issuing a misdemeanour order are fulfilled, pursuant to *lex specialis* the inspector may forthwith collect a penalty, indemnity or compensation for costs from the perpetrator, without a misdemeanour order, issuing however a confirmation of receipt."

Article 56

In Article 193, paragraph 1, subparagraph 1 is amended to read:

"- undertakes an action which may result in destruction or some other major or permanent damage on the ecologically important area (Article 58, paragraph 4),"

Article 57

In Article 194, paragraph 1, subparagraph 1, after the number: "36" in brackets, the words: "paragraphs 1 and 3" are added.

Article 58

In Article 195, paragraph 1 is amended to read:

- "(1) A fine in the amount of HRK 25,000.00 to 200,000.00 for a misdemeanour shall be imposed on a legal person who:
- performs unauthorized actions in a strict nature reserve (Article 10),

- makes unauthorised economic use of natural resources or other unauthorised activity in the national park (Article 11),
- undertakes unauthorized interventions and actions that may impair the characteristics owing to which the designation of a special nature reserve was awarded (Article 12, paragraph 3),
- pursues activities endangering essential characteristics and role of a nature park, or carries out business activities and uses natural resources without having obtained the nature protection requirements (Article 13),
- pursues the activity that significantly endangers the meaning and role of a regional park or carries out business activities and uses natural assets without having obtained the nature protection requirements (Article 14, paragraph 2),
- in the nature monument or in its immediate vicinity undertakes the actions that endanger its characteristics and values (Article 15, paragraph 3),
- performs the actions and activities degrading the characteristics owing to which the designation of important landscape was awarded (Article 16, paragraph 2),
- carries out the actions and activities not aimed at maintenance or improving the forest park (Article 17, paragraph 2),
- undertakes the interventions and actions which modify or degrade the values owing to which the park architecture monument was awarded protection (Article 18, paragraph 2),
- with no valid reason destroys minerals, speleothems or fossils (Article 20, paragraph 4),
- does not protect indigenous domesticated taxa in the prescribed manner (Article 28),
- organises rides on motor vehicles outside communities, any kind of roads, field roads, improved paths and driving polygons with no approval from the Ministry (Article 32),
- places on the market and applies plant protection agents and mineral fertilizers in an unauthorized manner (Article 34),
- does not restore or bring the state of the natural environment in the impact area of the intervention close to that which prevailed prior to the intervention (Article 37g, paragraph 2)
- does not implement the mitigation measures in the prescribed manner (Article 37b, paragraph 2)
- does not implement the compensation terms in the prescribed manner (Article 37c, paragraphs 3 and 6)
- as a contractor carrying out the intervention or as a user of natural resources without delay does not eliminate harmful consequences (Article 40),
- uses and manages forests contrary to principles of sustainable development and principles of forest certification (Article 42, paragraph 2 and 3),

- performs forestation wherever that is not justified and in a manner endangering the endangered non-forest and rare habitat type (Article 43),
- uses chemical agents for protection of plants in forests with no authorization (Article 44),
- does not safeguard constant percentage of mature, old and dry trees pursuant to nature protection requirements (Article 45, paragraph 1),
- does not leave unhewed areas defined in forest management plans or nature protection requirements (Article 45, paragraph 3),
- does not manage in such a manner so as to conserve to the maximum extent the forest clearances and forest edges (Article 45, paragraph 4),
- does not manage in such a manner as to provide prolongation of hewable maturity for indigenous species of trees (Article 45, paragraph 5),
- damages, destroys or takes away speleothems and underground live nature from the speleological object (Article 48, paragraph 1),
- modifies habitat conditions in a speleological object by disposal of garbage or biological waste, by burning fire or otherwise (Article 48, paragraph 1),
- performs activities or actions in a speleological object without prior approval of the Ministry (Article 48, paragraph 2),
- endangers or degrades a speleological object or otherwise impedes its use (Article 49, paragraph 1),
- constructs barriers on watercourses, reclaims, buries springs, ponds, etc, and thereby endangers natural assets and biological diversity (Article 51, paragraph 1),
- manages grasslands in an unauthorized manner (Article 54),
- does not conserve peripheral parts of agricultural land as habitats (Article 55, paragraph 1),
- does not implement prescribed measures for conservation of habitat types in a favourable state (Article 56, paragraph 1),
- pursues research without the permission of the competent body and/or does not forward the results of research to the competent body (Article 67, paragraph 1 and/or 3),
- disturbs, captures, injures wild animals, reduces population of a wild taxon, destroys or degrades its habitat without just cause (Article 85, paragraph 2),
- does not apply measures, methods and technical means that least disturb wild taxa or habitats of populations thereof (Article 86, paragraph 1),
- does not apply prescribed protective measures and does not maintain crossings for wild animals (Article 87, paragraph 3),

- constructs towers and technical components of medium-voltage transmission lines in an unauthorised manner (Article 88),
- collects plants, fungi and parts thereof and captures and kills animals for the purpose of processing, trade and other business without obtaining authorisation from the Ministry and without other prescribed requirements (Article 89),
- uses protected wild taxa contrary to prescribed requirements (Article 94),
- uses the devices for capturing and killing protected animals as well as the agents that may induce local vanishing or severe disturbance of populations of the species (Article 95),
- trades in wild growing strictly protected plants and fungi (Article 97, paragraph 2),
- intentionally captures, holds and kills strictly protected animals, damages or destroys their evolution forms, nests or broods, as well as the breeding and resting sites, disturbs these during the time of breeding, rearing young and hibernation, and intentionally destroys or takes eggs from natural environment or keeps empty eggs (Article 97, paragraph 3, subparagraph 1, 2, 3, 4, 5 and 6),
- hides, keeps, breeds, trades in, imports, exports, transports, alienates or in any other manner way acquires, and stuffs strictly protected animals (Article 97, paragraph 3, subparagraph 7)
- proceeds contrary to the law with regard to wild growing plants, fungi and animals found in a strict nature reserve, national park and special nature reserve, as well as to underground animals (Article 97, paragraph 4),
- keeps in captivity, breeds, markets and purchases wild taxa contrary to statutory requirements (Article 99),
- exports or imports strictly protected plants, fungi and animals with no authorisation from the Ministry (Article 99, paragraph 2),
- carries out introduction, taking out, export, re-export, import, introduction from the sea of wild taxa that are protected under this Act or international treaties the Republic of Croatia is a party to, parts and derivatives thereof contrary to the requirements laid down in the Act and implementing regulations (Article 101),
- carries out introduction, taking out, export, re-export, import, introduction from the sea of wild taxa that are protected under this Act or international treaties the Republic of Croatia is a party to, parts and derivatives thereof without an appropriate permit or certificate issued by the Ministry or an act issued by the competent body of the exporting or re-exporting country, or with a false, falsified or invalid permit or certificate, or with a permit or certificate that was changed without approval from the Ministry or the competent body of the exporting or re-exporting country (Article 101, paragraph 1),
- uses a permit, certificate or other act issued under this Act for the purpose of transboundary movement and trade in protected wild taxa for any other specimen of a wild taxon that is not the one for which the permit, certificate or other act was issued (Article 101, paragraph 7 and/or Article 107, paragraph 5),

- in his/her request for issuance of permits for introduction, taking out, export or import and introduction from the sea, re-export certificate, trade permit or certificate, uses a false statement or knowingly provides false information for the purpose of obtaining a permit or certificate (Article 101, paragraphs 1 and 4, Article 107, paragraphs 1 and 4),
- submits a false, falsified or invalid permit or certificate, or a permit or certificate that was changed without approval of the issuing competent body in his/her request for issuance of permits for introduction, taking out, export or import and introduction from the sea, re-export certificate, trade permit or certificate or any other purpose relating to this Act and implementing regulations adopted on the basis thereof (Article 101, paragraphs 1 and 4, Article 107, paragraphs 1 and 4),
- carries out transit of wild taxa protected under this Act, parts and derivatives thereof without a valid export permit or re-export certificate issued by the competent body of the exporting or re-exporting country (Article 101. paragraph 8.),
- performs trade in indigenous or alien wild taxa protected under this Act or international treaties the Republic of Croatia is a party to, contrary to the requirements laid down in the Act and implementing regulations adopted on the basis thereof (Article 107),
- falsifies or changes a permit or certificate for trading in indigenous or alien wild taxa protected under this Act (Article 107, paragraphs 1 and 4),
- does not comply with the provisions and conditions listed in the permit or certificate for trading in indigenous or alien wild taxa protected under this Act (Article 107, paragraphs 1 and 4),
- if the Ministry is not immediately notified of any changes and new circumstances that affect or may affect the validity of the permit or certificate for the purpose of transboundary movement and trade in protected wild taxa issued under this Act and implementing regulations adopted on the basis thereof (Article 108a, paragraph 2),
- does not submit the offer for sale of real estate on the pre-emption right basis in the manner prescribed by this Act (Article 112, paragraph 1 and 2),
- sells the real estate located in a protected natural asset to another person at a price that is lower than the price quoted in the offer to the persons entitled to pre-emption (Article 112, paragraph 4),
- utilizes natural resources in an unauthorized manner and with damaging consequences (Article 122),
- implements the natural resources management plan without approval of the Ministry (Article 122),
- undertakes the actions and interventions on a protected natural asset without permission or contrary to specified nature protection requirements (Article 127),

- does not apply nature protection requirements established by decision on the selection of the preferred bidder and concession contract (Article 137, paragraph 1, subparagraph 3 and Article 138, paragraph 1),
- does not undertake all the measures and actions to impede the modifications and damages incurred (Article 143, paragraph 1),
- exercises the activity in a protected area with no concession approval (Article 146, paragraph 1),
- places on the market minerals, speleothems and fossils without permission (Article 148, paragraph 3),
- exports minerals, speleothems or fossils that are designated as protected natural assets (Article 150, paragraph 2)."

In Article 196, paragraph 1, subparagraph 12 is amended to read:

"- displays in zoos, aquaria, terrariums or similar spaces the animals of indigenous or alien wild taxa protected under this Act without authorisation from the Ministry (Article 105, paragraph 1),"

Article 60

In Article 197, paragraph 1, subparagraph 2 is deleted.

The former subparagraph 3 becomes subparagraph 2.

Subparagraph 4, which becomes subparagraph 3, is amended to read:

"- takes out from the Republic of Croatia wild taxa and parts thereof that are not a protected natural asset for scientific purposes without authorisation from the Ministry (Article 67, paragraph 4)"

The former subparagraphs 5 to 18 become subparagraphs 4 to 17.

Article 61

Article 198 is amended to read:

- "A misdemeanour fine in the amount of HRK 1,000.00 shall be imposed on a natural person who in national parks, nature parks, regional parks, forest parks and park architecture monuments:
- performs underwater activities without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 1),
- anchors and/or berths vessels outside locations designated by the spatial plan (Article 70a, paragraph 1, subparagraph 2),

- performs recreational fishing without a licence or contrary to the conditions laid down in the issued licence (Article 70a, paragraph 1, subparagraph 3),
- damages and/or destroys signs and/or information boards (Article 70a, paragraph 1, subparagraph 4),
- makes a fire outside of the settlements and/or locations specially designated for that purpose (Article 70a, paragraph 1, subparagraph 5),
- films or photographs for commercial purposes without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 6),
- flies hang gliders or paragliding wings without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 7),
- posts information boards, advertising and/or other signs without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 8)."

After Article 198, the following Article 198a is added:

"Article 198a

A misdemeanour fine in the amount of HRK 200.00 shall be imposed on a natural person who:

- visits and/or tours a national park, nature park, regional park, forest park and a park architecture monument without a ticket (Article 70a, paragraph 1, subparagraph 9),
- deposits waste outside the designated and marked area (Article 70a, paragraph 1, subparagraph 10),
- swims outside the location designated by the public entity (Article 70a, paragraph 1, subparagraph 11)."

Article 63

In Article 38, paragraph 2, the words: "the state administration office in the county, or administrative body of the City of Zagreb competent for nature protection activities (hereinafter referred to as: state administration office)" are replaced by the words: "administrative body in the county or the City of Zagreb competent for nature protection activities (hereinafter referred to as: the administrative body)".

In Article 79, paragraph 2; Article 84, paragraph 3; Article 116, paragraph 2; Article 127, paragraphs 4 and 5; Article 143, paragraph 1; Article 145, paragraph 3; Article 154, paragraph 1; Article 155, paragraph 2; Article 163, paragraph 1; Article 164, paragraph 1 of this Act, the words: "state administration office" are replaced by the words: "administrative body".

- (1) Counties shall ensure the performance of activities prescribed by this Act, as well as establish competent administrative bodies for that purpose within two months from the entry into force of this Act.
- (2) Counties shall take over the activities, employees, office and other equipment as well as records of the state administration offices in counties which were related to the performance of activities in line with the Nature Protection Act (Official Gazette 70/05), each from their territory and in accordance with their self-governmental scope in line with *lex specialis*.

Article 65

- (1) Proceedings initiated prior to the entry into force of this Act shall be completed in accordance with the provisions of the Nature Protection Act (Official Gazette 70/05).
- (2) Pending the adoption of the regulation of the Government of the Republic of Croatia referred to in Article 15 of this Act, the ecological network impact assessment referred to in Article 5 of this Act shall apply only to the ecological network proclaimed by the Government of the Republic of Croatia in the Regulation on the proclamation of the ecological network (Official Gazette 109/2007).

Article 66

This Act shall enter into force on the eighth day from the day of its publication in the Official Gazette, with the exception of the provisions of Article 37c, paragraphs 4 and 6 referred to in Article 8 of this Act that shall enter into force on the date of accession of the Republic of Croatia to the European Union and Article 20 of this Act which shall enter into force on 18 May 2009.

Class: 351-01/08-01/07

Zagreb, 21 November 2008

THE CROATIAN PARLIAMENT

The President of the Croatian Parliament

Luka Bebić, m.p.

Pursuant to Article 104 paragraph 4 of Nature Protection Act (Official Gazette 70/05) the Minister of Culture hereby passes the

ORDINANCE

CONCERNING THE CONDITIONS OF KEEPING PROTECTED ANIMALS IN CAPTIVITY, MARKING METHODS AND KEEPING RECORDS THEREOF

CHAPTER I

General provisions

Article 1

This Ordinance lays down conditions to be met as regards manner of keeping protected animals in captivity, marking methods and record keeping procedures. For the purpose of paragraph 1 of this Article, protected animals are animals of native and non-native wild species, protected as defined in Nature Protection Act, including pets that belong to wild species which are held as companion animals(hereinafter referred to as: "animals"). The provisions of this Ordinance shall not apply to the transport and quarantine conditions stipulated by special regulations.

CHAPTER II

Conditions of keeping protected animals in captivity

Article 2

The conditions of keeping animals in captivity laid down in this Ordinance shall be ensured by natural and legal persons who:

- breed animals,
- trade in animals
- keep animals with the intention of displaying them to the public in zoos, aquariums, terrariums or similar areas.
- become owners of animals with the purpose of keeping them as household pets.

Article 3

The conditions of keeping animals in captivity include providing the animals with adequate accommodation and care.

The conditions of accommodation and care for animals are laid down in the Annex, an integral part of Ordinance hereof.

In case of keeping hybrids whose parent species are of different sizes, the conditions applying to keeping animals shall be those stipulated for the species of a bigger parent thereof.

Article 4

The accommodation facility for animals shall have such technical and functional characteristics, so as to provide the animals with:

- enough space, so that they are not restricted in fulfilling basic physiological, ethological and other biological needs appropriate to the animal species, age, degree of development and adaptation, in accordance with established experience and scientific knowledge,
- appropriate lighting, the day and night cycle, temperature, relative air humidity, air circulation, gas concentrations and appropriate liquids/gasses ratio, suitable to the needs of the animal species and its ecotypes, to the age, degree of development and adaptation, provided that the influence of disturbing factors is as minimal as possible and
- single-animal enclosures, for the solitary animals.

Animal care encompasses:

- caring for animals in such a manner as to all their physiological, ethological and other biological needs are fulfilled,
- protection from the escape of the animals,
- necessary veterinary and hygienic measures, especially:

daily health status control of animals,

control of sanitary quality of food and water,

storing and preparing the food and feeding animals in accordance with sanitary regulations, regular cleaning of the enclosures using cleaning agents that are not toxic to the animals.

Article 6

By way of derogation from Articles 3, 4 and 5 of this Ordinance the conditions of keeping animals can be adapted to given capacities in the following circumstances:

- in case of animal shelter,
- in case of temporary care for sick and injured animals until they are cured,
- in case of animal exhibitions or similar events, lasting no longer than 7 days,
- in case of retail stores and wholesale trade in live animals, where it is possible to keep up to 50 percent more animals than the number stipulated for the corresponding size of cage, birdcage, terrarium or aquarium.
- if so established under other regulations.

In the case specified in paragraph 1, indent 4 of this Article, the owner of the retail store shall put up a warning to the customers stating that the size of the enclosure in which animals are kept in the store is not corresponding to the real needs stipulated for the species and give a written instruction on the stipulated conditions of keeping and caring for the species to each customer at time of purchase

Article 7

Failure to comply with the conditions relating to the keeping of animals and caring for them stipulated in this Ordinance shall be deemed to be animal torture.

CHAPTER III

Marking of animals

Article 8

Provisions of this Ordinance regarding marking of animals apply to live vertebrates listed in Annexes I, II, III and IV of Ordinance on designating wild species and subspecies protected and strictly protected.

By way of derogation from paragraph 1 of this Article, the obligation of marking shall not apply to the species listed in Annex III of the Ordinance on designating wild species and subspecies protected and strictly protected that are listed as game animals.

The breeders registered in accordance with the provisions of Ordinance on transboundary movement and trade in protected species shall provide for marking of animals specified in paragraph 1 of this Article.

Natural and legal persons who become the owners of the animals referred to in paragraph 1 of this Article that are not marked, but for which they possess a proof of legal origin, shall mark them subsequently pursuant to the provisions of this Ordinance.

If an original mark is destroyed, the breeder and/or owner shall submit a request to the Ministry for consent for new marking of the animal. The Ministry shall grant consent if the identity of the animal is established beyond dispute.

If a marked animal from Annexes I and II to the Ordinance on designating wild species and subspecies protected and strictly protected shall die, escape or is destroyed, the breeder and/or owner shall within ten days submit the following data to the Ministry:

- the species of the animal,
- animal 's identification mark (microchip transponder number, legring number etc.),
- date of death or escape,
- possible further use of the animal (stuffing, donating the carcass for scientific research etc.). The expenses of marking of animals shall be covered by breeders and/or owners of the animals.

Article 9

Live vertebrates other than birds shall be marked by means of a uniquely numbered unalterable microchip transponder in the following manner:

– mammals:

large mammals (except elephants) – the middle of the left side of the neck, subcutaneously, medium-sized and small mammals – between clavicles,

primates - metacarpal or metatarsal area,

elephants – behind the left ear,

– reptiles:

turtles and tortoises – subcutaneously in left hind limb (intramuscularly for species with thin skin), subcutaneously in tarsal area for large species,

crocodiles – anterior to the nuchal cluster,

lizards – left quadriceps or subcutaneously in that area, for very small species subcutaneously on the left side of the body,

snakes – left part of the neck subcutaneously, two head lengths from the tip of the nose,

- amphibians implantation into lymphatic cavity,
- fish implantation anteriorly to dorsal fin.

Article 10

Microchip transponders from Article 9 of this Ordinance:

- shall conform to ISO standards 11784:1996 (E) and 11785:1996 (E);
- shall contain the unique, permanently legible and unalterable number consisting of 15 digits, composed in the following manner:

places 1, 2 and 3: triple-digit country code – 191 in accordance with Croatian HRN ISO standard 3166-1,

places 4 and 5: producer's code number

places 6 to 15: unique (individual) number of the animal;

- shall contain a mechanism preventing the migration of the microchip transponder through the body of the animal,
- shall be harmless to the animals,
- shall be packed in separate and sterile containers until their implantation into the animal. Marking system used in the Republic of Croatia shall ensure the uniqueness of the microchip transponders. The producer of the microchip transponders shall be deemed responsible for uniqueness of the microchip transponder numbers.

Exceptionally, , if a marking method specified in Article 10 of this Ordinance is not applicable because of the physical or behavioural properties of the animal, the animals concerned shall be marked by means of uniquely numbered rings, bands, tags, tattoos and the like, in order to enable their identification.

The unique number from paragraph 1 of this Article shall consist of eleven characters, composed in the following manner:

places 1-2: country code (HR) in accordance with Croatian ISO standard HRN 3166-1,

places 3-4: the year of breeding,

places 5-8: breeder's code number,

places 9-11: unique (individual) number of the animal.

The unique number is granted by the Ministry upon request of the party.

Article 12

Birds from Annexes I and II of the Ordinance on designating wild species and subspecies protected and strictly protected shall be marked by means of a legring and a microchip transponder.

Birds from Annexes III and IV of the Ordinance on designating wild species and subspecies protected and strictly protected shall be marked by means of legring only.

A legring shall be uniquely marked, seamlessly closed, i.e. made in a continuous circle, without any break or join, it must not have been tampered with in any way, and must be commercially manufactured for that purpose.

The legring must be of a size which cannot be removed from the leg of a fully grown bird, and is applied to the leg of the bird in the first days after hatching.

By way of derogation from the provisions of paragraph 2 of this Article, if a bird cannot be marked by means of a legring, because of its physical or behavioural properties, or if a legring has not been applied in good time, the bird shall be marked by means of a microchip transponder.

In the case specified in paragraphs 1 and 5 of this Article, the microchip transponder shall be implanted in the left pectoral muscle of the bird, except in penguins, into which it is implanted subcutaneously at the base of the neck. The microchip transponder shall be in accordance with the criteria from Article 10 of this Ordinance.

Article 13

Legrings from Article 12 of this Ordinance:

- shall contain a unique number consisting of 11 digits, composed in the following manner:

places 1 and 2: country code (HR) in accordance with Croatian ISO standard HRN 3166-1,

places 3 and 4: the year of breeding,

places 5 and 6: distributor's code number,

places 7 and 8: breeder's code number,

places 9 - 11: serial number of the bird.

Marking system used in the Republic of Croatia ensures uniqueness of the legring number.

The application of the microchip transponders into the animals referred to in Article 10 of this Ordinance shall be performed by doctors of veterinary medicine.

Procurement and distribution of microchip transponders shall be performed only by a legal person authorised by the Ministry for the duration of 3 years.

The authorised legal person referred to in paragraph 2 of this Article shall keep records of issued microchip transponders, containing the following data:

- total number of issued microchip transponders,
- the manufacturer of microchip transponders,
- the list of the authorised veterinary organisations and private practices that took over microchip transponders,
- the list of unique microchip transponder numbers that were taken over by particular authorised veterinary organisations and private practices.

The Ministry shall exercise control over the record keeping referred to in paragraph 3 of this Article.

Article 15

The attaching of seamless legrings to the birds shall be performed by the breeders.

Procurement and distribution of legrings shall be performed only by a legal person authorised by the Ministry for the duration of 3 years.

The authorised legal person referred to in paragraph 2 of this Article shall keep records of issued legrings, containing the following data:

- total number of issued legrings,
- the manufacturer of legrings,
- the list of breeders who took over the legrings,
- the list of unique legring numbers that were taken over by particular breeders.

The Ministry shall exercise control over the record keeping referred to in paragraph 3 of this Article.

Article 16

Marking of animals in line with the provisions of this Ordinance shall be undertaken with due regard to humane care, well-being and natural behaviour of the specimens concerned.

CHAPTER IV

Keeping records of protected animals in captivity

Article 17

Legal or natural persons who become owners of the animals listed in Annexes I, II, III and IV of the Ordinance on designating wild species and subspecies protected and strictly protected, with the intention of keeping them in captivity, shall inform the Ministry within 30 days after acquiring ownership rights over the animals.

The written notification referred to in the previous paragraph shall contain the following data:

- name, family name, or name and address of the owner of the animal,
- Croatian and Latin name of the species,
- number of the animals kept,
- sex of the animals,
- number (microchip transponder, legring number, seal, tattoo, etc.),

- country of origin of the animal,
- description of the conditions of keeping and caring for the animal,
- date of acquiring the animal,
- manner of acquiring the animal.

The provision of paragraph 1 of this Article is not applicable to the natural and legal persons who trade in live animals, or to the natural and legal persons who become owners of the animals listed in Annex III of the Ordinance on designating wild species and subspecies protected and strictly protected that along with a scientific name bear a specific notification of being game animals

The Ministry shall keep records of animals referred to in paragraph 1 of this Article.

CHAPTER V

Transitional and final provisions

Article 18

Natural and legal persons who keep animals in captivity shall harmonise the conditions under which animals are kept with the provisions of this Ordinance within twelve months from the date of its entering into force.

Article 19

Specimens of animals that were marked before entering into force of this Ordinance or prior to their import into the Republic of Croatia shall be deemed to have been marked in compliance with the provisions of this Ordinance.

It shall be deemed that the specimens of animals marked outside the area of the Republic of Croatia are marked in compliance with the provisions of this Ordinance, if they are marked using methods approved by the proper administrative body of another state, which are of equal value with the marking methods provided for in this Ordinance.

The Ministry shall keep records on other states that mark animals by using methods which are of equal value to to the ones provided for in this Ordinance.

The standards laid in Article 10, paragraph 1 of this Ordinance shall cease to apply by establishing relevant Croatian ISO standards related to microchip transponders referred to in Articles 9 and 12 of this Ordinance.

Article 20

This Ordinance shall enter into force on the eighth day from its publication in the Official Gazette.

Class: 612-07/05-30/27 Reg No: 532-08-01/1-05-01 Zagreb, 5th December 2005

Minister **Božo Biškupić, signed**

Annex to the Ordinance concerning the conditions of keeping protected animals in captivity, marking methods, and keeping records thereof

Mammals (Mammalia)

a) Monotremes and marsupials

SPECIES	No.	Outdoo	or area	Ind	oor area			additional imal	Special
SPECIES		Floor a (m ²)	Height (m)	Floor area (m ²)	Height (m)	Temp (°C)	Outdoor area (m ²)	Indoor area (m²)	Requirements
Echidna	2	-	-	4	-	15	-	2	1) 3)
Cuscus, opossums, brushtail possum	2	-	-	4	3	-	-	1	2)14)
Gliders	6	-	-	6	3	-	-	0.5	2)14)
Wombat, Tasmanian devil	2	10	-	6	-	15	-	-	1)14)19)
Tree kangaroos	2	16	3	8	2.5-3	18	4	4	2)
Rock wallabies	5	150	-	15	-		15	3	2)19)21)
Medium-sized kangaroos and wallabies	5	150	-	15	-	15	15	3	1)6)8)21)
Great kangaroos	5	300	-	20	-	15	30	15	6)8)19)21)

b) Tree shrews

No.		Outdoo	or area	Ind	Indoor area			additional imal	Special
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	Requirements
Tree shrews	5	•	-	3	1.5	18	-	0.3	2)3)14)15)

c) Insectivores (Insectivora)

SPECIES No.		Outo	door	Indoor				additional imal	Special
SPECIES		Floor rea (m ²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor (m²)	Indoor area (m²)	Requirements
Hedgehog	2	2	-	-	-	-	-	-	6)3)
Tenrec	2	-	-	1	-	18	-	-	

d) Primates (Primates)

	No.	No. Outdoor area		Inde	oor area	1		additional imal	Special
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area(m²)	Indoor area (m²)	Requirements
Loris, potto, mouse lemur	5	-	-	1.5 - 3	2	20-25	-	0.3	2)3)14)
Tarsiers, lesser galago, small lemurs, Goeldi's monkey	5	-	-	4	2	20-25	-	0.5	2)3)14)15)
Marmosets, tamarins	5	6	2	6	2	18-24	0.5	0.5	2)3)13)14)15)

Large galagos, night	5	-	-	6	2	18-25	-	1	2)3)22)
monkeys, titi monkeys, owl									
monkeys									
Squirrel monkeys, talapoin	5	6	2.5	6	2		1.5	1.5	2) 6)
Howler monkeys,	5	10	3	8	2	18-25	2	2	2)3)
capuchins, lemurs, uakaris, saki monkeys									
Macaques, spider monkeys, woolly monkeys, guenons,	5	15	3	12	2	18-21	3	3	2) 3) 19)
smaller langurs, larger lemurs									
Langurs (+guereza), hussar monkey, mangabeys, baboon, sifakas, mandrills	5	25	3	15	3	18-21	4	4	2) 3) langur, guereza ;8)12)19)
Gibbons	2	25- length 8 m	3	20	3	16	8	5	2) 3) 19) 21)
Chimpanzee, orang-utan	3	35	4	20	3	18	8	8	2) 3) 7)12)17) 19)
Gorilla	3	50	4	50	4	18	10	10	2) 3)7) 12)17) 19)

e) Carnivores (Carnivora)

	No.	Outdo	or area	Inde	oor area	1		additional nimal	Special
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	Requirements
Sun bear spectacled bear, sloth bear	2	60	-	4/specimen	-	-	10	-	1) 2) 3) 7)17) 18)
Brown bear, polar bear, giant panda, Asian black bear	2	150	-	6/specimen	-	-	20	-	1) 2) 3)7) 17) 18) panda – obligatory bamboo; polar bear pool→ see Appendix I
Common racoon, red panda	2	20	2	-	-	15	2	-	2)3)6)14) 21)panda- obligatory bamboo
Ringtailed coati	2	8	2.5	8	2	10	2	2	2)3)6)14)21)
Civets	2	16	2.5	12	2	18	5	5	2)3)5)
Kinkajou, ring-tailed cat	2	-	-	12	2	-	-	2	2)3)
Small cat species	2	10	2.5	10	2.5		1	1	2)3)5)6)18)19)
Serval, ocelot, fishing cat	2	15	2.5	12	2.5	18	2	2	2)3)Fishing cat 4)5)6)18)19)
Lynx, clouded leopard	2	20	2.5	10(not for lynx)	2.5	18(not for lynx)	10	10	2)3)5)6)18)19) Lynx21)
Puma, jaguar, leopard, snow leopard	2	30	2	15	2	15	15	12	2)3)Jaguar 4)5)6)9)18)19)
Lion, tiger	2	40	3	25	3	15	10	4	2)3)tiger 4)5)6)9) 18)19)
Cheetah	2	80	-	20	2	15	10	5	3)5)6)18)19)
Fennec fox	2	6	-	6	-	18	1	1	1)3)6)9)14)16)
Medium-sized foxes (e.g. Arctic fox), raccoon dogs	2	20	-	8	-	-	4	1	1)3)6)14)21)
Red fox, grey fox, Southern American zorros	2	60	-	-	-	-	10	-	1)3)6)14)

Jackals, coyote, wild dogs	2	40	-	-	-	-	10	-	1)3)6)14)15)
Maned wolf	2	60	-	2/specimen	-	18	15	-	1)3)6)15)19)
Wolf, African wild dog	2	100	-	-	-	-	10	-	1)3)6)19)21)
Short-clawed otter	2	10	-	6	-	-	3	2	3)5)pool→ see
Short-clawed offer									Appendix I
European river otter	2	20	-	-	-	-	-	-	3)5)pool→see
European river otter									Appendix I
Marine otter	2	10	-	-	-	-	3	-	3) pool \rightarrow see
With the otter									Appendix I
True seals	2	5	-	-	-	-	-	-	$pool \rightarrow see$
True Sears									Appendix I
Eared seals	5	10	-	-	-	-	-	-	$pool \rightarrow see$
		1.0							Appendix I
Southern elephant seal,	3	10	-	-	-	-	-	-	pool → see
walrus	_	0		47.04		1.0	1	0.5	Appendix I
	2	8	-	4(if there is	-	18	1	0.5	1)3)5)6)16)
Devent				an outdoor enclosure,					
Dwarf mongoose				if not, than					
				6)					
	2	12	_	4 (if there		18	2	1	1)3)5)6)16)
		12	_	is an	_	10	L	1	1)3)3)0)10)
Suricate (meerkat), banded				outdoor					
mongoose, yellow				enclosure,					
mongoose				if not, than					
				6)					
Medium-sized mongooses	2	16		8		18	3	2	1)3)5)6)16)
Large mongooses (e.g.	2	20	-	10	-	18	3	2	1)3)5)6)16)
binturong)									, , , , ,
Small weasels	2	1.5	-	-	-	-	-	-	2)3)14)
Large weasels	2	6	2	-	_	-	-	-	2)3)14)
Polecats, minks	2	10	2	-	-	-	-	-	3)14)
Martens	2	10	2.5	8	2.5	-	ı	ı	2)3)14)
Skunk	2	10	-	10	-	-	2	2	1)14)
Wolverine	2	40	-	-	=	-	ı	-	1)2)18)
Badgers	2	20	-	10	-	-	4	4	1)3)6)14)
Aardwolf	1	50	-	6	-	-	10	3	1)18)19)
Hyenas	1	150	-	4	-	15	20	2	1)18)19)

f) Edentates (*Edentata*)

	Outdoo	Outdoor area		oor area	ı		additional imal	Special	
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	Requirements
Armadillos	2	-	-	4	-	18	-	1	1)14)
Tamandua	2	-	-	6	2	18	-	2	2)14)
Giant anteater	2	40	-	6	-	16	10	3	1)19)
Sloths	2	-	-	10	2	-	-	1.5	2)

$g) \ Lagomorphs \ (\textit{Lagomorpha})$

	SPECIES	No.	Outdoor area	Indoor area	For each additional animal	Special
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		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	Requirements
Hares	2	20	-	-	-		4	-	3)6)
Rabbits, pikas	5	10	-	-	-		2	-	3)6)

h) Elephants (*Proboscidea*)

SPECIES			door osure	Indoor enclosure				additional imal	Special Requirements
		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	
Elephant/female	3	500	-	15/specime n	-	16	100	-	8)9)10)
Elephant/male	1	150	-	2x30/speci men	-	16	100		8)9)10)

i) Hyraxes (Hyracoidea)

No.		Outdoo	or area	Inde	Indoor area			additional imal	Special
SPECIES		Floor area (m²)	Height (m)	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		Requirements			
Hyraxes	5	10	2	10	2	-	2	2	2)8)

j) Aardvark (Tubulidentata)

SPECIES	No.	Outdoor enclosure		Indoo	Indoor enclosure			additional imal	Special Requirements
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	
Aardvark	5	-	-	40	-	-	-	5	1)

k) Rodents (Rodentia)

SPECIES	No.	Outdoor enclosure		Indoo	Indoor enclosure			additional imal	Special Requirements
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	
Coypu	2	8	-	2	-	-	1	-	8)pool→see Appendix I
Squirrels, flying squirrels	2	4	2.5	3	2	18	2	2	2)8)14)
Tree porcupines, giant squirrels	2	-	-	12	3	-	-	3	2)5)8)14)
North American porcupine	2	10	3	-	-	-	4	-	2)8)14)
Old World porcupines	2	12	-	_	-	-	2	-	1)3)8)14)

Springhare	3	-	-	8	-	18	-	-	1)3)8)14)
Agouti, viscacha	5	-	-	8	-	15	-	2	1)3)8)14)
Paca	2	-	-	6	-	15	-	3	1)8)14)19)
Marmots	5	20	-	-	-	-	4	-	1)8)23)
Prairie dogs	5	20	-	-	-	-	2		1)8)
Capybara	2	40	-	8	-	15	10	2	3)8)pool→see Appendix I
Mara	2	20	-	-	-	-	4	-	1)3)8)14)
Beaver	5	20	-	2/pair	-	-	4	-	23)8)pool→see Appendix I
Hutias, hutia conga	2	-	-	5	2	-	-	1.5	1)2)8)14)

l) Bats (Chiroptera)

	No.	Outdoor area		Indoor area				additional imal	Special
SPECIES		Floof area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	Requirements
Fruit bats	20	-	-	10	2.5	21	-	-	11)12)
Flying foxes	20	=	-	20	3	21	-	-	11)12)

m) Odd-toed ungulates (Perissodactyla)

	No.	Outo ar	Indoor area		l	For each an	Special		
SPECIES		Floor area (m²)	Height (m)	Floor area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor area (m²)	Requirements
Wild asses, wild horses, zebras	5	500	-	8/specimen	-	8	80	-	9)21)18)19)
Tapirs	2	200	-	12/ specimen	-	-	50	-	6)9)pool→see Appendix I
Rhinoceroses	2	500	-	25/ specimen	-	18	150	-	9)10)18)19)

n) Even-toed ungulates (Artiodactyla)

CDECLEC	No. Oute		Outdoor area Indoo			ı	For each additional animal		Special
SPECIES		Area (m²)	Height (m)	Area (m²)	Height (m)	Temp (°C)	Outdoor area (m²)	Indoor (m ²)	Requirements
Peccaries	3	60	-	3/ specimen	-	-	10	-	6)9)10)
Wild boars	2	100	-	4/ specimen	-	-	10	-	6)9)10)19)
Pygmy hippopotamus	2	100	-	10/ specimen	-	18	10	6	pool→see Appendix I
Hippopotamus	2	250	-	40	-	18	50	10	pool→see Appendix I
Alpaca, llama	3	150	-	-	-	-	30	-	21)

Vicuña, guanaco,	3	300	-	8/	-	-	50	-	Camel 19)21)
dromedary and Bactrian				specimen					
camel									
Indian spotted chevrotain	2	-	-	6	-	-	-	2	3)
Water chevrotain	2	40	-	8	-	-	12	2	3)10)
Small-sized deer (such as pudu)	4	100	-	3/ specimen	-	-	15	-	3)19)
Medium-sized deer (such as fallow deer)	8	400	-	4/specimen	-	-	60	-	9)19)21)
Large deer (such as red deer)	6	500	-	6/specimen	-	-	80	-	9)19)21)
Elk (moose)	3	500	-	-	-	-	100	-	9)19)21)
Okapi	2	300	-	15/specime n	-	-	50	-	18)
Giraffes	4	500	-	25/specime n	-	15	50	-	18)20)
Small-sized antelopes (Klipspringer), dik-dik antelopes, Duikers	2	50	-	3/specimen	-	-	20	-	3)19)21)
Gazelles	10	500	-	4/specimen	-	-	40	-	3)19)21)
Medium-sized antelopes (e.g. saiga, pronghorn)	6	500	-	5/specimen	-	-	50	-	3)19)21)
Large antelopes (e.g. blue wildebeest, waterbuck)	5	500	-	8/specimen	-	-	80	-	9)19)21)
Goral, takin	4	400	-	4/specimen	-	-	40	-	2)3)19)21)
Mouflon, wild sheep, wild goats	10	400	-	-	-	-	40	-	2)3)19)21)
Bison, wild cattle, musk ox	5	500	-	8/specimen	-	-	80	-	9)19)21)

Sizes of pools for mammals

SPECIES	For a g	roup of the anin	following nals (n)	number of	For each additional animal	Special Requirements	Minimal required area of land
	No. (n)	Floor area (m ²)	Depth (m)	Volume (m³)	m ²	_	m ²
Coypu, mink	2	2	0.5	1	-	_	See table
Beaver	3	15	0.8	12	-	-	See table
Capybara	5	6	0.5	3	1	-	See table
Short-clawed otter	2	10	0.5	5	2	-	See table
European river otter	2	20	0.8	16	-	-	See table
Marine otter	2	60	2.0	120	8	-	See table
Polar bear	1	60	1.5	90	20	-	See table
Pygmy hippopotamus	2	20	0.8	16	-	Temp.18-20	See table
Hippopotamus	2	30	1.5	45	8	Temp.18-20	See table
Tapirs	2	10	0.8	8	-	=	See table
True seals	2	60	1.5	90	10	-	See table
Elephant-seals (sea lions)	5	100	2.0	200	15	-	See table
Southern elephant-seal, walrus	3	200	3.0	600	40	-	See table

Explanation of numbers in "Special requirements" column in the table pertaining to the conditions under which mammals should be kept

- 1. the animals must be enabled to dig
- 2. the animals must be enabled to climb
- 3. the animals must be be enabled to hide
- 4. pool is required
- 5. the animals must be provided with raised platforms for observing the surroundings
- 6. outdoor enclosure must be provided with natural materials (dirt, sand, bark, leaves, etc.)
- 7. enclosures must be provided with enrichment items
- 8. branches should enclosure on a regular basis with the purpose of ensuring dental hygiene and as enrichment of the environment
- 9. the animals must be enabled to wallow in or sprinkle with sand or mud and/or logs for scratching must be provided
- 10. bathing and/or showering must be available to animals throughout the year
- 11. firm animals must be enabled to grip structures on the roof or on the top of the enclosure
- 12. the enclosure should be equipped with multiple feeding places
- 13. the enclosure must have direct access to sunlight –open enclosure or openings on the roof or open windows
- 14. sleeping boxes are mandatory
- 15. monogamous pairs with their offspring until the time they cease to accept them
- 16. a heater needed in outdoor enclosure
- 17. each animal should have its own bed
- 18. individual boxes for each animal (small carnivores $0.5 1 \text{ m}^2$, wolverine, lynx, serval, puma, clouded leopard, other medium-sized cats 1.5 m^2 , big-sized cats, cheetah 2.5 m^2 , sun bear, hyenas, aardwolf 4 m^2 , other bears + giant panda 6 m^2)
- 19. the possibility of separating animals
- 20. open but roofed pre-area (80 m²) must be provided
- 21. outdoor enclosure must contain a shelter for the animal

Birds (Aves)

GENERAL CONDITIONS OF KEEPING BIRDS

1. AVIARIES

Aviaries and birdcages should be isolated from noise and positioned in such a manner as to protect the birds from any stress that might be caused by humans or other animals. If exhausted or injured birds are kept with the purpose of reintroducing them into their natural habitats, it is necessary to minimize the presence of humans in their surroundings. Such birds are not to be exhibited nor displayed for public viewing.

2. LIGHTING

If birds are kept indoors, the space should be adequately illuminated by natural light, or an appropriate artificial lighting must be provided. Equal lighting should also be provided in closed parts of the aviaries that serve as protection. Daylight should not be interrupted; the day and night cycle should be adhered to. The duration of illuminated period is defined according to the specific requirements for the species and the season of the year; for songbirds it mostly varies between 8 and 14 hours a day.

3. FOOD

Each bird species should be provided with food appropriate to its species and age. Fresh food and water should be provided on a daily basis, and food and water bowls should be washed regularly. Food and water bowls should be placed away from perches in order to minimize the possibility of contamination with bird droppings. The birds should also be provided with water for bathing.

4. ILLNESS AND INJURIES

Daily controls of the health status of captive bred birds are recommended. If any bird is suspected to be ill, has parasites or has injured itself, veterinarian should be consulted. In case captive birds are injured or ill, it is more important to prevent them from further injuries than to satisfy their need to move. A temporary restriction of movement is often necessary. Within that period the birds can be held in boxes.

a) OSTRICHES

Ostriches should be kept within high fenced enclosures. A dry shelter must be provided, with no draught and in which the ground does not freeze. Rheas and emus should be provided access to a shelter at the temperatures below -10°C. Cassowaries are solitary animals and should be kept separately except during the mating season.

	No. of	Floor area /m ²	Sh	nelter	Each	Special	
SPECIES	birds	x height of the fence/m	Floor a rea/m ² per bird	Temperature	addition al bird	Requirements	
Ostrich (Struthio camelus)	3	250/1,8	6	> 10 °C	50	Sand for bathing	
Rheas (Rheidae)	2	200/1,2	4	Heating is not necessary	25	Sand for bathing	
Emu (<i>Dromaius</i> novaehollandiae)	2	200/1,2	4	Heating is not necessary	100	Sand for bathing	
Cassowary (Casuariidae)	2	200/1,8	6	> 15 °C	-	Pool with water	

b) SWIMMING AND WADING BIRDS

Swimming and wading birds should be given access to a shallow pool of water. For species that spend most of their time in water, minimal pool floor areas and depths are listed. The pool should have low edges that allow the birds to enter the water. An indoor area with a pool should be provided for the tropical species.

SPECIES	No. of bird s	Floor area of the outdoor area /m²	Each addition al bird /m ²	Floor area of indoor space per each animal/m ²	Pool – floor area/m² x water depth/m	Pool floor area for each additional bird /m ²	Special Requirements
Pelicans (Pelecanidae)	1-4	40	10	3	30×0.75	5	Indoor pool also

							needed
Penguins (Spheniscidae)	1-12	60	3		16 x 1,5	1	
Cormorants (<i>Phalacrocorax</i> sp.)	1-6	10	1,5		10	1,25	Perches or branches
Storks (Ciconia sp.)	2	30	6	1	pool		Perches or branches
Large egrets and herons (<i>Ardea</i> sp.)	6	30	3	1-tropical species	pool		Perches or branches
Medium-sized egrets and herons and spoonbills	6	20	2	0,5-tropical species	pool		Perches or branches
Bitterns (Ixobrychus sp.)	2	6			pool		reed or bushes
Small ducks (up to 50 cm)	2	8 x height 2,5 m		shelter	4 x 0,60-1 m*		reed, nesting boxes (Aix)
Large ducks (more than 50 cm)	2	12 x height 2,5 m		shelter	6 x 0,60-1 m*		reed
Lesser gooses, shelducks	2	60			pool		Short grass
Swans, bigger gooses	2	200			100		Short grass

^{*} the recommended depth of a pool for surface-feeding ducks is 60 cm, and for diving ducks approximately 1 m.

c) PHEASANTS

Pheasants can be kept in aviaries. Due to their marked territoriality, pairs should be kept separately. Generally, birds endure coldness well and therefore an unheated shelter provides sufficient protection.

	No. of	Outdoor enclosure	Shelter
SPECIES	birds	Dimensions	Dimensions
		$\mathbf{F.A./m}^2 \mathbf{x} \mathbf{h} \mathbf{/m}$	F.A. x h
Pheasants	2	12,0 x 2,0	4m x 2 m
Peacock	2	40,0 x 2,0	

d) DIURNAL BIRDS OF PREY AND OWLS

Diurnal birds of prey and owls can be kept in partially closed aviaries that protects the birds from spectators. Partially closed aviaries besides closed wooden or brick sides have one or more partially open sides. The aviaries must be equipped with perches and shelves placed in the upper parts of the aviary in such a was that there is enough space for free flight. Agile birds with short wings and long tails, such as sparrowhawks and goshawks should not be kept in aviaries exclusively made of wire.

In the table, the following codes for temperature requirements are used:

- endures low temperatures well, protection from the rain and the wind is needed (indoor area is not required)
 sensitive to very low temperatures, unheated indoor area or sleeping place is needed I.
- II.
- Ш. - cannot stand low temperatures, warm indoor area free from draught is needed
- very sensitive to low temperatures, heated indoor area with temperature above 15°C is needed IV.

N		Outdoor area	Indoor area		Each	
SPECIES	of bird s	Dimensions F.A.; w; h;	Dimensions F.A.; w; h;	Temperature	addition al animal	Special requirements
DIURNAL BIRDS OF PREY						
Falconiformes						
Vultures Cathartes, Coragyps,	1	24m ² ; 3m; 3m;	4m ² ; 2m; 2m	IV.	$10m^2$	Sarcorhamphus papa
Sarcorhamphus						sensitive to frost
Andean condor Vultur gryphus	1	24m ² ; 3m; 3m;		I.		
Osprey Pandion haliaetus	1	24m ² ; 3m; 3m;	4m ² ; 2m; 2m	II.	10m^2	
Honey buzzard Pernis apivorus	1	10,5m ² ; 2m; 2,5m;	2m ² ; 1m; 2m	III.	$3m^2$	

Black-winged kite <i>Elanus</i> caeruleus	1	7,5m ² ; 2m; 2,5m	2m²; 1m; 2m	IV.	3m ²	
Milvine kites <i>Milvus</i>	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	I.	$6m^2$	M. migrans I-II*
Fish eagles Haliaeetus	1	24m ² ; 3m; 3m;	4m ² ; 2m; 2m	I. H. leucogaster i H. vocifer - IV.	10m ²	0
Smaller Old World vultures Neophron, Necrosyrtes, Gypohierax	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	Neophron II-III* other IV.	6m ²	
Lammergeier <i>Gypaetus</i> barbatus	1	24m²; 3m; 3m;		I.	10m ²	
Larger Old World vultures Gyps, Aegypius, Torgos, Trigonoceps, Sarcogyps	1	24m²; 3m; 3m;	4m ² ; 2m; 2m	Aegypius, G. fulvus i G. bengalensis - I Torgos i Sarcogyps -IV other - III	10m ²	
Snake eagles Circaetus, Spilornis, bateleur eagle Terathopius ecaudatus	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	IV.	6m ²	
Harriers Circus	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	C. earuginosus – II C. cyaneus - I	6m ²	
Harrier hawks <i>Polyboroides</i> , Goshawks <i>Melierax</i>	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	IV.	6m ²	
Lizard buzzard Kaupifalco monogrammicus	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	IV.	$3m^2$	
Northern goshawk Accipiter gentilis	1	12m ² ; 2m; 2,5m		I.	6m ²	
Northern sparrowhawk Accipiter nisus	1	7,5m ² ; 2m; 2,5m		I.	$3m^2$	
Buzzards Buteo buteo, B. jamaicensis	1	10,5m ² ; 2m; 2,5m;	2m ² ; 1m; 2m	B. buteo -I. B. jamaicensis I-II*	$3m^2$	
Buzzards Buteo	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	B. lagopus, regalis, rufinus -I. B. polyosoma -II. B. rutofunus - III.	6m ²	
Harpy eagles <i>Harpia</i> , <i>Morphnus</i> martial eagle <i>Polemaetus</i> bellicosus	1	24m²; 3m; 3m;	4m ² ; 2m; 2m	III.	10m ²	
Great Philippine eagle Pithecophaga jefferyi; crowned hawk-eagle Stephanoaet. coronatus	1	24m²; 3m; 3m;	4m²; 2m; 2m	IV.	10m ²	
Booted eagles, hawk-eagles Aquila	1	24m²; 3m; 3m;	4m²; 2m; 2m	A. clanga and pomarina -II, A. verreauxi -III other - I	10m ²	
Tawny eagle Aquila rapax	1	18m ² ; 3m; 2,5m;	4m ² ; 2m; 2m	I-II.*	6m ²	
Bonelli's eagle <i>Hieraaetus</i> fasciatus	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	I-II.*	6m ²	
Long-crested eagle <i>Lophaetus</i> occipitalis	1	12m ² ; 2m; 2,5m	4m²; 2m; 2m	IV.	6m ²	
Caracaras Phalcoboenus, Polyborus	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	P. australis - I. P. megalopterus - II.	6m ²	
Caracaras Milvago	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	III.	$3m^2$	
Pygmy falcons <i>Polihierax</i>	1	5m ² ; 2m; 2m	1,5m ² 1m; 2m	IV.	1m^2	
Falconets Microhierax	1	2m ² ; 1m; 2m**	1m ² 1m; 1m	IV.	$1m^2$	
Kestrels Falco	1	5m ² ; 2m; 2m	1,5m ² 1m; 2m	F. tinnunculus - I F. vespertinus - III F. sparverius - II-	1m ²	

				III*		
Hobbies Falco	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	F. subbuteo - III F. columbarius - I	$3m^2$	F. subbuteo needs area of 10,5 m ²
Falcons <i>Falco</i>	1	12m ² ; 2m; 2,5m	4m²; 2m; 2m	European and North American non- migratory birds - I F. biarmicus - I-II* F. jugger - II F. eleonorae - III F. cherrug - I-III*	6m ²	
OWLS Strigiformes						
Barn owls <i>Tyto</i>	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	T. alba - I-II* T. capensis - IV	3m ²	T. capensis spends time on the ground and it needs shelter
Oriental bay-owl <i>Phodilus</i> badius	1	5m ² ; 2m; 2m	1,5m ² 1m; 2m	IV	1m^2	
Screech owls or scops owls Otus		2m ² ; 1m; 2m**	1m ² ; 1m; 1m	O. brucei and scops - III O. senegalensis and choliba - II-III*	1m ²	
Northern white-faced scops owl Ptilopsis leucotis	1	5m²; 2m; 2m	1,5m ² 1m; 2m	III-IV*	1m^2	
Small eagle-owls <i>Bubo poensis B africanus</i>	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	IV.	$3m^2$	
Medium-sized eagle-owls B. nipalensis, B. sumatranus	1	12m ² ; 2m; 2,5m	4m²; 2m; 2m	IV.	$3m^2$	
Large eagle-owls B. bubo, B. virginianus	1	18m ² ; 3m; 2,5m;	4m²; 2m; 2m	B.b.bubo and B.b. omisus - I; B.b. ascalaphus and B. capensis - III B.b. bengalensis - IV B. virginianus - I- II* B. lacteus - III-IV*	3m ²	
Fish-owls <i>Ketupa</i>	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	III.	$3m^2$	
Snowy owl Nyctea scandiaca	1	18m ² ; 3m; 2m;		I	$3m^2$	diurnal
Pel's fishing owl Scotopelia peli	1	12m ² ; 2m; 2,5m	4m ² ; 2m; 2m	IV.	$3m^2$	
Owls <i>Strix</i> (lesser species, e.g. Tawny owl <i>S.aluco</i>)	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	S. aluco and S. varia - I. S. hylophila and S. woodfordi - IV	$3m^2$	
Owls (Strix, Surnia, Pulsatrix)	1	12m ² ; 2m; 2,5m	4m²; 2m; 2m	S. uralensis, S. ulula - I P. perspicilata and S. leptogrammica - III	3m ²	Surnia ulula is diurnal
Great grey owl Strix nebulosa	1	18m ² ; 3m; 2,5m;		I	$3m^2$	
Owlets and pygmy-owls Glaucidium – smaller species	1	2m²; 1m; 2m**	1m ² ; 1m; 1m	G. brasilianum - IV G. perlatum - III- IV*	1 m ²	
Owlets and pygmy-owls Glaucidium – larger species	1	5m ² ; 2m; 2m	1,5m ² 1m; 2m	G. passerinum - I G. cuculoides - IV	1m ²	
Elf owl Micrathene whitneyi	1	2m ² ; 1m; 2m**	1m ² ; 1m; 1m	IV	$1m^2$	
Little owls and burrowing owls Athene	1	5m ² ; 2m; 2m	1,5m ² 1m; 2m	A. noctua - I A. cunicularia - II A. brama- IV*	1 m ²	A. cunicularia should be allowed to burrow in the ground
Forest owls Aegolius	1	5m ² ; 2m; 2m		I.	1m^2	
Boobook or morepork owl	1	7,5m ² ; 2m; 2,5m		I.	$3m^2$	

Ninox novaeseelandiae						
Eared owls Asio	1	7,5m ² ; 2m; 2,5m	2m ² ; 1m; 2m	A. otus and	$3m^2$	A. flammeus and A.
				flammeus - I		capensis spend time on
				A. clamator - II-III*		the ground and they
				A. capensis - III		need a shelter

^{*} while adjusting the temperature, attention should be paid to the geographical origin, which means that other categories not listed here might be necessary

d) PIGEONS

Many pigeons are markedly territorial, so pairs should be kept separately, although they can be kept in aviaries with other bird species. The species that endure low temperatures can be kept in outdoor aviaries if there is a shelter that does not freeze.

SPECIES	No. of birds	Outdoor enclosure Dimensions F.A./m² x h/m
Small species	2	2,0 x 2,0
Medium-sized species	2	6,0 x 2,0
Large species	2	10,0 x 2,0

e) PARROTS

Parrots can be kept in aviaries or birdcages. The birdcages should be kept at the height of no less than 80 cm. If the birds are kept in outdoor aviaries a space intended for protection from weather conditions must be provided (an illuminated space, closed from all sides, of at least the same height as the birdcage or aviary, with an opening for entrance and exit, temperature requirements corresponding to a particular species) which birds can have access to at any given moment. Only under adverse weather conditions, e.g. a heavy frost, the birds should be kept in the shelter during the daytime. For species that usually have to be kept in warmed up area, adequately furnished indoor aviaries must be of same dimensions as outdoor aviaries. Food and water bowls shall be placed in the shelter during the winter. The flooring of cages, of indoor aviaries and the shelter can be covered with sand, sawdust of rough wood, wooden granules or similar material and must be cleaned at least once a week. Outdoor aviaries substrate in can be either natural (ground), or a layer of sand or gravel can be provided. Cages, aviaries and shelters must contain at least two wooden perches of different thickness for the birds to sit on, positioned in such a way as to enable long lines of flight. A dividing wall between birdcages or aviaries might be necessary for protection from bite injuries. As all parrots except Monk parakeet build nests in treeholes, nesting boxes should be provided for nesting. Some genera (Aratinga, Pyrrhura, Brotogeris, Bolborhynchus) use them throughout the year for sleeping. The timal temperature of the indoor area is set out for each group. The temperature in the shelter should be no less than 10°C, and for Cyclopsitta, Deroptyus, Eclectus, Forpus, Geoffroyus, Graydidascalus, Gypopsitta, Micripsitta, Pionites, Pionopsitta, Prioniturus, Psittacella, Psittaculirostris, Psittinus, Psittrichas, Tanygnathus, Triclaria and Loriculus genera no less than 15°C. For parrots that can endure coldness, e.g. Rose-necked parakeet (Psittacula krameri), Derbyan parakeet (Psittacula derbiana), Monk parakeet (Myopsitta monachus), Burrowing parrot (Cyanoliseus patagonicus) and Australian parrots, the shelter must not freeze.

If captive parrots are taken from the wild, during the first two years of their captive lives they need larger space and plenty of room to retreat. Therefore the area of the birdcage and aviaries must be at least 50% larger than the one set out in the table for different groups of parrots. If parrots are to be kept only temporarily (up to three months), the area of birdcages and aviaries can be 50% smaller than listed in the table.

	No. of	Outdo	or area	Shelter		
SPECIES	birds	Dimensions l x w x h/m	Each additional pair	Dimensions A x h	Each additional pair	
Macaws						
up to 40 cm long	2	2,0 x 1,0 x 1,5	1 m^2	$1.0 \text{ m}^2 \text{ x } 1.5 \text{ m}$	0.5 m^2	
40-60 cm long	2	3,0 x 1,0 x 2,0	1.5 m^2	$1.0 \text{ m}^2 \text{ x } 2.0 \text{ m}$	0.5 m^2	
more than 60 cm long	2	4,0 x 2,0 x 2,0	4 m^2	$2.0 \text{ m}^2 \text{ x } 2.0 \text{ m}$	1 m^2	
Other parrots						
up to 25 cm long (Neophema, Forpus)	2	1,0 x 0,5 x 0,5	0.25 m^2	$0.5 \text{ m}^2 \text{ x } 0.5 \text{ m}$	$0,25 \text{ m}^2$	

^{**} if birds are kept in heated indoor aviaries exclusively:F. a:2 m², w:1 m, h:1 m (for each additional animal 1 m² should be added)

25-40 cm long (large lories)	2	2,0 x 1,0 x 1,0	1 m ²	$1.0 \text{ m}^2 \text{ x } 1.0 \text{ m}$	0.5 m^2
Parrots and cockatoos more than 40 cm	2	3,0 x 1,0 x 2,0	$1,5 \text{ m}^2$	$2.0 \text{ m}^2 \text{ x } 2.0 \text{ m}$	1 m^2
long					

f) SONGBIRDS

Songbirds can be kept in birdcages or outdoor aviaries. The species that can endure coldness can be kept in outdoor aviaries provided they have access to the shelter that does not freeze. The outdoor aviaries have to be partially roofed, and must have a shelter for protection from the elements (harsh sun, wind and rain) which birds can have access to at any given moment. The height of the aviary should be at least 1,70 m. The floor must be covered with sand, sawdust, ground or other suitable material, and must be kept clean. Birdcages, aviaries and shelters must have at least three perches for sitting and the clearance, must be such to allow birds' flying Using natural branches is recommended. Birdcages should be opaque on three sides, and aviaries on one. Round birdcages are not suitable. The birdcage should be placed (with the exception of those intended for the species that nest on the ground, e.g. larks) at the height of no less than 80 cm. If the birds can tolerate each other, different bird species can be kept in a common aviary, and the floor area of the enclosure should be adjusted to the largest of the species.

	No. Shelter		Each			
SPECIES	of bird s	Dimensions l x w x h /m	Floor area/number of the birds	Temperature	addition al 1 or 2 birds	Special Requirements
Skylarks (Alaudidae)						
up to 15 cm long	1-2	1,0 x 0,5 x 0,5	$1\text{m}^2/1\text{ pair},$	European species –	25%	Ground covered
15 - 20 cm long	1-2	1,2 x 0,8 x 0,5	up to 6 birds	indoor area that will	25%	with 4 cm of dirt or
more than 20 cm long	1-2	1,6 x 0,8 x 0,5	during the	not freeze	25%	sand
-			winter	tropical > 10 °C		Shelter on the ground
Waxbills (Estrildidae), sparrow	s and v	weavers (<i>Ploceid</i>	lae)		•	
up to 12 cm long	1-2	0,8 x 0,4 x 0,4	1m ² / 20-30*	Waxbills > 15-20 °C	25%	Waxbills need
12 - 20 cm long	1-2	1,2 x 0,5 x 0,5	1m ² / 10-15*	weavers and tropical	25%	baskets for sleeping
more than 20 cm long	1-2	1,6 x 0,5 x 0,5	1m ² / 5 birds	sparrows > 10 °C;	25%	for long-tailed
				European species – no		weavers $v = 1,2 \text{ m}$
				freezing		·
Finches (Fringillidae), buntings	(Emb	<i>erizinae</i>), cardin				
up to 15 cm long	1-2	0,8 x 0,4 x 0,4	$1\text{m}^2/10-20**$	tropical > 15 °C	25%	
15 - 20 cm long	1-2	1,2 x 0,5 x 0,5	$1\text{m}^2/6-10**$	buntings - indoor area	25%	
more than 20 cm long	1-2	1,6 x 0,8 x 0,8	1m ² / 4 birds	that will not freeze	25%	
Starlings (Sturnidae)						
Bali mynah (Leucopar rothschildi)	2	2,0 x 2,0 x 2,0	2m ² / 2 birds	> 10°C	1 pair is usually kept	Water for bathing, nesting boxes
Hillmyna (Gracula religiosa)	2	2,0 x 1,0 x 1,8	$0.6 \text{ m}^2/2$ birds	> 10°C		
Babblers (Timaliidae)						
up to 20 cm long (e.g. Leiothrix	4	2,0 x 1,0 x 1,8	$0.5 \text{ m}^2/2$	>5°C		
sp.)			birds	(L. argentauris > 10°C)		
more than 20 cm long (e.g.	2	2,0 x 1,0 x 1,8	$0.6 \text{ m}^2/2$	> 5°C		
Garrulax canorus)			birds			

Reptiles (Reptilia)

	HOUSING	MINIMAL SPACE AREA (1 X w X h) PER SPECIMEN	OUTLOOK OF THE ENCLOSURE	TEMPERATURE (°C)	WATER AND FOOD
Snakes (Serpentes)	Terrarium	Length of the snake=(length of the enclosure+width of the enclosure±10%; Terrarium for arboreal snakes must be at least 40 cm high; For each additional specimen, the space has to be 20% wider.	Rough peat, bark, soft sawdust, newspaper or a commercial substrate, hiding-place (as small as possible, so that the snake barely fits inside); Arboreal snakes must have a terrarium with branches, at least one of which must beplaced horizontally; Wooden terrarium or earth substrates are not recommended (because of the possibility of infection by parasites).	25-30 The heater is placed in the section of the terrarium opposite to the hiding place; it must not cover over 1/3 of the area of the tarrarium, the use of so-called "heating rocks" for heating is not recommended.	Watersupply is mandatory. Some species need to be sprinkled with water, because they drink it from the scales on their bodies; Water bowl has to be of such a diametar so that a coiled up snake can lie in it; Carnivores
Lizards (Sauria)	Terrarium	4 x 3 x 3 BL For arboreal lizards, height=3,5 BL; For each additional specimen, the enclosure must be 15 % wider.	Rough peat, bark, gravel or commercial substrate, for some species that burrow, the depth of the substrate (sand) should be 8-10 cm. The terrarium must at least to some degree mimic the natural habitat (visually); a hiding-place is necessary (as small as possible); Arboreal lizards must have terrarium with branches, at least one of which must be in placed horizontally, and beneath spot light or UV light tube so the animal can bask; Wooden terrarium or ground substrate are not recommended (because of the possibility of infection by parasites).	The heater should be placed in the section of the terrarium opposite to the hiding place, it must not cover over 1/3 of the area of the tarrarium, the use of so-called "heating rocks" for heating is not recommended; The terrarium for the lizards that bask, besides a spot light (as a source of heat) must be equipped with a special fluorescent tube that emits UV light of specific wavelengths.	Water supply is mandatory; As the arboreal species often do not drink water from the container, it is necessary to sprinkle the terrarium, so the lizards can drink the water from branches and similar; Herbivores and carnivores – the diet should be adapted to each species; Herbivorous lizards should be provided with sufficient quantities of vitamins and substances necessary for maintaining physiological functions in their diet.

		HOUSING	MINIMAL SPACE AREA (I X w X h) PER SPECIMEN	OUTLOOK OF THE ENCLOSURE	TEMPERATURE (°C)	WATER AND FOOD
pecies	Green iguana (Iguana iguana)	Terrarium	4 x 3 x 5 BL or 5 x 3 x 4 BL	The substrate must be slightly humid, frequent sprinkling is necessary, a water bowl must occupy 1/3 of the area of the terrarium, the terrarium must have branches for climbing, at least one of which must be placed beneath a spot light for heating, the terrarium must be equipped with a UV light tube.	28-30	
Special lizard species	Chamaleon idae family - chameleon s	Terrarium	4 x 4 x 4,5 BL for terrestrial species; 4 x 2,5 x 4 BL for arboreal species; The space should be 20% wider if a pair is kept	Branches for climbing (for arboreal species) must be provided; Hiding-places (for terrestrial species) Adult chameleons must be kept separately (due to stress reduction)	20-30 for most of the species; >24 for mountain species; Approximately 20 for nocturnal species that must provided with a spot light turned on during the day.	
	Varanidae family - monitor lizards	Terrarium	5 x 3 x 4 BL; 5 x 2 x 4 BL; 4 x 2 x 5 BL; 5 x 2 x 2 BL	Big gravel, bark, commercial substrates; Arboreal species must have branches for climbing.	30-34; Beneath the spot light 45	
Crocodiles, alligators and caimans		Large terrarium	Water area of 2,5 m² (per specimen), the depth of water should be approximately 40 cm, land area (basking area); For each additional specimen, the terrarium must be enlarged – the under water area for additional 20% and land for additional 10%.	Water area of 2,5 m² (per specimen), the depth of water should be approximately 40 cm, land area (basking area) may be made of concrete or covered with plastic mass or rough peat, bark	Water temperature 25-27; Air temperature 25-30, beneath the spot light 35	Carnivores; Caimans are mostly feed on fish, but they can also feed on mice and other small rodents

	HOUSING	MINIMAL SPACE AREA (1 X w X h) PER SPECIMEN	OUTLOOK OF THE ENCLOSURE	TEMPERATURE (°C)	WATER AND FOOD
Tortoises	Terrarium or outdoor enclosures i	5 x 4 x 3 SL	Should be kept in colonies; Terrarium with plastic substrate, gravel, mixture of peat and soil; the hiding-place must be big enough to provide shelter for several animals simultaneously; The outdoor enclosure should be provided with a quality fence because tortoises are good diggers and can easily dig under the fence, the substrate may be ground or grass, with several hiding-places, preferably in shade.	27-30 Beneath the spot light up to 35; If the tortoises are kept outdoors, it is recommended that a part of the enclosure is in the sunlight. The other part must constantly be in shade, so the animals can hide from the sunlight.	Herbivores; Various plants with occasional supplementing of vitamins; Young tortoises should occasionally be given calcium
Turtles	Outdoor pool or terrarium	5 x 4 x 3 SL	Are kept in colonies; The enclosure should contain at least one dry part where turtles can climb and bask; The outdoor pool must have an edge where turtles can easily climb; Turtles need not have a hiding-place; Some like to burrow in the mud, so the bottom should be covered with a rather thick layer of sand.	Water for young turtles must be warmed up to at least 22, even up to 26 °C; The water can be heated by using aquarium heaters.	Can be fed with commercial mixtures

	HOUSING	MINIMAL SPACE AREA (1 X w X h) PER SPECIMEN	OUTLOOK OF THE ENCLOSURE	TEMPERATURE (°C)	WATER AND FOOD
Length and width of the shell (in cm): 10 x 10 20 x 20 30 x 30 40 x 35 50 x 40 60 x 50 70 x 60 80 and more x 70 and more	Pool	FLOOR AREA X DIAMETER X HEIGHT (m ² x m x m) 0,1 x 0,4 x 0,3 0,5 x 0,8 x 0,5 1 x 1,2 x 0,7 1,7 x 1,5 x 0,7 2,2 x 1,7 x 0,9 3,5 x 2 x 0,9 6 x 2,5 x 1,2 7,5 x 3 x 1,2	Water characteristics: Salinity: 20-35% pH: 7,5–8,5 Chlorine concentration: 1,0-1,5 ppm Water quality: high sanitary quality; clear Pool characteristics: Specimens with the shell length of 10-70 cm: for each additional specimen the area should be increased by 50%; Specimens with the shell length of 70-90 cm: for each additional specimen the area should be increased by 100%; the inside surface of the pool must not be covered in toxic substances; the pool must not contain objects that can be swallowed by the turtle, or which the turtle might entangle in; The pools must be additionally lightened (up to 16 hours a day), but a part of the pool must be in shade in order to enable the animal to move into shelter should the natural or artificial lighting be too intensive	Water temperature 20-30 °C	Unspoiled and clean, fresh or frozen in such a manner to maintain good quality; Hand feeding of animals that shall be reintroduced into the sea is prohibited; The marine turtles should be fed on live prey before releasing.

 $BL-body\ length$ $SL-shell\ length$

Amphibians (Amphibia)

HOUSING

OUTLOOK OF THE ENCLOSURE

Frogs and Toads (Anura)		
Pipidae – tongueless frogs	Aquarium	 small floating pieces of land size of the water container: 1 liter of water per 1 cm of the body length of the animal maximum water depth 15-50 cm adequate ratio of the size of water and land
Ranidae – true frogs Discoglossidae – fire-bellied toads Bufonidae – true toads	Aquaterrarium	 sections of the aquaterrarium should be ensured high quality of water should be maintained (daily filtering and changing of water) small water container
Pelobatidae – spadefoot toads Leptodactyllidae Dendrobatidae – poison-dart frogs Climbing frogs:	Terrarium	 appropriate substrate (e.g. peat or dry leaves that should be kept damp) hiding area should be provided tall terrarium
- Hylidae – tree frogs - Rhacophoridae - Microhyllidae	Terrarium	 small water container appropriate substrate (e.g. peat or leaves) possibility to climb (branches, rocks)
Newts and salamanders (Caudata)		
Salamanders	Terrarium	 small water container appropriate substrate (e.g. peat or leaves) live plants should be planted and hiding area provided adequate ratio of the size of water and land sections of the aquaterrarium should be ensured high quality of water should be maintained
Newts	Aquaterrarium	 (daily filtering and changing of water) live plants should be planted and hiding area provided

THE MINISTRY OF CULTURE

Pursuant to Article 101, paragraph 6, of the Nature Protection Act (Official Gazette 70/05), the Minister of Culture hereby issues the

ORDINANCE ON THE TRANSBOUNDARY MOVEMENT AND TRADE IN PROTECTED SPECIES

I GENERAL PROVISIONS

Article 1

- (1) This Ordinance establishes the procedure and conditions for issuance of permits for taking out, introduction, import or export and introduction from the sea of wild taxa listed in Annexes I to X which constitute an integral part of this Ordinance, manner of marking of live animals and shipments, manner of surveillance and record keeping, as well as conditions for trade and breeding.
 - (2) Provisions of this Ordinance shall also apply to derivatives and parts of wild taxa.
- (3) Provisions of this Ordinance regulating breeding and trade in wild taxa shall not apply to the species listed in Annex I which have been indicated as hunting species. Provisions of the Hunting Act shall apply to the trade and breeding of such species.

Article 2

For the purpose of this Ordinance:

- 1. "date of acquisition" means the date on which a specimen was taken from the wild, born in captivity or artificially propagated,
- 2. "country of origin" means the state in which a specimen was taken from the wild, born in captivity or artificially propagated,
- 3. "Convention" means the Convention on International Trade in Endangered Species of Wild Fauna and Flora, which was ratified by the Act on Ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (Official Gazette International Agreements 12/99),
- 4. "first generation offspring (F1)" means specimens produced in a controlled environment from parents at least one of which was conceived in or taken from the wild,
- 5. "second generation offspring" (F2) and "subsequent generation offspring" (F3, F4 etc.) means specimens produced in a controlled environment from parents that were also produced in a controlled environment,

- 6. "breeding stock" means all the animals in a breeding operation that are used for reproduction,
- 7. "controlled environment" means an environment that is manipulated for the purpose of producing animals of a particular species, that has boundaries designed to prevent entry and exit of animals, eggs and gametes; it may include artificial housing for animals, waste removal, health care, protection from predators, artificial supply of food, etc.
- 8. "import notification" means notification by the importer or his agent or representative at the time of the introduction into the Republic of Croatia of a specimen of a species included in Annexes III or IV, on the form referred to in Annex XII,
- 9. "checks at the time of introduction, export, re-export and transit" means documentary checks of permits, certificates and notifications provided by this Ordinance and special regulations and examination of specimens, as well as taking of samples for analysis or more detailed checks,
- 10. "introduction from the sea" means introduction into the Republic of Croatia of any specimen which was taken in, and is being introduced directly from the marine environment not under the jurisdiction of any State, including the air-space above the sea and the sea-bed and subsoil beneath the sea,
- 11. "issuance" means completion of all procedures involved in preparing and drawing up of a permit or certificate and its delivery to the applicant,
- 12. "Ministry" central body of the state administration competent for environmental protection activities,
- 13. "cross-border traffic" means taking out, introduction, export or import and introduction from the sea, of protected wild taxa, and parts and derivatives thereof,
- 14. "trade" means sale and purchase, acquisition for commercial purposes, public display for the purpose of gain, use for the purpose of gain, keeping for sale, offer for sale or transport for sale, and rent and exchange of protected wild taxa,
- 15. "primarily commercial purposes" denotes all purposes whose objective is the acquisition of economic or any other gain,
- 16. "personal or household effects" means dead specimens, parts and derivatives thereof, that are the belongings of a private individual and that form, or are intended to form, part of his normal goods and chattels,
- 17. "place of destination" means the place intended for accommodation of specimens at the time of introduction into the Republic of Croatia; in case of live specimens, this is the first place where specimens are intended to be accommodated following any period of quarantine or other confinement for the purpose of sanitary checks and controls,
- 18. "population" means a biologically or geographically distinct total number of individuals,

- 19. "re-export from the Republic of Croatia" means export from the Republic of Croatia of all specimens that have been previously introduced,
- 20. "reintroduction into the Republic of Croatia" means introduction into the Republic of Croatia of any specimen which has been previously introduced,
- 21. "scientific authority" means a scientific authority designated in accordance with the provisions of the Convention,
- 22. "specimen" means any animal or plant, whether alive or dead, of the species listed in Annexes I to X, any part or derivative thereof, whether or not contained in other goods. This term also includes all other goods which appear from an accompanying document, the packaging or mark or label, or from any other circumstances, to be or to contain parts or derivatives of animals or plants of those species unless such parts or derivatives are specifically exempted from the provisions of this Ordinance or Annexes to the Ordinance. «A Specimen» will be considered to be a specimen of a species listed in Annexes I to X if it is, or is part of or derived from, an animal or plant at least one of whose "parents" is of a species so listed. In cases where the "parents" of such an animal or plant are of species listed in different Annexes, or of species only one of which is listed, the provisions of a more restrictive Annex shall apply. In case of specimens of hybrid plants, if one of the "parents" is of a species listed in Annex I, the provisions of the more restrictive Annex shall apply only if that species is annotated to that effect in the Annex,
- 23. "transit" means the transport of specimens between two points outside the Republic of Croatia through the territory of the Republic of Croatia which are shipped to a named consignee and during which any interruption in the movement arises only from the arrangements necessitated by this form of traffic,
- 24. "worked specimens that were acquired more than 50 years previously" means specimens that were significantly altered from their natural raw state and worked into jewellery, adornment, art, utility or musical instruments before 1 June 1947 and that have been, to the satisfaction of the Ministry, acquired in such conditions. Such specimens shall be considered as worked only if they are clearly in one of the aforementioned categories and require no further carving, crafting or manufacture to achieve their purpose.

II CONDITIONS FOR CONDUCT OF TRANSBOUNDARY MOVEMENT

Import

- (1) Specimens of species listed in Annex I may be introduced in the Republic of Croatia on the basis of the import permit issued by the Ministry, upon completion of the procedure at the border customs office at the point of introduction.
- (2) The import permit may be issued only in accordance with prescribed restrictions referred to in this Ordinance and on the condition that:
 - 1) the competent scientific authority, on the basis of the available documentation, has established that:

- introduction into the Republic of Croatia would not have a harmful effect on the conservation status of these species or on the extent of the territory occupied by the relevant population of the species;
- introduction into the Republic of Croatia is necessary for:
 - a) scientific progress and conducting of indispensable bio-medical research, in case it is proved that those are the only species suitable for the stated purposes and that there are no other specimens bred in captivity or artificially propagated, or
 - b) breeding or propagation for the purpose of conservation of species, or
 - c) research and education for the purpose of conservation of species, or
 - d) other needs which are not harmful for survival of species.
- that the intended accommodation for a live specimen and the place of destination is adequately equipped to conserve and care for it properly;
- 2) the applicant has submitted documentary evidence that specimens were acquired in accordance with legal regulations on protection of the species concerned in the exporting country. In case of import of specimens of species listed in Annex I which are referred to in Annexes to the Convention, the applicant shall enclose the export permit or re-export certificate, or copy thereof, which has been issued in accordance with the Convention by the competent authority of the exporting country of re-exporting country. In cases of the import of species listed in Annex I, for which signatories to the Convention did not record some limiting condition, the original of the import permit shall be issued to the applicant only upon submission of the export permit or re-export certificate;
- 3) that the Ministry has been satisfied that specimens would not be used for primarily commercial purposes;
- 4) that the Ministry is satisfied, following consultation with the competent scientific authority, that there are no other factors relating to the conservation of the species which militate against issuance of the import permit;
- 5) that the Ministry is satisfied that any live specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment.

- (1) The specimens of species listed in Annex II may be introduced into the Republic of Croatia on the basis of the import permit issued by the Ministry, upon completion of the procedure at the border customs office at the point of introduction.
- (2) The import permit may be issued only in accordance with the restrictions established herein and when:
 - that the competent scientific authority, based on the available data, is of the opinion that that the introduction into the Republic of Croatia would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of the current or anticipated level of trade. This opinion shall be valid for subsequent imports as long as the abovementioned aspects have not changed significantly;
 - the applicant provides documentary evidence that the intended accommodation for a live specimen at the place of destination is adequately equipped to conserve and care for it properly;
 - the applicant provides documentary evidence that the specimens have been obtained in accordance with the national legislation in the exporting country on the

conservation of the species concerned, which evidence in case of the import of the species listed in Annexes to the Convention shall be the export permit or re-export certificate, or a copy thereof, which has been issued in accordance with the Convention by the competent authority of the exporting country or re-exporting country;

- the Ministry has established, following consultation with the competent scientific authority, that there are no other factors relating to the conservation of the species which militate against issuance of the import permit;
- the applicant provides satisfactory evidence that any live specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment.

Article 5

The introduction into the Republic of Croatia of the specimens of species listed in Annex III shall be subject to completion of the checks and the prior presentation of the completed form of the import notification referred to in Annex XII and:

- an export permit which has been issued in accordance with the Convention by the competent authority of the exporting country, in case of import from the country indicated by the name of that species in Annex III, or
- an export permit, a re-export certificate or a certificate of origin issued in accordance with the Convention by the competent authority of the exporting country or re-exporting country, in case of import from all other countries except those which are indicated in remarks related to the species listed in Annex III.

Article 6

The introduction into the Republic of Croatia of specimens of the species listed in Annex IV shall be subject to completion of the checks and the prior presentation of the completed form of the import notification referred to in Annex XII at the border customs office at the point of introduction.

Article 7

The conditions for the issuance of an import permit as referred to in Article 3, paragraph 2, subparagraphs 1 and 4 and Article 4, paragraph 2, items 3, 4 and 5 of this Ordinance shall not apply to specimens for which the applicant provides documentary evidence:

- that they were previously legally introduced into or acquired in the Republic of Croatia and that they are, modified or not, being reintroduced into the Republic of Croatia, or
- that they are worked specimens that were acquired more than 50 years previously.

Export and re-export

- (1) The export or re-export from the Republic of Croatia of specimens of the species listed in Annexes I and VIII shall be subject to the prior presentation of an export permit or re-export certificate issued by the Ministry, upon completion of the procedure at the border customs office at the point of export.
- (2) An export permit for specimens of the species listed in Annex I may be issued only when the following conditions have been met:
 - 1) the competent scientific authority, based on available data has established in writing that the capture or collection of the specimens in the wild or their export will not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of that species;
 - 2) the applicant has provided documentary evidence that:
 - the specimens have been obtained in accordance with the legislation in force that regulates their taking from the wild;
 - the specimens have been obtained in the Republic of Croatia in accordance with the provisions of the Convention,
 - the specimens have been obtained in or imported into the Republic of Croatia before 12 June 2000,
 - any live specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment,
 - the specimens of species not listed in Annex I to the Convention will not be used for primarily commercial purposes,
 - in the case of export to a State party to the Convention of specimens of the species referred to in Annex I to the Convention, an import permit has been issued.
 - 3) the Ministry is satisfied, following consultation with the competent scientific authority, that there are no other factors relating to the conservation of the species which militate against issuance of the export permit.
- (3) A re-export certificate may be issued only when the conditions referred to in Article 2, sub-paragraphs 1 and 2, items 4, 5 and 6 of this Article have been met and when the applicant provides documentary evidence that the specimens:
 - were introduced into the Republic of Croatia in accordance with the provisions of this Ordinance,
 - if introduced into the Republic of Croatia before 12 June 2000, entered international trade in accordance with the provisions of the Convention,
 - were legally introduced into the territory of the Republic of Croatia, before entry into force of this Ordinance.

- (1) The export or re-export from the Republic of Croatia of specimens of the species listed in Annexes II, III and IX shall be subject to completion of checks and the prior presentation, at the customs office at which the export formalities are completed, of an export permit or re-export certificate issued by the Ministry.
- (2) An export permit may be issued only when the conditions referred to in Article 8, paragraph 2, subparagraphs 1 and 2, items 1-4 and subparagraph 3 have been met.
- (3) A re-export permit may be issued only when the conditions referred to in Article 8, paragraph 2, subparagraph 2, item 4 and paragraph 3, subparagraph 3 have been met.

The conditions for the issuance of an export permit or re-export certificate as referred to in Article 8, paragraph 2, subparagraphs 1 and 2, item 6 of this Ordinance shall not apply to:

- worked specimens that were acquired more than 50 years previously, and
- dead specimens and parts and derivatives thereof for which the applicant provides documentary evidence that they were legally acquired before 12 June 2000.

Specific rules for import of live specimens of foreign species

Article 11

- (1) Live specimens of foreign species that are not listed in Annexes I to X may be introduced into the Republic of Croatia on the basis of the import permit issued by the Ministry, upon completion of the procedure at the border customs office at the point of introduction.
 - (2) The permit shall be issued if the following conditions have been met:
 - 1) the applicant encloses a written statement from which the purpose of the import is evident,
 - 2) the applicant holds the permit granting the introduction of foreign wild taxa into the nature of the Republic of Croatia or the permit for breeding in a controlled environment,
 - 3) in case of the import for purposes other than those referred to in subparagraph 2 of this Article, the competent scientific authority has issued an expert opinion stating that:
 - the introduction into the Republic of Croatia would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of the current or anticipated level of trade. This opinion shall be valid for subsequent imports as long as the abovementioned aspects have not changed significantly;
 - there is no threat to indigenous species, in case of the incidental or intentional escape of specimens, to the natural environment of the Republic of Croatia,
 - the intended accommodation for live specimens at the place of destination is adequately equipped to conserve and care for them properly.
 - 4) the applicant has submitted to the Ministry satisfactory evidence that each live specimen will be so prepared and shipped as to minimize the risk of injury, damage to health or cruel treatment.

Transit

- (1) Transit through the Republic of Croatia of specimens of the species listed in Annexes I to X shall be subject to the notification of the border customs office at the point of introduction.
- (2) For the transit of specimens of the species referred to in paragraph 1 of this Article it shall be necessary to present a valid export permit or re-export certificate issued by the competent authority of the exporting or re-exporting country specifying their place of destination.

(3) If the document referred to in paragraph 2 of this Article has not been issued before export or re-export, the specimen must be seized or confiscated unless the document is submitted retrospectively in compliance with Article 103, paragraph 3, of the Nature Protection Act.

Special exemptions at import, export and re-export

- (1) Provisions of this Ordinance relating to export and re-export shall not apply to dead specimens, parts and derivatives of species listed in Annexes I to IV which represent personal or household effects that are imported or re-imported into the Republic of Croatia.
- (2) By way of derogation from paragraph 1 of this Article, the provisions of this Ordinance relating to import and re-import shall apply to:
- personal or household effects which are used for commercial gain, and which are sold, displayed for commercial purposes, kept for sale, offered for sale or transported for sale, and
- personal and household effects originating from specimens of the species listed in Annex I, in case they are introduced into the Republic of Croatia for the first time by a person with a permanent residence in the Republic of Croatia or intending to acquire permanent residence in the Republic of Croatia.
- (3) Dead specimens referred to in paragraph 1 of this Article shall also imply hunting trophies if they are:
 - contained in the personal luggage of travellers coming from abroad, or
 - contained in the personal property of a foreign natural person transferring their normal place of residence from abroad for a residence in the Republic of Croatia, or
 - hunting trophies taken by a traveller and imported at a latter date.
- (4) The first introduction into the Republic of Croatia of personal and household effects, including hunting trophies, by a person who has their normal place of residence in the Republic of Croatia and which involves specimens of species listed in Annex II shall not require the presentation to the competent customs office of an import permit where the original and the copy of the export permit or the re-export certificate of the exporting country is presented. Customs shall forward the original to the Ministry and return the stamped copy to the holder.
- (5) The reintroduction into the Republic of Croatia of personal and/or household effects, including hunting trophies, by a person permanently residing in the Republic of Croatia and which involves specimens of species listed in Annex I or Annex II to this Ordinance shall not require the presentation to customs of the "original" import permit where the customs-endorsed copy for the holder of a previously used import or export permit of the Republic of Croatia, the copy of the export or re-export document referred to in the previous paragraph of this Article or proof that the specimens were legally acquired within the Republic of Croatia is presented.
- (6) By way of derogation from paragraphs 4 and 5 of this Article, the import or reimport into the Republic of Croatia of the following items shall not require the presentation of an import permit, export permit or re-export permit:
 - caviar of sturgeon pieces (*Acipenseriformes* spp.) up to a maximum of 250 grams per person;
 - queen conch (Strombus gigas) shells up to three per person;
 - rainsticks of *Cactaceae* spp. up to three per person.

- (1) Provisions of this Ordinance relating to export and re-export shall not apply to dead specimens, parts and derivatives of the species listed in Annexes I to IV which represent personal or household effects that are exported or re-exported from the Republic of Croatia and that are:
 - contained in the personal luggage of travellers going abroad, or
 - contained in the personal property of a natural person for the purpose of acquiring residence abroad.
- (2) By way of derogation from paragraph 1 of this Article, the provisions of this Ordinance relating to export and re-export shall apply to personal and household effects and hunting trophies belonging to species listed in Annexes I and II to this Ordinance, if used for commercial gain, sold, displayed for commercial purposes, kept for sale, offered for sale or transported for sale or exported.
- (3) The re-export of personal or household effects and hunting trophies, by a person permanently residing in the Republic of Croatia, involving specimens of species listed in Annex I or II shall not require the presentation to customs of the "original" re-export permit where customs-endorsed copy for the holder of a previously used import or export permit of the Republic of Croatia, the copy referred to in Article 14, paragraph 4, or proof that the specimens were legally acquired within the Republic of Croatia is presented.
- (4) By way of derogation from paragraphs 2 and 3 of this Article, the export or reexport of the following items shall not require the presentation of an export permit or reexport permit:
 - caviar of sturgeon pieces (*Acipenseriformes* spp.) up to a maximum of 250 grams per person;
 - queen conch (Strombus gigas) shells up to three per person;
 - rainsticks of *Cactaceae* spp. up to three per person.

Article 15

- (1) Permits referred to in Articles 3, 4, 5, 6, 8 and 9 of this Ordinance shall not be required in the case of herbarium specimens, dried and other preserved museum specimens, and of live plant material bearing the label referred to in Annex XIV to this Ordinance in case they are lent, donated or exchanged for non-commercial purposes between scientists and scientific institutions, registered by the competent authority in the countries in which they are located. The scientists and scientific institutions shall fill out all boxes of the label and, by returning the part of the label provided for that purpose, immediately inform the Ministry of its use.
- (2) A registration number shall be attributed to the scientists and scientific institutions referred to in paragraph 1 of this Article by the Ministry, which shall contain five digits, the first two of which shall be the two-letter ISO code of the state and the last three a unique number assigned to each scientist or scientific institution.
- (3) Scientists and scientific institutions shall keep an inventory list of specimens listed in Annexes I to IV to this Ordinance and shall enable the Ministry to have access to it.

- (1) The Ministry shall, when implementing the Convention, issue at the request of the interested party the certificate proving that the specimens were acquired before the Convention entered into force for the state of origin and the Republic of Croatia (preconvention status).
- (2) Date of acquisition of live or dead specimens taken from the wild shall mean the date on which a specimen was taken from its natural environment, while the date of acquisition of parts and derivatives thereof shall be the date when they legally became someone's property. In the event that it is not possible to ascertain the date of acquisition of the specimen, the pre-convention status cannot be established for such a specimen.

- (1) By way of derogation from the provisions of Articles 3, 4, 5, 6, 8, and 9 of this Ordinance in case a specimen forms a part of a circus, travelling zoo, plant exhibition and other travelling exhibition, the import, export and re-export shall be permitted based on the certificate on the pre-convention status of the specimen or the certificate that the specimens were captive bred or artificially propagated.
- (2) Certificates referred to in the paragraph above shall be issued by the Ministry, based on the submitted request. A certificate may permit multiple import into and export from the Republic of Croatia. The certificate shall have a three-year validity period which may be extended upon expiry.
- (3) By way of derogation from the provision of the Article 16, paragraph 1 of this Ordinance, the certificate on the pre-convention status may be issued only if specimens were acquired before 1 July 1975 or before the species to which a specimen belongs was included in the Annexes to the Convention.
- (4) The request for issuance of the certificate referred to in paragraph 2 of this Article shall contain the list of specimens in scientific and common names of the species and the accompanying documentation specifying when and how the specimens were acquired and the documents (pictures, descriptions etc.) confirming that the specimens will be transported in accordance with the provisions of this Ordinance.

General restrictions on import

- (1) The import of the species listed in Annex VI shall not be permitted.
- (2) By way of derogation, the import of the species referred to in paragraph 1 of this Article may be permitted by the Ministry by the issuance of an import permit, in case the following conditions have been met:
 - application for import has been submitted before the entry into force of the import prohibition,
 - the Ministry establishes that the import order was paid or that specimens were despatched before the entry into force of the import prohibition.
- (3) Unless otherwise prescribed in Annex VI by the name of the species in boxes "source", "type of specimen" or "country of origin", the import prohibition referred to in paragraph 1 of this Article shall not apply to:
 - specimens born or bred in captivity or artificially propagated specimens,

- specimens indispensable for scientific progress and for necessary bio-medical research if it has been proved that the specimen concerned is the only suitable specimen for that purpose and that there are no alternative captive-bred or artificially propagated specimens; specimens intended for breeding or propagation, from which conservation benefits will accrue to the species, or for research or education aimed at preservation or conservation of the species
- specimens that form a part of personal and household effects of natural and legal persons entering into the Republic of Croatia with the intention of temporary or permanent residence.

The import permit referred to in the previous paragraph shall be issued by the Ministry at the request of the applicant.

Article 19

- 1) The import of pelts of animals referred to in Annex VII, Chapter 1, and derivatives thereof listed in Annex VII, Chapter 2 shall not be permitted.
- (2) By way of derogation, the import of the pelts of animals to which the prohibition referred to in the previous paragraph of this Article relates may be permitted if the Ministry establishes that:
 - pelts are of animal species indicated alongside the name of the country listed in Annex VII of Chapter 3, or
 - pelts are obtained from animal species born and bred in captivity.
- (3) In case of the import referred to in the previous paragraph, the importer shall present to the border customs office a certificate issued by the Ministry on the form referred to in Annex VII of Chapter 4 to this Ordinance or an import permit issued in accordance with Articles 3 and 4 of this Ordinance in case of the fur of animals and derivatives composed thereof subject to provisions of Articles 3 and 4 of this Ordinance.
- (4) Presentation to the border customs office of the certificate referred to in paragraph 3 of this Article shall not be required in the cases involving:
 - finished goods for personal and private use, if proof of origin or invoice is presented,
 - finished goods not intended for sale within the Republic of Croatia but intended for re-export,
 - pelts of animals and derivatives composed thereof that are re-imported into the Republic of Croatia after the processing procedure in a third country, if the evidence is presented that the pelts of animals and derivatives composed thereof were previously exported or re-exported from the Republic of Croatia.

- (1) The import of skins, derivatives thereof and other products deriving from specimens of the species listed in Annex X for commercial purpose shall not be permitted.
- (2) By way of derogation, the import of skins, derivatives thereof and other products deriving from specimens of the species listed in Annex X may be permitted if specimens were captured in traditional hunting practiced by the Inuit people or if non-commercial import is involved.
- (3) The Ministry shall issue the import permit if the following conditions have been met:

- 1) the competent scientific authority, based on the available data, has issued a written expert opinion confirming that:
 - the import of specimens does not have a harmful effect on the population status of the species or on the extent of the territory occupied in the country of origin,
 - the import of specimens is indispensable for scientific progress and for necessary bio-medical research, and the species concerned is the only suitable species for that purpose and there are no other specimens bred in captivity or artificially propagated; or the import of specimens is indispensable for research and education for the purpose of the conservation of the species concerned,
 - the purpose of the import does not have a harmful effect to the survival of the species.
- 2) the importer enclosed the documentation evidencing that the specimens were obtained in accordance with the relevant regulations of the country of origin and the written statement confirming that the specimens will be used for the purposes referred to in the previous sub-paragraph, items 2 and 3 of this Article.
- (4) The presentation to the border customs office of the import permit by the importer shall be required in case of the import referred to in paragraph 3 of this Article.

III TRADE

- (1) The sale, purchase, submission of the offer for purchase, acquisition for commercial purposes, public display for the purpose of acquiring gain, keeping for sale, offering for sale or transport for sale, as well as rent and exchange of specimens of the species listed in Annex I and Annex VIII shall not be permitted.
- (2) By way of derogation, the Ministry may permit activities referred to in paragraph 1 of this Article, if one of the following conditions has been met:
 - specimens were acquired or introduced into the Republic of Croatia before entry into force of this Ordinance and the applicant has proved that the specimens were acquired in accordance with the environmental protection regulations;
 - specimens were worked and acquired more than 50 years previously;
 - specimens were introduced into the Republic of Croatia in accordance with provisions of this Ordinance and shall be used for purposes which are not harmful to the survival of the population of the species concerned;
 - specimens relate to animals born and bred in captivity, specimens relate to artificially propagated plants, or parts and derivatives thereof;
 - specimens are necessary for scientific progress and for necessary bio-medical purposes if it is evident that the species concerned is the only suitable for that purpose and if there are no specimens of the species concerned that are born and bred in captivity or artificially propagated;
 - specimens are intended for breeding or propagation for the purpose of conservation of the species;
 - specimens are intended for research or education for the conservation of the species:
 - specimens originate from the Republic of Croatia and were taken from the wild in accordance with the environmental protection regulations;
 - specimens are from scientific collections intended for breeding in captivity or for artificial propagation aiming at the protection of the species or research and

- education with the purpose to protect the species, which are commercially exchanged only between scientific institutions and scientists that are registered with the Ministry.
- (3) The Ministry shall issue a certificate for activities referred to in paragraph 2 of this Article on the form in Annex XIII, which constitutes an integral part of this Ordinance. The certificate shall be issued to the holder of the specimens, while each subsequent holder shall have to obtain a new certificate.
- (4) The Ministry shall keep the registry of natural and legal persons that were granted the permit for trade on the basis of this Ordinance.

- (1) The sale, purchase, submission of the offer for purchase, acquisition for commercial purposes, public display for the purpose of acquiring gain, keeping for sale, offering for sale or transport for sale, as well as rent and exchange of specimens of the species listed in Annex II and Annex IX shall not be permitted.
- (2) By way of derogation, the Ministry may permit the activities referred to in paragraph 1 of this Article, if one of the following conditions has been met:
 - specimens were acquired in the Republic of Croatia in accordance with the environmental protection regulations;
 - specimens were introduced into the Republic of Croatia in accordance with the environmental protection regulations.
- (3) The Ministry shall issue a certificate for the activities referred to in paragraph 2 of this Article on the form in Annex XIII, which constitutes an integral part of this Ordinance. The certificate shall be issued to the holder of the specimens, while each subsequent holder shall have to obtain a new certificate.

Article 23

Provisions of Article 21, paragraphs 1 and 2 of this Ordinance shall not apply to:

- captive born and bred adult animal specimens of the species referred to in Annex V to this Ordinance and hybrids thereof, provided that the specimens indicated in the additional remarks are marked in accordance with Article 33 of this Ordinance,
- artificially obtained plant specimens,
- worked specimens that were obtained more than 50 years previously, in accordance with the definition laid down in Article 2 of this Ordinance.

IV MOVEMENT OF LIVE SPECIMENS WITHIN THE REPUBLIC OF CROATIA

- (1) For each movement (transport, relocation, new settlement, change of residence etc.) of a live specimen of the species listed in Annexes I and VIII from the location indicated in the import permit or the certificate issued in accordance with this Ordinance the Ministry shall issue a certificate on the form referred to in Annex XIII.
- (2) The certificate referred to in the previous paragraph may be issued if the following conditions have been met:

- the person responsible for the transfer of specimens provides documentation evidencing that the specimens were obtained in accordance with the environmental protection regulations
- the competent scientific authority issues a written expert opinion stating that the intended accommodation for a specimen is adequately equipped to conserve and care for it properly;
- the Ministry is satisfied that there are no other factors relating to the conservation of species which militate against the issuance of the certificate.
- (3) By way of derogation, the certificate referred to in paragraph 1 of this Article shall not be required if a live animal must be moved for the purpose of urgent veterinary treatment and is returned directly to its authorized location.
- (4) When live animals are transported into, from or within the Republic of Croatia, or are trans-shipped, they shall be prepared, moved and cared for in such a way so as to minimize the risk of injury, damage to health or cruel treatment, in accordance to special regulations.

V CAPTIVE BREEDING AND ARTIFICIAL REPRODUCTION

Article 25

- (1) A specimen of an animal species is considered to be born and bred in captivity when the Ministry, after obtaining the opinion of the competent scientific authority, is satisfied that:
 - it is, or is derived from, offspring born or otherwise produced in a controlled environment – of parents that mated or had gametes otherwise transferred in a controlled environment, if reproduction is sexual, or of parents that were in a controlled environment when development of the offspring began, if reproduction is asexual;
 - 2) the breeding stock was established in accordance with the legal provisions applicable to it at the time of acquisition and in a manner not detrimental to the survival of the species concerned in the wild;
 - 3) the breeding stock is maintained without the introduction of specimens from the wild, except for the occasional addition of animals, eggs or gametes, in accordance with the legal provisions applicable and in a manner not detrimental to the survival of the species concerned in the wild for the following purposes only:
 - to prevent or alleviate deleterious inbreeding, the magnitude of such addition being determined by the need for new genetic material;
 - to dispose of animals confiscated in accordance with the Nature Protection Act; or
 - exceptionally, for the use as breeding stock;
 - 4) the breeding stock has itself produced second or subsequent generation offspring in a controlled environment, or is managed in a manner that has been demonstrated to be capable of reliably producing second-generation offspring in a controlled environment.

The owner of the animal shall enable access to specimens for the purpose of analysis when the Ministry is establishing the origin of the animal by analysing blood or other tissue thereof.

Article 27

A specimen of a plant species shall only be considered to be artificially propagated when the Ministry, after obtaining the opinion of the competent scientific authority, is satisfied that:

- it is, or it is derived from, plants grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other sprouts under controlled conditions, i.e. in a non-natural environment that is intensively manipulated by human intervention, which may include tillage, fertilisation, weed control, irrigation, or nursery operations such as potting, bedding and protecting from weather,
- the cultivated parental stock was established in accordance with the legal provisions applicable to it on the date of acquisition and is maintained in a manner not detrimental to the survival of the species in the wild,
- the cultivated parental stock is managed in such a way that its long-term maintenance is guaranteed,
- in the case of grafted plants, both the root stock and the graft have been artificially propagated in accordance with items 1 to 3 of this Article,
- in the case of species of trees, the specimen is grown in a monospecific plantation.

Article 28

Specimens referred to in Annex I that are born and bread in captivity or artificially propagated shall be treated in accordance with provisions applicable to specimens of the species referred to in Annex II, except for the purpose referred to in Article 21, paragraph 1 of this Ordinance.

- (1) Before the beginning of the breeding or artificial propagation of specimens of the species listed in Annexes I, II and Annexes VIII and IX, a natural or legal person shall obtain the authorization from the Ministry. The authorization shall be issued based on the prior opinion of the competent scientific authority.
 - (2) The request for authorization shall contain the following:
 - name and address of a natural person, i.e. name and registered office of a legal person and the name of the responsible person within the legal person, which shall engage in breeding activities;
 - evidence that the person/entity referred to in the previous item is registered for the relevant breeding activity;
 - location of the breeding site;
 - date of the beginning of the breeding;
 - scientific name of the species to be bred;
 - description of the breeding stock which includes the number and age of males and females forming the breeding stock and the known or likely genetic connection between specimens in pair and among pairs of the breeding stock;

- evidence on the legal origin of the breeding stock;
- current number, by sex and age, of captive bred offspring, in addition to breeding stock;
- data on the death rate for different age groups and, where possible, for both sexes;
- data on the past, current and expected annual production of offspring, together with the data on percentage of females producing offspring each year and abnormalities in the annual production of offspring (including an explanation of probable cause);
- documentation showing that the species has been bred to second-generation offspring (F2) and a description of the method used, or if the operation has only bred the species to the first generation, documentation showing that the breeding methods used are the same as, or similar to, those that have resulted in second-generation offspring elsewhere;
- description of the facilities to house the current and expected number of specimens, including security measures to prevent escape and/or thefts (detailed information on the number and size of breeding and rearing enclosures, egg incubation capacity, food production or supply, availability of veterinary services);
- an assessment of the anticipated need for, and source of, additional specimens to augment the breeding stock to increase the genetic pool of the captive population in order to avoid any deleterious inbreeding;
- detailed description of the marking methods (e.g. tags, rings, microchips) used for breeding stock and offspring and for the products thereof (e.g. skins, meat) intended for export;
- type of product from which commercial gain is expected (live specimens, meat, eggs, fur, skins, other body parts and derivatives thereof, etc.);
- (3) The Ministry shall keep a register of natural and legal persons that were granted the authorization for breeding on the basis of this Ordinance.
- (4) The breeder shall submit to the Ministry a report on captive breeding or artificial propagation by 1 March each year for the previous year.
- (5) If a breeder fails to proceed in accordance with the provisions of this Ordinance and in accordance with the conditions laid down in the authorization for breeding, the issued authorization for breeding shall be repealed by the Ministry, which shall also prohibit the continuation of the captive breeding or artificial propagation.
- (6) The provisions of paragraph 2 of this Article shall apply to the relevant procedure for the issuance of the authorization for captive breeding or artificial propagation of plant species referred to in Annexes I, II, VIII and IX.

VI MARKING SHIPMENTS AND INDIVIDUAL LIVE SPECIMENS OF ANIMAL AND PLANT SPECIES, PARTS AND DERIVATIVES THEREOF

- (1) The Ministry shall issue the certificate referred to in Article 21, paragraph 3 of this Ordinance to the applicant with regard to live vertebrates when the applicant has provided evidence that the animals are marked in accordance with the provisions of this Ordinance.
- (2) The import permit shall be issued to the applicant only when the applicant has provided evidence that the specimens have been marked in accordance with the Convention:

- specimens that derive from a captive breeding operation that was approved by the Parties to the Convention,
- specimens that derive from a farming operation that was approved by the Conference of the Parties to the Convention,
- specimens from a population of a species listed in Annex I to the Convention for which an export quota has been approved by the Conference of the Parties to the Convention,
- raw tusks of African elephant and cut pieces thereof that are both over 20 cm in length and 1 kg in weight,
- raw, tanned and/or finished crocodile skins, flanks, tails, throats, feet, backbones and other parts thereof that are exported to the Republic of Croatia and entire raw, tanned or finished crocodile skins and flanks that are re-exported to the Republic of Croatia.
- live vertebrates of species listed in Annex I to this Ordinance that belong to a travelling animal exhibition,
- any primary container (tin, jar, or box into which caviar is directly packed) of more than 249 grams of caviar, based on the application of non-reusable labels on each primary container that is imported into the Republic of Croatia from a country of origin;
- primary containers containing less than 250 grams of caviar, based on the application of non-reusable labels on the secondary containers, including a description of the content that are imported into the Republic of Croatia from a country of origin.

- (1) The Ministry shall issue a re-export certificate for specimens marked in accordance with Article 30, paragraph 2, items 1, 2, 3, 4 and 6 of this Ordinance, if they are not substantially modified and if the applicant has satisfied the Ministry that the original markings are intact.
- (2) The Ministry shall issue a re-export certificate for entire raw, tanned and/or finished crocodile skins and flanks if the applicant has satisfied the Ministry that the original tags are intact or, where these have been lost or removed, the specimens have been marked with a re-export tag.

Article 32

The Ministry shall issue a re-export permit when the applicant has satisfied the Ministry that the specimens have been marked in accordance with the Convention:

- any primary container (tin, jar or box into which caviar is directly packed) of more than 249 grams of caviar, based on the application of non-reusable labels on each primary container;
- primary containers of less than 250 grams of caviar, based on the application of non-reusable labels on the secondary containers, including a description of the content.

- (1) Live vertebrates shall be marked in the manner prescribed by the Ordinance on housing conditions, marking and registering of protected animals in captivity.
- (2) By way of derogation, the provision of paragraph 1 of this Article shall not apply to specimens of live vertebrates referred to in Article 30 of this Ordinance if their physical properties do not, at the time of issue of the relevant certificate referred to in Annex XIII, permit the safe application of the marking method. Where this circumstance applies, the Ministry shall record this in box 20 of the certificate, or, where the marking method can be safely applied at the later date, include the appropriate remarks therein.

VII PROCEDURE FOR ISSUANCE OF PERMITS AND CERTIFICATES

Applications

Article 34

- (1) An application for the issuance of a certificate or a permit based on this Ordinance shall be submitted to the Ministry in writing.
- (2) The application for the issuance of an import permit, export permit or re-export certificate shall be submitted before the import of specimens into the Republic of Croatia i.e. their export or re-export.
- (3) The applicant shall provide accurate data and statements in the application referred to in paragraph 1 of this Article and shall enclose valid documentation.
- (4) The permits, certificates and other authorizations issued in other countries, shall be considered valid at import into the Republic of Croatia and transit through the Republic of Croatia if they have been issued and used for export or re-export from another country by no later than one day prior to their last day of validity and are used for import into the Republic of Croatia or transit through the Republic of Croatia within six months from their date of issue.
- (5) In case the applicant fails to enclose to the application for import, export or reexport the documentation of the country of export, import or re-export referred to in Articles 3, 4, 5, 7, 8, 9, 10 and 11 of this Ordinance, the applicant shall have the obligation to inform the Ministry of the reasons therefor. By way of derogation, the stated documentation may be enclosed retrospectively for specimens listed in Annexes II and III, and for specimens listed in Annex I if the specimens involved are worked specimens acquired more than 50 years previously and the Ministry in consultation with the competent authority of another country establishes that the reasons why the documentation was not timely enclosed cannot be attributed to the applicant and that the import, export or re-export is carried out in accordance with the provisions of the Convention.
- (6) The Ministry shall check box 23 in the form referred to in Annex XI indicating the retrospective issuance on the import and export permit and in the form of the re-export certificate, issued pursuant to paragraph 5 of this Article as well as the reason for the retrospective issuance.

Article 35

(1) Applications for issuance of permits, certificates and other authorizations for specimens listed in Annexes I to IV to this Ordinance shall be submitted in the application form referred to in Annex XI which constitutes an integral part of this Ordinance.

(2) Applications for issuance of permits, certificates and other authorizations for specimens of the species listed in Annexes V to X to this Ordinance shall be submitted on the application form referred to in Annex XVI which constitutes an integral part of this Ordinance.

Permits and certificates

Article 36

- (1) The form and content of the import permits, export permits and re-export certificates for specimens of the species listed in Annexes I IV shall conform to the model in Annex XI to this Ordinance and shall consist of:
 - original,
 - copy for the holder,
 - copy for the exporting or re-exporting country in the case of import permits, or the copy for return by the border customs office to the Ministry in case of an export permit or re-export certificate,
 - copy for the Ministry,
 - copy for the customs,
 - application.
- (2) The form and content of a notification on import for specimens of the species listed in Annexes III and IV to this Ordinance shall conform to the model in Annex XII of this Ordinance and shall consist of:
 - original,
 - copy for the importer,
 - copy for the customs.
 - (3) The form and content of the certificates for purposes referred to in Article 21, paragraph 2, items 1-9 and Article 24, paragraph 1 of this Ordinance shall conform to the model in Annex XIII and shall consist of:
 - original,
 - copy for the Ministry,
 - application.
- (4) The form and the content of the label referred to in Article 18 of this Ordinance shall conform to the model in Annex XIV to this Ordinance.

Form for permits, certificates and other documents

- (1) The paper for the forms referred to in Article 36 of this Ordinance shall be free of mechanical pulp, dressed for writing purposes and weigh at least 55 g/m².
- (2) The size of the forms referred to in Article 36, with the exception of the label, shall be 210 x 297 mm (A4) with a maximum tolerance as to length of 18 mm less and 8 mm more.
 - (3) The paper of the forms referred to in Article 36, paragraph 1 shall be:
 - white for the «original», with a wattle pattern background, printed in grey on the front for the purpose of revealing any falsification by mechanical or chemical means,
 - yellow for the «copy for the holder»,

- pale green for the «copy for the exporting or re-exporting country» in case of an import permit, i.e. the copy for return by the customs to the Ministry in case of an export permit or re-export certificate,
- pink for the «copy for the Ministry»,
- pale blue for the «copy for the customs»,
- white for the «application».
- (4) The paper for the forms referred to in Article 36, paragraph 2 shall be:
 - white for the «original»,
 - yellow for the «copy for the importer»,
 - pale blue for the «copy for the customs».
- (5) The paper for the forms referred to in Article 36, paragraph 3 shall be:
 - yellow for the «original», with a wattle pattern background, printed in grey on the front, for the purpose of revealing any falsification by mechanical or chemical means,
 - pink for the «copy for the Ministry»,
 - white for the «application».
- (6) Paper for the label referred to in Article 36, paragraph 4 shall be white.
- (7) The forms and the label referred to in Article 36 shall be printed and completed in the Croatian and English languages.
- (8) Forms referred to in Article 36, paragraphs 1, 2 and 3 of this Ordinance, may be issued in the electronic form and may be part of a computerised issuing procedure.

- (1) The forms shall be completed in the electronic form.
- (2) Applications for permits, certificates and the label referred to in Article 36 of this Ordinance shall be completed legibly, in ink and in block capitals.
- (3) Permits, certificates and notifications on import may not contain any erasures or alterations, unless they have been authenticated by the stamp and signature of the Ministry or the competent customs office.
- (4) In permits and certificates, as well as in applications for the issue of such documents the following shall be used:
 - codes contained in Annex XV for description of the specimens,
 - units contained in Annex XV for indication of quantity and net mass,
 - the standard references for nomenclature contained in Annex XVII, used to indicate the scientific names of species,
 - codes contained in Annex XVIII of Chapter I to indicate the intended purpose of the shipment,
 - codes contained in Annex XVIII of Chapter II to indicate the source of the specimens.
- (5) If an annex is attached to any of the forms referred to in Article 36 of this Ordinance which constitutes an integral part thereof, that fact and the number of pages shall be clearly indicated on the permit or certificate concerned and each page of the annex shall include the number of the permit or certificate and its date of issue and the signature and stamp of the authority having issued the permit or certificate.
- (6) Where the form referred to in Article 36, paragraph 1, is used for more than one species in a shipment, an annex shall be attached which, in addition to the requirements referred to in paragraph 1 of this Article, shall, for each species in the shipment, reproduce

boxes 8 to 22 of the form concerned as well as the spaces contained in box 27 thereof for the inclusion of the "quantity/net mass actually imported" and, where appropriate, "number of animals dead on arrival".

- (7) Where the form referred to in Article 36, paragraph 3 of this Ordinance, is used for more than one species, an annex shall be attached which, in addition to the requirements referred to in paragraph 1 of this Article, shall, for each species, reproduce boxes 4 to 18 of the form concerned.
- (8) The provisions of paragraphs 1, 2, 3 and 4, items 3 and 4, and paragraph 5 of this Article shall also apply in the context of making decisions on the acceptability of permits and certificates issued by exporting countries for specimens to be introduced into the Republic of Croatia. Where such documents concern specimens subject to voluntarily fixed export quotas allocated by the Conference of the Parties to the Convention, they shall only be accepted if they mention the total number of specimens already exported in the current year, including those covered by the permit in question, and the quota for the species concerned. Re-export certificates issued by the exporting countries shall further only be accepted if they specify the country of origin and the number and date of issue of the relevant export permit and, where applicable, the country of the last re-export and the number and date of issue of the relevant re-export certificate, or contain a satisfactory justification for the omission of such information.

Article 39

A separate import permit, import notification, export permit or re-export certificate shall be issued by the Ministry for each shipment of specimens shipped together as part of one load.

VALIDITY PERIOD OF PERMITS AND CERTIFICATES

- (1) The period of validity of the import permits shall not exceed 12 months. An import permit shall not be valid in the absence of a valid corresponding document from the country of export or re-export.
- (2) The period of validity of export permits and re-export certificates shall not exceed 6 months
- (3) After their expiry, the permits and certificates referred to in paragraphs 1 and 2 of this Article shall be considered null and void.
- (4) The holder shall without undue delay return to the Ministry the original and all copies of an expired or unused import permit, export permit or re-export certificate issued by the Ministry.
- (5) The permits i.e. the certificates referred to in Article 8, paragraphs 2 and 3, Article 9, Article 21, paragraph 3 and Article 24, paragraph 1, of this Ordinance, and the "copy for the holder" which constitutes an integral part of the Annex XI, shall be issued by the applicant in the following cases:
 - where live specimens referred to therein have died, have escaped or were destroyed
 - where entries in boxes 2 and 4 of a certificate referred to in Annex XIII or box 3, in case of species listed in Annex I, and in boxes 6 and 8 on the "copy for the holder"

- of a used import permit referred to in Annex X, no longer reflect the actual situation.
- (6) The certificates referred to in Article 21, paragraph 2, items 3, 5, 6, 7 and 9 of this Ordinance shall cease to be valid when the entry in box 1 no longer reflects the actual situation.
- (7) In the cases referred to in paragraphs 5 and 6 of this Article, the Ministry may, upon request issue a new permit, certificate or some other document reflecting such changes.
- (8) When a permit or certificate is issued to replace a document that has been cancelled, lost, stolen or destroyed, or that, in case of a permit or re-export certificate, has expired, it shall indicate the number of the replaced document and the reason for the replacement in the box reserved for the special conditions entry.
- (9) When an export permit or re-export certificate for the species listed in Annexes I to IV of this Ordinance has been cancelled, lost, stolen or destroyed, the issuing management authority shall inform the management authority of the country of destination and the secretariat of the Convention.

VIII ACCOMMODATION OF SEIZED SPECIMENS

Article 41

- (1) Live specimens of animal and plant species listed in Annexes I to X to this Ordinance, parts and derivatives thereof seized or confiscated by the nature protection inspection may be temporarily accommodated at natural or legal persons authorized by the Ministry for that purpose.
- (2) Once the court decision on confiscation becomes final, the confiscated specimen of the protected wild taxon shall become the property of the Republic of Croatia.

Treatment of confiscated specimens of animal species

- (1) The specimens of live animals which have been confiscated at import into the Republic of Croatia for which the Ministry identifies the country of origin, i.e. which have been seized or otherwise confiscated in the area of the Republic of Croatia and the natural location from which the specimens have been taken is known, may be returned to the country of origin with the prior consent of that country, i.e. returned to the location from which they were taken from the nature, if the following conditions have been met:
 - animals were kept in quarantine and were found free of disease or parasites,
 - animals will be so prepared for shipment and shipped as to minimize the risk of injury, damage to health or cruel treatment
 - the return is justified and beneficial for the conservation of that species.
- (2) Where procedure referred to in the previous paragraph of this Article is not possible the Ministry shall adopt a decision on further treatment of confiscated specimens which shall include:
- 1) return to nature, provided that:
 - it has been proven that the species concerned is indigenous,
 - specimens belong to the same population as the specimens of the species concerned in the nature,

- behaviour of specimens does not differ from the wild specimens in nature,
- specimens were kept in quarantine and were found free of disease or parasites,
- 2) relinquishing to legal or natural persons, for the purpose of permanent keeping in captivity for non-commercial purposes, which may be approved to:
 - natural and legal persons authorized by the Ministry to care about seized or confiscated animals, or
 - other natural and legal persons which engage in non-commercial activity, if they prove to be qualified to provide the adequate housing and care conditions in accordance with the Ordinance on the conditions for keeping, marking methods, and keeping records on protected animals in captivity.
- 3) relinquishing to scientists and scientific institutions, in case it is not possible to provide permanent accommodation according to paragraph 2, subparagraph 2 of this Article. In case of live specimens listed in Annex I and Annex VIII to this Ordinance, the relinquishing may be approved only if the specimens will be used for research which contributes to the conservation of that or related species in nature.
- 4) relinquishing to legal or natural persons for commercial purposes provided that:
 - they hold the authorization of the Ministry for commercial breeding or artificial propagation, and
 - they have been registered with the Secretariat of the Convention in case of specimens of the species listed in Appendix I to the Convention,
- 5) the sale provided that:
 - the specimen will not be resold,
 - that the specimens have spent the necessary period in quarantine and are not transmitters of contagious diseases or parasites,
 - the buyer has not been registered as a violator of nature protection regulations and proves to have secured conditions for accommodation of a live specimen in accordance with the Ordinance on the conditions for keeping, marking methods, and keeping records on protected animals in captivity and to have undertaken all necessary measures for the purpose of preventing the escape of the specimen to nature.
- 6) putting to death, in case it is not possible to accommodate animals in accordance with provisions of subparagraphs 1 5 of this Article. The putting to death shall be carried out in accordance with regulations in the field of animal welfare. Dead specimens may be handed over to museums, scientific institutions and scientists and if there is no such interest, dead specimens shall be destroyed by a commission.
- (3) The Ministry shall adopt the decision referred to in paragraphs 1 and 2 of this Article regarding the treatment of confiscated live animal specimens, based on a written expert opinion of the competent scientific authority.

- (1) In relation to dead specimens of animal species, as well as parts and derivatives thereof the Ministry may:
 - keep them for the Ministry's own use for educational purposes,
 - relinquish them to other natural and legal persons that are related to the protection of nature, such as schools, museums, scientific institutions, scientists, etc.,
 - sell them.
 - have them destroyed by a commission.

Treatment of confiscated specimens of plant species

Article 44

(1) Provisions of Articles 42 and 43 of this Ordinance shall adequately apply to live and dead specimens of plant species listed in the annexes to this Ordinance.

IX AUTHORITIES COMPETENT FOR IMPLEMENTATION OF PROVISIONS OF THIS ORDINANCE

Article 45

- 1) The Ministry shall perform the activities of the competent management authority in terms of provisions of this Ordinance, and in particular it shall:
 - issue permits and certificates and other acts pursuant to this Ordinance,
 - adopt decisions on procedure in case of seizure,
 - keep records on scientific institutions and scientists,
 - keep records on international trade of specimens listed in Annexes I to IV and prepare annual and biennial reports on trade which are submitted each year by 31 October to the Secretariat of the Convention and to other international organizations according to established deadlines.
 - prepare, in co-operation with the relevant experts, proposals for the conference of the parties to the Convention and amendments to Appendices of the Convention,
 - organise and run the projects for informing and educating the public about trade in endangered species,
 - organise and keep training programmes for employees of other state administration bodies responsible for implementation of the provisions of this Ordinance and Convention,
 - establish starting points and standpoints of the Republic of Croatia at the Conference of the parties to the Convention,
 - act as a competent management authority in terms of Article 9 of the Convention,
 - maintain contacts with the Secretariat of the Convention and countries that are parties to the Convention,
 - co-operate with administrative and expert bodies of other countries and with international organisations competent for nature protection activities,
 - co-operate with non-governmental organisations in the field of nature protection,
 - perform also other activities in accordance with this Ordinance.

- 1) For the purpose of this Ordinance the activities of the competent scientific authority shall be performed by:
 - the Institute of Ornithology of the Croatian Academy of Sciences and Arts,
 - the Faculty of Science of the University of Zagreb,

- the Croatian Museum of Science, and
- the Department of Biology at the Veterinary Faculty of the University of Zagreb.
- 2) Scientific entities referred to in the previous paragraph shall:
 - establish whether the import, export, re-export or the introduction from the sea endangers the survival of the species listed in Annexes I to X of this Ordinance,
 - issue written expert opinions on treatment of seized and confiscated specimens,
 - issue written expert opinions regarding conditions of housing of live animals of animal and plant species in captivity,
 - issue written expert opinions, at the request of the Ministry, regarding artificial breeding or propagation of the species,
 - issue expert opinions in case of import and export of species which are carried out within the conservation programme of the species,
 - issue written expert opinions, at the request of the Ministry, related to the manner of marking,
 - issue written expert opinions, at the request of the Ministry, on the origin of the specimens,
 - co-operate with expert bodies of other countries that are parties to the Convention,
 - issue written expert opinions regarding registration of scientific institutions and scientists.
 - provide professional assistance to the Ministry, including the nature protection inspection, to the customs office and border police, in taxonomic identification of species,
 - participate, as appropriate, in the work of expert bodies of the Convention,
 - prepare proposals for the purpose of reducing illegal trade in endangered species,
 - based on the comparison of the issued export permits for the species listed in Annex II of this Ordinance with the realised export permits, for the purpose of monitoring the pressure on populations, issue written expert opinions for the purpose of undertaking necessary measures by the Ministry, in case they establish that the import might endanger a favourable status of the species in nature,
 - participate in organisation and running, in co-operation with the Ministry, of the training programmes for employees of other state administration bodies responsible for implementation of provisions of this Ordinance and Convention and informing and educating the public,
 - co-operate with the Ministry in preparation of the expert material and the defining of starting points and standpoints of the Republic of Croatia for the Conference of the Parties to the Convention.
 - perform other activities specified by this Ordinance.

- 1) Customs office shall check the import, export, re-export and transit of the species listed in Annexes I to X of this Ordinance and live animals of foreign species, and in particular it shall:
 - check whether the specimens have, when crossing the border, valid permits, certificates or other documents, which are issued by the Ministry in accordance with this Ordinance and the Nature Protection Act or the prescribed documentation of some other country issued in accordance with the Convention,

- check, with the assistance of the customs veterinary of phytosanitary inspection, whether the actual specimens and shipments correspond to the data stated in the accompanying documentation,
- check, with the help of the customs veterinary inspection, the transport conditions stated in the accompanying documentation,
- carry out other activities specified by this Ordinance.
- 2) Customs office shall inform the Ministry on the identification or reporting of the specimens subject to this Ordinance or on the breach of this Ordinance and the Nature Protection Act and the customs regulations that refer to live specimens of foreign species and specimens of the species listed in Annexes I to X of this Ordinance.

X TRANSITIONAL AND FINAL PROVISIONS

Article 48

- (1) Scientists and scientific institutions that intend to, in accordance with this Ordinance, import, export or re-export specimens of the species listed in Annexes I to X of this Ordinance shall register themselves with the Ministry within 6 months from the date of entry into force of this Ordinance.
- (2) Scientists and scientific institutions referred to in the previous Article shall make an inventory list of the species listed in Annexes I to VIII of this Ordinance that they possess or own and shall inform the Ministry thereof within 4 months from the date of entry into force of this Ordinance.
- (3) Legal or natural persons that perform the activities of a circus or a travelling exhibition shall obtain a permit for such activities pursuant to Article 105 of the Nature Protection Act and/or a certificate on a pre-convention status of specimens referred to in Article 16 of this Ordinance, within 3 months from the date of entry into force of this Ordinance
- (4) A legal or natural person performing a commercial activity with the species listed in Annex I and Annex VIII of this Ordinance shall obtain a permit referred to in Article 21 of this Ordinance within 2 months from the date of entry into force of this Ordinance.
- (5) Legal and natural persons engaging in captive breeding or artificial propagation of the species listed in Annexes I, II, VIII and IX shall obtain an authorization in accordance with Article 29 of this Ordinance within 2 months from the date of entry into force of this Ordinance.
- (6) Legal or natural persons engaging in captive breeding or artificial propagation of the species listed in Annex I and Annex VIII of this Ordinance shall mark the animals pertaining to the breeding stock in the manner prescribed by the Ordinance on the conditions for keeping, marking methods, and keeping records on protected animals in captivity within 4 months from the date of entry into force of this Ordinance and the offspring of the breeding stock before submission of the application for issuance of the export permit or prior to sale.

The Ministry may issue permits, certificates and other official documents on the formerly prescribed forms for no longer than 3 months from the entry into force of this Ordinance.

Article 50

This Ordinance shall enter into force on the eighth day from the day of its publication in the Official Gazette.

Class: 612-07/05-41/31

Reg. No.: 532-10-01/4-06-05 Zagreb, 15 March 2006

> Minister of Culture Božo Biškupić, *m.p.*

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		FAUNA		
CHORDATA	CHORDATES			
MAMMALIA	MAMMALS			
DASYUROMORPHIA				
Dasyuridae				
		Sminthopsis longicaudata		(I)
The description		Sminthopsis psammophila		(I)
Thylacinidae		The tracing a superior to the form to a		
		Thylacinus cynocephalus (maybe extinct)		(I)
PERAMELEMORPHIA		CAUTOLY		
Peramelidae				
		Chaeropus ecaudatus (maybe		(1)
		extinct)		
		Macrotis lagotis		(l)
		Macrotis leucura		(I)
DIPROTODONTIA		Perameles bougainville		(I)
Vombatidae				1
		Lasiorhinus krefftii		(1)
Macropodidae				(.)
		Lagorchestes hirsutus		(I)
		Lagostrophus fasciatus		(I)
		Onychogalea fraenata		(I)
		Onychogalea lunata		(I)
Potoroidae				
		Bettongia spp.		(I)
				(.,
		Caloprymnus campestris (maybe extinct)		(I)
CHIROPTERA		CAUTOLY		
Pteropodidae				
		Acerodon jubatus		(I)
		Acerodon lucifer (maybe extinct)		(I)
		Pteropus insularis		(1)
		Pteropus livingstonei Pteropus mariannus		(II) (I)
		Pteropus molossinus		(I)
		Pteropus phaeocephalus		(1)
		Pteropus pilosus		(I)
		Pteropus rodricensis		(II)
		Pteropus samoensis		(I)
		Pteropus tonganus		(I)
		Pteropus voeltzkowi		(II)
PRIMATES				
Lemuridae				
Manual dan dan		Lemuridae spp.		(I)
Megaladapidae		Manufacturi d		(1)
Cheirogaleidae		Megaladapidae spp.		(I)
onon ogaroida c		Cheirogaleidae spp.		(1)
Indridae		опеноданиае эрр.		(1)
		Indridae spp.		(I)
Daubentoniidae		Section 2017		(-)
		Daubentonia madagascariensis		(1)
Tarsiidae				Ľ
		Tarsius spp.		(II)
Callithricidae				
		Callimico goeldii		(I)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Callithrix aurita		(1)
		Callithrix flaviceps		(I)
		Leontopithecus spp.		(I)
		Saguinus bicolor		(1)
		Saguinus geoffroyi		(I)
		Saguinus leucopus		(1)
		Saguinus oedipus		(1)
Cebidae		Cagainas occipas		(1)
		Alouatta coibensis		(1)
		Alouatta palliata		(1)
		Alouatta pigra		(1)
		Ateles geoffroyi frontatus		(1)
		Ateles geoffroyi panamensis		(1)
		Brachyteles arachnoides		(I)
		Cacajao spp.		(I)
		Callicebus personatus		(II)
		Chiropotes albinasus		(I)
		Lagothrix flavicauda		(I)
		Saimiri oerstedii		(I)
Cercopithecidae				
		Cercocebus galeritus (subspecies		
		Cercocebus galeritus galeritus is		(1/11)
		referred to in Appendix I to the		(1/11)
		Convention)		
		Cercopithecus diana		(I)
		Cercopithecus solatus		(II)
		Colobus satanas		(II)
		Macaca silenus		(I)
		Mandrillus leucophaeus		(I)
		Mandrillus sphinx		(I)
		Nasalis concolor		(I)
		Nasalis larvatus		(I)
		Presbytis potenziani		(I)
		Procolobus pennantii (species is		
		referred to in Appendix II to the		
		Convention, however, the		(1/11)
		subspecies Procolobus pennantii		()
		kirkii is referred to in Appendix I to the Convention)		
		Procolobus preussi		(II)
		Procolobus preussi Procolobus rufomitratus		(I)
	1	Pygathrix spp.		(I)
	1			
	1	Semnopithecus entellus Trachypithecus francoisi		(I) (II)
		Trachypithecus geei		
		• •		(I)
		Trachypithecus johnii		(11)
Hylohotidoo		Trachypithecus pileatus		(I)
Hylobatidae		I halahatida a ana		(1)
Hominidoo		Hylobatidae spp.		(I)
Hominidae	-	O college and the		(1)
	-	Gorilla gorilla		(1)
		Pan spp.		(l)
VENABTUS		Pongo pygmaeus		(I)
XENARTHRA				
Dasypodidae				
		Priodontes maximus		(I)
LAGOMORPHA				
Leporidae				
		Caprolagus hispidus		(I)
		Romerolagus diazi		(I)

GROUP		SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
Sciuridae					
		Cynomys mexicanus		(I)	
Muridae					
		Leporillus conditor		(I)	
		Pseudomys praeconis		(I)	
		Xeromys myoides		(I)	
Lluctricidos		Zyzomys pedunculatus		(1)	
Hystricidae				-	
		Hystrix cristata		(III Ghana)	
Chinchillidae					
		Chinchilla spp. (Specimens of the			
		domesticated form are not subject to		(1)	
0571071		the provisions of this Ordinance)			
CETACEA		0574054		a no. (1)	
CARNIVORA		CETACEA spp.		(I/II) ⁽¹⁾	
Canidae		+		+	
		+			
		Canis lupus (all populations, except			
		those in Spain, north from Dour and in Greece north of the 39th parallel.			
		Populations in Bhutan, India, Nepal			
		and Pakistan are referred to in		(1/11)	
		Appendix I to the Convention; all			
		other populations are referred to in			
		Appendix II to the Convention)			
		Canis simensis			
		Speothos venaticus		(I)	
Ursidae					
		Ailuropoda melanoleuca		(I)	
		Ailurus fulgens		(I)	
		Helarctos malayanus		(I)	
		Melursus ursinus		(1)	
		Tremarctos ornatus		(I)	
		Ursus arctos (only the populations in			
		Bhutan, China, Mexico and Mongolia			
		and subspecies of Ursus arctos			
		isabellinus are referred to in		(I/II), L	
		Appendix I to the Convention; all other populations are referred to in			
		Appendix II to the Convention.).			
		,			
		Ursus thibetanus		(I)	
Lutrinae					
		Aonyx congicus (only populations in			
		Cameroon and Nigeria; all other		(I)	
		populations are included in Annex II		(1)	
		to this Ordinance)			
		Enhydra lutris nereis		(1)	
		Lontra felina		(1)	
		Lontra longicaudis		(I)	
		Lontra provocax		(I)	
·		Lutra lutra		(I)	
		Pteronura brasiliensis		(I)	
Mustelinae					
		Mustela nigripes		(I)	
Viverridae		Prionadon pardicalar		(1)	
Felidae		Prionodon pardicolor		(1)	
i ondao					

GROUP		SPECIES		
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Acinonyx jubatus (Approved are the following annual export quotas for live specimens and hunting trophies: Botswana: 5; Namibia: 150; Zimbabwe: 50. Trade in those specimens is subject to provisions of Article 3 of this Ordinance)		(1)
		Caracal caracal (only the population in Asia; all other populations are included in Annex II to this Ordinance)		(1)
		Catopuma temminckii		(I)
		Felis nigripes		(I)
		Felis silvestris		(II)
		Herpailurus yaguarondi (only populations in Central and North America; all other populations are included in Annex II to this Ordinance)		(1)
		Leopardus pardalis		(I)
		Leopardus tigrinus		(1)
		Leopardus wiedii		(I)
		Lynx lynx		(II)
		Lynx pardinus		(I)
		Neofelis nebulosa		(I)
		Oncifelis geoffroyi		(I)
		Oreailurus jacobita		(1)
		Panthera leo persica		(1)
		Panthera pardus		(I) (I)
		Panthera pardus Panthera tigris		(1)
		Pardofelis marmorata		(1)
		Prionailurus bengalensis bengalensis (only the population in Bangladesh, India and Thailand; all other populations are included in Annex II to this Ordinance)		(1)
		Prionailurus bengalensis iriomotensis		(II)
		Prionailurus planiceps		(I)
		Prionailurus rubiginosus (only the population in India; all other populations are included in Annex II to this Ordinance)		(1)
		Puma concolor coryi		(I)
	1	Puma concolor costaricensis		(I)
		Puma concolor couguar		(1)
Otariidae		Uncia uncia		(1)
Otal II uac	+	Arctocephalus philippii		(II)
		Arctocephalus townsendi		(1)
Phocidae		Arotocephalus townsenui		(1)
****	+	Monachus spp.		(1)
PROBOSCIDEA				1.7
Elephantidae				
		Elephas maximus		(I)
		Loxodonta africana (excluding populations in Botswana, Namibia, South Africa and Zimbabwe which are included in Annex II to this Ordinance)		(1)
SIRENIA				

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
Dugongidae				
		Dugong dugon		(I)
Trichechidae				
		Trichechidae spp.(Trichechus		
		inunguis and Trichechus manatus		
		are referred to in Appendix I to the Convention, <i>Trichechus</i>		(1/11)
		senegalensis is referred to in		
		Appendix II to the Convention)		
PERISSODACTYLA				
Equidae				
		Equus africanus (excluding the		
		domesticated form known also under		
		the name Equus asinus which is not		(1)
		subject to provisions of this Ordinance)		
				(1)
		Equus grevyi		(1)
1		Equus hemionus (the species is referred to in Appendix II to the		
		Convention, however, the		
		subspecies Equus hemionus		(1/11)
		hemionus is referred to in Appendix I		
		to the Convention)		
		Equus kiang		(II)
		Equus onager khur		(I)
		Equus przewalskii		(I)
		Equus zebra zebra		(I)
Tapiridae				
		Tapiridae spp. (excluding the		
		species included in Annex II to this		(I)
District and the second second		Ordinance)		
Rhinocerotidae				
		Rhinocerotidae spp. (excluding the		
		subspecies included in Annex II to this Ordinance)		(I)
ARTIODACTYLA		uns ordinance)		
Suidae				
Caraco		Babyrousa babyrussa		(1)
		Sus salvanius		(1)
Tayassuidae		ous saivariius		(1)
,		Catagonus wagneri		(I)
Camelidae				
		Vicugna vicugna (excluding		
		populations in: Argentina (populations in the regions Jujuy and		
		Catamarca and semi-closed		
		populations in the regions Jujuy,		
		Salta, Catamarca, La Rioja and San		(I)
		Juan); Bolivia (the entire population);		
		Chile (population of the Primera		
		region); and Peru (the entire population); which are included in		
		Annex II to this Ordinance)		
Masahidaa		,		
Moschidae				+
		Moschus spp. (only the populations		
		in Afghanistan, Bhutan, India,		(n)
		Mianmar, Nepal and Pakistan; all other populations are included in		(I)
		Annex II to this Ordinance)		1
Cervidae		,		-
OUI VIUAG		Axis calamianensis		(1)
		Axis kuhlii		(I)
	!	, 555 (61)		(')

GROU	JP	SPECIES		REMAR
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Axis porcinus annamiticus		(I)
		Blastocerus dichotomus		(I)
		Cervus duvaucelii		(I)
		Cervus elaphus hanglu		(I)
		Cervus eldii		(I)
		Dama mesopotamica		(I)
		Hippocamelus spp.		(I)
		Megamuntiacus vuquanghensis		(1)
		Muntiacus crinifrons		(1)
		Ozotoceros bezoarticus		(1)
				(1)
Antilocapridae		Pudu puda		(1)
		Antilocapra americana (only the population in Mexico; no other population is included in the Annexes to this Ordinance)		(1)
Bovidae				
		Addax nasomaculatus		(I)
		Bos gaurus (excluding the domesticated form known as Bos frontalis, to which the provisions of this Ordinance do not apply)		(1)
		Bos mutus (excluding the domesticated form known as Bos grunniensis, to which the provisions of this Ordinance do not apply)		(1)
		Bos sauveli		(I)
		Bubalus depressicornis		(I)
		Bubalus mindorensis		(I)
		Bubalus quarlesi		(I)
		Capra falconeri		(I)
		Cephalophus jentinki		(I)
		Gazella dama		(1)
		Hippotragus niger variani		(I)
				_
		Naemorhedus baileyi		(I)
		Naemorhedus caudatus		(I)
		Naemorhedus goral		(I)
		Naemorhedus sumatraensis		(I)
		Oryx dammah		(I)
		Oryx leucoryx		(I)
		Ovis ammon hodgsonii		(I)
		Ovis ammon nigrimontana		(I)
		Ovis orientalis ophion		(I)
		Ovis vignei vignei		(I)
		Pantholops hodgsonii		(I)
		Pseudoryx nghetinhensis		(I)
		Rupicapra pyrenaica ornata		(I)
AVES	BIRDS			
STRUTHIONIFORMES				
Struthionidae	Ostriches			
		Struthio camelus (only the populations in Algeria, Burkina Faso, Cameroon, Central African Republic, Chad, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal and Sudan; no other population is included in the	Ostrich	(1)
		Annexes to this Ordinance)		
RHEIFORMES				

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Rhea pennata (excluding populations of the species Rhea pennata pennata from Argentina and Chile, which are included in Annex II to this Ordinance)		(1)
TINAMIFORMES				
Tinamidae	Tinamous			
		Tinamuss solitarius		(I)
SPHENISCIFORMES Spheniscidae	Denovire			
Sprieriiscidae	Penguins	Spheniscus humboldti		(1)
PODICIPEDIFORMES		Opricinacus numborus		(1)
Podicipedidae	Grebes			
		Podilymbus gigas		(I)
PROCELLARIIFORMES				
Diomedeidae	Albatrosses			
		Diomedea albatrus		(I)
PELECANIFORMES Deleganidae				
Pelecanidae	Pelicans	Pala an mus arianus		(1)
Sulidae	Boobies, Gannets	Pelecanus crispus		(I)
Sulidae	boobles, Garriets	Papasula abbotti		(1)
Fregatidae	Frigate birds	r apasara appetii		(1)
-	James vis	Fregata andrewsi		(I)
CICONIIFORMES				
Ardeidae	Herons and Egrets			
		Bubulcus ibis		(III Ghana
		Casmerodius albus		(III Ghana
Ciconiidae	Ctorko	Egretta garzetta		(III Ghana
Olcorillade	Storks	Ciconia boyciana		(1)
		Ciconia nigra		(I) (II)
		Ciconia stormi		(,
		Jabiru mycteria		(I)
		Leptoptilos dubius		
		Mycteria cinerea		(I)
Threskiornithidae	Ibises			
		Geronticus calvus		(II)
		Geronticus eremita		(I)
		Nipponia nippon Platalea leucorodia		(I) (II)
		Pseudibis gigantea		(,
Phoenicopteridae	Flamingos			
		Phoenicopterus ruber		(II)
ANSERIFORMES				
Anatidae	Ducks, Geese, Swans			
		Anas aucklandica		(l)
		Anas laysanensis		(I) (I)
		Anas oustaleti Anas querquedula		(III Ghana
		Aythya innotata		(Griane
		Aythya nyroca		(III Ghana
		Branta canadensis leucopareia		(I)
		Branta ruficollis		(II)
		Branta sandvicensis		(I)
		Cairina scutulata		(I)
		Mergus octosetaceus		4
		Oxyura leucocephala		(II)
		Rhodonessa caryophyllacea (maybe extinct)		(I)
		Tadorna cristata		1

GROUP		SPECIES		REMAR	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
FALCONIFORMES					
Cathartidae	Cathartines				
		Gymnogyps californianus		(1)	
		Vultur gryphus		(I)	
Pandionidae	Osprey				
	, ,	Pandion haliaetus		(II)	
Accipitridae	Hawks and Eagles				
	, and the second	Accipiter brevipes		(II)	
		Accipiter gentilis		(II)	
		Accipiter nisus		(II)	
		Aegypius monachus		(II)	
		Aquila adalberti		(I)	
		Aquila chrysaetos		(II)	
		Aquila clanga		(II)	
		Aquila heliaca		(I)	
		Aquila pomarina		(II)	
		Buteo buteo	·	(II)	
		Buteo lagopus		(II)	
·		Buteo rufinus		(II)	
		Chondrohierax uncinatus wilsonii		(1)	
		Circaetus gallicus		(II)	
		Circus aeruginosus		(II)	
		Circus cyaneus		(II)	
		Circus macrourus		(II)	
		Circus pygargus		(II)	
		Elanus caeruleus		(II)	
		Eutriorchis astur		(II)	
		Gypaetus barbatus		(II)	
		Gyps fulvus		(II)	
		Haliaeetus spp. (the species Haliaeetus albicilla is referred to in Appendix I to the Convention; other species are referred to in Appendix II to the Convention)		(1/11)	
		Harpia harpyja		(I)	
		Hieraaetus fasciatus		(11)	
		Hieraaetus pennatus		(II)	
		Leucopternis occidentalis		(II)	
		Milvus migrans		(11)	
		Milvus milvus		(II)	
		Neophron percnopterus		(II)	
		Pernis apivorus		(II)	
		Pithecophaga jefferyi		(I)	
Falconidae	Falcons	-			
		Falco araea		(I)	
		Falco biarmicus		(II)	
		Falco cherrug		(II)	
		Falco columbarius		(II)	
		Falco eleonorae		(II)	
		Falco jugger		(I)	
		Falco naumanni		(II)	
		Falco newtoni (only the population in Seychelles)		(1)	
		Falco pelegrinoides		(I)	
		Falco peregrinus		(1)	
		Falco punctatus		(1)	
		Falco rusticolus		(1)	
	+				
		Falco subbuteo		(II)	

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
0444500450		Falco vespertinus		(II)
GALLIFORMES				
Megapodiidae	Brush turkeys			
2 11		Macrocephalon maleo		(I)
Cracidae	Guans, Chacalaca			
		Crax alberti		(III Colum
		Crax blumenbachii		(I)
		Mitu mitu		(I)
		Oreophasis derbianus		(I)
		Penelope albipennis		(I)
		Pipile jacutinga		(I)
		Pipile pipile		(I)
Phasianidae	Pheasants, Grouse			
		Catreus wallichii		(I)
		Colinus virginianus ridgwayi		(I)
		Crossoptilon crossoptilon		(I)
		Crossoptilon harmani		(I)
		Crossoptilon mantchuricum		(I)
		Lophophorus impejanus		(I)
		Lophophorus Ihuysii		(I)
		Lophophorus sclateri		(I)
		Lophura edwardsi		(I)
		Lophura imperialis		(I)
		Lophura swinhoii		(I)
		Odontophorus strophium		
		Ophrysia superciliosa		
		Polyplectron emphanum		(I)
		Rheinardia ocellata		(I)
		Syrmaticus ellioti		(1)
		Syrmaticus humiae		(1)
		Syrmaticus mikado		(I)
		Tetraogallus caspius		(I)
		Tetraogallus tibetanus		(1)
		Tragopan blythii		(1)
		Tragopan caboti		(I)
		Tragopan melanocephalus		(1)
		Tympanuchus cupido attwateri		(1)
GRUIFORMES		Tympanaonae sapras attratori		(.)
Gruidae	Cranes			
	Oranos	Grus americana		(1)
				(1)
		Grus canadensis (The species is referred to in Appendix II to the		
		Convention, however, the		
		subspecies Grus canadensis		(1/11)
		nesiotes and Grus canadensis pulla		
		are referred to in Appendix I to the		
		Convention)		an an
		Grus grus		(II)
		Grus japonensis		(I)
		Grus leucogeranus		(I)
		Grus monacha		(l)
		Grus nigricollis		(I)
		Grus vipio		(I)
Rallidae	Rails, Coots			
		Gallirallus sylvestris		(I)
Rhynochetidae	Kagu			
		Rhynochetos jubatus		(I)
Otididae	Bustards			
		Ardeotis nigriceps		(I)
		Chlamydotis undulata		(I)
<u> </u>		Eupodotis indica		(II)

SCIENTIFIC NAME CHARADRIIFORMES Scolopacidae	COMMON NAME	SCIENTIFIC NAME Eupodotis bengalensis	COMMON NAME	(I)
				(I)
		Otio to unio		
		Otis tarda		(II)
		Tetrax tetrax		(II)
Scolopacidae				
	Sandpipers, Snipe			
		Numenius borealis		(I)
		Numenius tenuirostris		(I)
		Tringa guttifer		(I)
Laridae	Gulls, Terns			
		Larus relictus		(I)
COLUMBIFORMES				
Columbidae	Pigeons, Doves			
		Caloenas nicobarica		(I)
		Claravis godefrida		
		Columba livia		(III Ghana
		Ducula mindorensis		(1)
		Leptotila wellsi		(-)
		Streptopelia turtur		(III Ghana
PSITTACIFORMES		es spropora tartar		(III SHAIII
Psittacidae	Parrots	+		+
	1 411013	Amazona arausiaca		(1)
		Amazona barbadensis		(I)
		Amazona barbaderisis Amazona brasiliensis		(I)
		Amazona finschi		
		Amazona guildingii		(I) (I)
	_	Amazona guilairigii Amazona imperialis		(1)
-		·		
		Amazona leucocephala		(I)
		Amazona ochrocephala auropalliata		(I)
		Amazona ochrocephala belizensis		(I)
		Amazona ochrocephala caribaea		(1)
		Amazona ochrocephala oratrix		(1)
		Amazona ochrocephala parvipes		(I)
		Amazona ochrocephala tresmariae		(I)
		Amazona pretrei		(I)
		Amazona rhodocorytha		(I)
		Amazona tucumana		(I)
		Amazona versicolor		(I)
		Amazona vinacea		(I)
		Amazona viridigenalis		(I)
		Amazona vittata		(I)
		Anodorhynchus spp.		(I)
		Ara ambigua		(I)
		Ara glaucogularis		(I)
		Ara macao		(I)
		Ara militaris		(I)
		Ara rubrogenys		(I)
		Cacatua goffini		(I)
		Cacatua haematuropygia		(I)
		Cacatua moluccensis		(1)
		Cacatua sulphurea		(I)
		Cyanopsitta spixii		(1)
		Cyanoramphus forbesi		(1)
		Cyanoramphus novaezelandiae		(1)
		L VCIONSITTA GIONNITHAIMA AAVANI		
		Cyclopsitta diophthalma coxeni Eos histrio		(I) (I)

SCIENTIFIC NAME COMMON NAME	GROUP		SPECIES		REMARK
CulturPormes Cult	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
Cuaracuba guaracuba (1)					(I)
Neopheras chrysogaster 01 0 0 0 0 0 0 0 0					(1)
Pezoporus wallicus			·		
Pezoporus wallicus					
Pronopsiting pileata			Pezoporus wallicus		(I)
Probaseign atenimus			· ·		
Propyrthura couloni					. ,
Pesphotus chrysopterygius (1)					
Psephotus chrysopterygius (1)					
Psephotus dissimilis					, ,
Psephotus pulcherrimus (maybe extinct) (1)					
Paittacula echo			Psephotus pulcherrimus (maybe		
Pyrrhura cruentata (1) Rihynchopsita spp. (1) (1)			, ,		(1)
Rhynchopsitta spp. (1) Strigops habropillus (1)					
Strigops habroptitus			+ '		. ,
Vini spp. (The species Vini ultramarina is referred to in Appendix I to the Convention, other species are referred to in Appendix II to the Convention)					
Musophagidae					(1)
Musophagidae			ultramarina is referred to in Appendix I to the Convention, other species are referred to in Appendix II		(1/11)
Tauraco bannermani	CUCULIFORMES				
STRIGIFORMES Barn owls Tyto alba (II)	Musophagidae	Turacos			
Tyto alba			Tauraco bannermani		(II)
Tyto alba	STRIGIFORMES				
Tyto soumagnei	Tytonidae	Barn owls			
Tyto soumagnei			Tvto alba		(II)
Strigidae			+ *		, ,
Aegolius funereus (II)	Strigidae	Owls	- July Commander		(-)
Asio flammeus (II)	<u> </u>		Aegolius funereus		(II)
Asio otus (II)			·		` '
Athene blewitti					` ,
Athene noctua (II)					. ,
Bubo bubo (II)					
Glaucidium passerinum (II)					- '
Mimizuku gurneyi					` ,
Ninox novaeseelandiae undulata (I)			· · · · · · · · · · · · · · · · · · ·		` '
Nyctea scandiaca (II) Otus ireneae (II) Otus scops					
Nyctea scandiaca (II) Otus ireneae (II) Otus scops			Ninox squaminila natalis		(1)
Otus ireneae					
Otus scops (ii)					
Strix aluco					` '
Strix nebulosa (II)					
Strix uralensis (ii)					
Surnia ulula (II)					
APODIFORMES			+		
Trochilidae Hummingbirds (I) TROGONIFORMES (I) Trogonidae Trogons Pharomachrus mocinno (I) CORACIIFORMES (I) Bucerotidae Hornbills Aceros nipalensis (I) Aceros subruficollis (I) Buceros bicornis (I)	APODIFORMES		Garriia uiuia		(11)
Glaucis dohrnii		Humminghirds	+		-
TROGONIFORMES		Transmingulius	Glaucis dobrnii		(1)
Trogonidae Trogons (I) CORACIIFORMES	TROGONIFORMES		Giaucis doliiIIII		(1)
Pharomachrus mocinno		Trogona	+		
CORACIIFORMES Bucerotidae Hornbills Aceros nipalensis (I) Aceros subruficollis (I) Buceros bicornis (I)	og om da o	riogons	Pharomachrus mocinno		(1)
Bucerotidae Hornbills (I) Aceros nipalensis (I) Aceros subruficollis (I) Buceros bicornis (I)	CORACIIFORMES		i natomaciius modifino		(1)
Aceros nipalensis (I) Aceros subruticollis (I) Buceros bicornis (I)		Harabilla			-
Aceros subruficollis (I) Buceros bicornis (I)	Ducerondae	HORNDIIIS	Assure minutemais		(1)
Buceros bicornis (I)			· '		
Buceros vigil (I)					_

GROUP		SPECIES		REMARI
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
PICIFORMES				
Picidae	Woodpeckers			
		Campephilus imperialis		(1)
		Dryocopus javensis richardsi		(1)
PASSERIFORMES	SONGBIRDS			
Cotingidae	Cotingas			
		Cotinga maculata		(I)
		Xipholena atropurpurea		(I)
Pittidae	Pittas			
		Pitta gurneyi		(I)
		Pitta kochi		(I)
Atrichornithidae	Scrub-birds			
		Atrichornis clamosus		(I)
Hirundinidae	Swallows and Alles			
		Pseudochelidon sirintarae		(I)
Muscicapidae	Old World Warblers, Kinglets, Gnatcatchers, Thrushes			
		Bebrornis rodericanus		(III Mauriti
		Dasyornis broadbenti litoralis		(1)
		(maybe extinct)		
		Dasyornis longirostris		(1)
		Picathartes gymnocephalus		(I)
		Picathartes oreas		(I)
Zosteropidae	White-eyes			
		Zosterops albogularis		(I)
Meliphagidae	Honeyeaters			
to to state a		Lichenostomus melanops cassidix		(1)
Icteridae	Blackbirds and Allies			m
Fringillidaa	F: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Agelaius flavus		(1)
Fringillidae	Finches and Allies			m
Sturnidae	Otanii ana and Allina	Carduelis cucullata		(1)
Sturridae	Starlings and Allies	Lancaca and the definition		(1)
REPTILIA	DEDTH FO	Leucopsar rothschildi		(1)
TESTUDINATA	REPTILES			
	_			
Emydidae	_			
		Batagur baska		(1)
		Clemmys muhlenbergii		(I)
		Geoclemys hamiltonii		(I)
		Kachuga tecta		(I)
		Melanochelys tricarinata		(I)
		Morenia ocellata		(I)
		Terrapene coahuila		(I)
Testudinidae				1
		Geochelone nigra		(I)
		Geochelone radiata		(1)
		Geochelone yniphora		(I)
		Gopherus flavomarginatus		(I)
		Malacochersus tornieri		(II)
		Psammobates geometricus		(I)
		Pyxis arachnoides		(I)
	-		1	(1)
		Pyxis planicauda		
		Testudo graeca		(II)
		Testudo graeca		(II)
		Testudo graeca Testudo hermanni		(II) (II)
		Testudo graeca Testudo hermanni Testudo kleinmanni		(II) (II) (I)
Cheloniidae		Testudo graeca Testudo hermanni Testudo kleinmanni Testudo marginata		(II) (II) (I) (II)
Cheloniidae		Testudo graeca Testudo hermanni Testudo kleinmanni Testudo marginata		(II) (II) (I) (II)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Dermochelys coriacea		(I)
Trionychidae				
		Apalone ater		(1)
		Aspideretes gangeticus		(I)
		Aspideretes hurum		(I)
		Aspideretes nigricans		(I)
Chelidae				
		Pseudemydura umbrina		(I)
CROCODYLIA				
Alligatoridae				
		Alligator sinensis		(1)
		Caiman crocodilus apaporiensis		(1)
		Caiman latirostris (excluding the population in Argentina which is included in Annex II to this Ordinance)		(1)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Melanosuchus niger (excluding the population in Ecuador which is included in Annex II to this Ordinance and is subject to the zero annual export quota until the annual export quota is approved by the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Expert Group for Crocodiles of the IUCN)		(1)
Crocodylidae				
,		Crocodylus acutus (except the population on Cuba, which is included in Annex II to this Ordinance)		(1)
		Crocodylus cataphractus		(I)
		Crocodylus intermedius		(I)
		Crocodylus mindorensis		(I)
		Crocodylus moreletii		(I)
		Crocodylus niloticus (excluding the population in Botswana, Etiopia, Kenia, Madagascar, Malavi, Mozambique, South Africa, Uganda, United Republic of Tanzania [subject to the annual export quota of maximum 1,600 wild specimens including hunting trophies in addition to farm-bred specimens], Zambia and Zimbabwe; these populations are included in Annex II to this Ordinance)		(1)
		Crocodylus palustris		(I)
		Crocodylus porosus (excluding populations in Australia, Indonesia and Papua New Guinea which are included in Annex II to this Ordinance)		(1)
		Crocodylus rhombifer		(I)
		Crocodylus siamensis		(I)
		Osteolaemus tetraspis		(I)
		Tomistoma schlegelii		(I)

GROUP		SPECIES		REMAR
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
Gavialidae				
		Gavialis gangeticus		(I)
RHYNCHOCEPHALIA		January States		()
Sphenodontidae				
		Sphenodon spp.		(I)
SAURIA		1		
Gekkonidae				
		Phelsuma guentheri		(II)
Chamaeleonidae				
		Brookesia perarmata		(I)
		Chamaeleo chamaeleon		(II)
Iguanidae				
		Brachylophus spp.		(I)
		Cyclura spp.		(I)
		Sauromalus varius		(I)
Lacertidae				
		Gallotia simonyi		(I)
		Podarcis lilfordi		(II)
		Podarcis pityusensis		(II)
Varanidae				,
		Varanus bengalensis		(I)
		Varanus flavescens		(I)
		Varanus griseus		(I)
		Varanus komodoensis		(1)
		Varanus nebulosus		(I)
		Varanus olivaceus		(II)
SERPENTES				
Pythonidae				
		Python molurus molurus		(1)
Boidae				
		Acrantophis spp.		(I)
		Boa constrictor occidentalis		(I)
		Epicrates inornatus		(I)
		Epicrates monensis		(I)
		Epicrates subflavus		(I)
		Eryx jaculus		(II)
		Sanzinia madagascariensis		(I)
Bolyeriidae		_		
		Bolyeria multocarinata		(I)
		Casarea dussumieri		(1)
Viperidae				
		Vipera latifii		
		Vipera ursinii (only the population in Europe, except the areas included in the former SSSR; those populations are not included in Annexes to this Ordinance)		(1)

GRO	OUP	SPECIES		REMAR
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
AMPHIBIA	AMPHIBIANS			
ANURA	TAIL-LESS AMPHIBIANS			
5.6.11				
Bufonidae	True toads			
		Altiphrynoides spp.		(I)
		Atelopus zeteki		(I)
		Bufo periglenes		(1)
		Bufo superciliaris		(1)
		Nectophrynoides spp.		(1)
		Nimbaphrynoides spp.		(I) (I)
Microhylidae		Spinophrynoides spp.		(1)
Wild Orly ildae		Dyscophus antongilii		(1)
Myobatrachidae		Dyscophus antongiii		(1)
my obaliao maao		Rheobatrachus silus		(II)
CAUDATA		Jack dorido olido		(,
Cryptobranchidae				1
		Andrias spp.		(I)
PISCES	FISH			
ACTINOPTERYGII				
ACIPENSERIFORMES				
Acipenseridae				
		Acipenser brevirostrum		(I)
		Acipenser sturio		(I)
OSTEOGLOSSIFORMES				
Osteoglossidae				
		Scleropages formosus		(I)
CYPRINIFORMES				
Cyprinidae				
		Probarbus jullieni		(I)
Catostomidae				
		Chasmistes cujus		(I)
SILURIFORMES				
Pangasiidae				
		Pangasianodon gigas		(I)
PERCIFORMES				
Sciaenidae				
		Totoaba macdonaldi		(I)
COELACANTHIFORMES				
Coelacanthidae				
ABELICATION		Latimeria spp.		(I)
ARTHROPODA	ARTHROPODS			
INSECTA	INSECTS			
LEPIDOPTERA				
Papilionidae				
_		Ornithoptera alexandrae		(I)
		Papilio chikae		(1)
		Papilio homerus		(1)
		Papilio hospiton		(I)
		Parnassius apollo		(II)
MOLLUSCA	MOLLUSCS			
BIVALVIA	CLAMS, MUSSELS			
UNIONIDA				
Unionidae				
	1	0		(1)
		Conradilla caelata		(I) (I)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Epioblasma curtisii		(I)
		Epioblasma florentina		(1)
		Epioblasma sampsonii		(1)
		Epioblasma sulcata perobliqua		(I)
		Epioblasma torulosa gubernaculum		(1)
		Epioblasma torulosa torulosa		(1)
		Epioblasma turgidula		(I)
		Epioblasma walkeri		(I)
		Fusconaia cuneolus		(I)
		Fusconaia edgariana		(I)
		Lampsilis higginsii		(I)
		Lampsilis orbiculata orbiculata		(I)
		Lampsilis satur		(1)
		Lampsilis virescens		(I)
		Plethobasus cicatricosus		(I)
		Plethobasus cooperianus		(I)
		Pleurobema plenum		(I)
<u>-</u>		Potamilus capax		(I)
·		Quadrula intermedia		(I)
		Quadrula sparsa		(I)
		Toxolasma cylindrellus		(I)
		Unio nickliniana		(I)
		Unio tampicoensis tecomatensis		(I)
		Villosa trabalis		(I)
GASTROPODA	SNAILS			
STYLOMMATOPHORA				
Achatinellidae				
		Achatinella spp.		(I)
		FLORA		
AGAVACEAE				
		Agave arizonica		(I)
		Agave parviflora		(I)
		Nolina interrata		(I)
APOCYNACEAE				
		Pachypodium ambongense		(I)
		Pachypodium baronii		(I)
		Pachypodium decaryi		(I)
ARAUCARIACEAE				
		Araucaria araucana		(I)
CACTACEAE				
		Ariocarpus spp.		(1)
		Astrophytum asterias		(1)
		Aztekium ritteri		(1)
		Coryphantha werdermannii		(I)
		Discocactus spp.		(I)
		Echinocereus ferreirianus ssp. Lindsayi		(I)
		Echinocereus schmollii		(1)
		Escobaria minima		(I)
		Escobaria sneedii		(1)
		Mammillaria pectinifera		(I)
		Mammillaria solisioides Melocactus conoideus		(I) (I)
		Melocactus conoideus Melocactus deinacanthus		
				(I)
		Melocactus glaucescens		(I)
		Melocactus paucispinus Obregonia denegrii		(I) (I)
		Pachycereus militaris		(I) (I)
		Pacnycereus militaris Pediocactus bradyi		(I) (I)
		Pediocactus bradyi Pediocactus knowltonii		(I) (I)
	1	i Guiocacius Kriowiloriii		(1)

GROUP		SPECIES		REMAR
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Pediocactus paradinei		(I)
		Pediocactus peeblesianus		(I)
		Pediocactus sileri		(I)
		Pelecyphora spp.		(I)
		Sclerocactus brevihamatus ssp. Tobuschii		(I)
		Sclerocactus erectocentrus		(I)
		Sclerocactus glaucus		(I)
		Sclerocactus mariposensis		(I)
		Sclerocactus mesae-verdae		(I)
		Sclerocactus nyensis		(I)
		Sclerocactus papyracanthus		(I)
		Sclerocactus pubispinus		(I)
		Sclerocactus wrightiae		(I)
		Strombocactus spp.		(I)
		Turbinicarpus spp.		(I)
		Uebelmannia spp.		(I)
COMPOSITAE (ASTERACEAE)				
		Saussurea costus (also mentioned as S. Costus or Aucklandia)		(1)
CUPRESSACEAE				
		Fitzroya cupressoides		(I)
		Pilgerodendron uviferum		(I)
CYCADACEAE				
		Cycas beddomei		(I)
EUPHORBIACEAE				
		Euphorbia ambovombensis		(I)
		Euphorbia capsaintemariensis		(I)
		Euphorbia cremersii		(I)
		Euphorbia cylindrifolia		(I)
		Euphorbia decaryi		(I)
		Euphorbia francoisii		(I)
		Euphorbia handiensis		(II)
		Euphorbia lambii		(II)
		Euphorbia moratii		(I)
		Euphorbia parvicyathophora		(I)
		Euphorbia quartziticola		(I)
		Euphorbia tulearensis		(I)
		Euphorbia stygiana		(II)
FOUQUIERIACEAE				
		Fouquieria fasciculata		(I)
		Fouquieria purpusii		(I)
LEGUMINOSAE (FABACEAE)				
		Dalbergia nigra		(I)
LILIACEAE				
		Aloe albida		(I)
		Aloe albiflora		(I)
		Aloe alfredii		(I)
		Aloe bakeri		(I)
		Aloe bellatula		(I)
		Aloe calcairophila		(I)

GROUP		SPECIES		REMARI	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
		Aloe compressa		(I)	
		Aloe delphinensis		(I)	
		Aloe descoingsii		(I)	
		Aloe fragilis		(I)	
		Aloe haworthioides		(I)	
		Aloe helenae		(I)	
		Aloe laeta		(I)	
		Aloe parallelifolia		(I)	
		Aloe parvula		(I)	
		Aloe pillansii		(I)	
		Aloe polyphylla		(I)	
		Aloe rauhii		(I)	
		Aloe suzannae		(I)	
		Aloe versicolor		(I)	
		Aloe vossii		(I)	
NEPENTHACEAE					
		Nepenthes khasiana		(I)	
		Nepenthes rajah		(I)	
ORCHIDACEAE					
		For the following species referred to in Annex I, cell cultures obtained in <i>vitro</i> , in solid or liquid media, which are transported in sterile containers are not subject to the provisions of			
		this Ordinance.			
		Aerangis ellisii		(I)	
		Cephalanthera cucullata		(II)	
		Cypripedium calceolus		(II)	
		Dendrobium cruentum		(I)	
		Goodyera macrophylla		(II)	
		Laelia jongheana		(I)	
		Laelia lobata		(I)	
		Liparis loeselii		(II)	
		Ophrys argolica		(II)	
		Ophrys lunulata		(II)	
		Orchis scopulorum		(II)	
		Paphiopedilum spp.		(I)	
		Peristeria elata		(I)	
		Phragmipedium spp.		(I)	
		Renanthera imschootiana		(I)	
		Spiranthes aestivalis		(II)	
PALMAE (ARECACEAE)		Chlysalidocarpus decipiens		(I)	
PINACEAE					
		Abies guatemalensis		(I)	
PODOCARPACEAE					
		Podocarpus parlatorei		(I)	
RUBIACEAE					
		Balmea stormiae		(I)	
SARRACENIACEAE					
		Sarracenia rubra ssp. alabamensis		(1)	
		Sarracenia rubra ssp. jonesii		(I)	
		Sarracenia oreophila		(I)	
STANGERIACEAE					
		Stangeria eriopus		(I)	
ZAMIACEAE					
		Ceratozamia spp.		(I)	
		Chigua spp.		(I)	
		Encephalartos spp.		(I)	
		Microcycas calocoma		(I)	

GRO	UP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		FAUNA		
CHORDATA	CHORDATES			
MAMMALIA	MAMMALS			
MONOTREMATA				
Tachyglossidae				
		Zaglossus spp.		(II)
DIPROTODONTIA				
Phalangeridae		District and the second		(11)
		Phalanger orientalis Spilocuscus maculatus		(II)
Macropodidae		Spirocuscus macuialus		(11)
		Dendrolagus dorianus		
		Dendrolagus goodfellowi		
		Dendrolagus inustus		(II)
		Dendrolagus matschiei		,
		Dendrolagus ursinus		(II)
SCANDENTIA				
Tupaiidae				
		Tupaiidae spp.		
CHIROPTERA				
Pteropodidae				
		Acerodon spp. (excluding the species		(II)
		included in Annex I to this Ordinance) Pteropus spp. (excluding species		
		included in Annex II)		(II)
PRIMATES		· ·		
		PRIMATES spp. (excluding the species		(II)
XENARTHRA		included in Annex I)		()
Mermecophagidae				
wernecopragidae		Myrmecophaga tridactyla		(II)
Bradypodidae		Inymiccophaga tridactyla		(11)
		Bradypus variegatus		(II)
Dasypodidae		7		
		Chaetophractus nationi (The zero annual		
		export quota has been established. All		
		specimens are considered specimens of		(II)
		the species included in Annex I and trade		
		shall be regulated accordingly)		
PHOLIDOTA				
Manidae				
		Manis spp. (The zero annual export quota		
		has been established for Manis crassicaudata, Manis pentadactyla and		
		Manis javanica for specimens taken from		(II)
		the wild which are traded primarily for		
DODENTA		commercial purposes)		
RODENTIA				
Sciuridae		Potufo enn		(II)
CARNIVORA		Ratufa spp.		(II)
Canidae				
		Canis lupus (populations in Spain north		
		from Dour and in Greece north of the 39th		(II)
		parallel)		
		Cerdocyon thous		(II)
		Chrysocyon brachyurus		(II)
		Cuon alpinus		(II)
		Pseudalopex culpaeus		(II)

GROUP		SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
		Pseudalopex griseus		(II)	
		Pseudalopex gymnocercus		(II)	
		Vulpes cana		(II)	
		Vulpes zerda		(II)	
Ursidae					
		Ursidae spp. (excluding the species		(11)	
		included in Annex I)		(11)	
Lutrinae					
		Lutrinae spp. (excluding the species included in Annex I)		(II)	
Mephitinae		included in Affilex 1)			
Тиоришнас		Conepatus humboldtii		(II)	
Viverridae		Conepatus numbolutii		(11)	
		Cryptoprocta ferox		(II)	
		Cynogale bennettii		(11)	
				(II)	
		Eupleres goudotii		1 ' '	
		Fossa fossana		(II)	
		Hemigalus derbyanus		(II) (II)	
Felidae		Prionodon linsang		(11)	
, ondao		Falidas ann Vandulland		+	
		Felidae spp. (excluding the species included in Annex I. Specimens of the			
		domesticated form are not subject to the		(II)	
		provisions of this Ordinance)			
Otariidae					
		Austronofest or confestion the consistent			
		Arctocephalus spp (excluding the species included in Annex I)		(II)	
Odobenidae		included in Affilex 1)			
Odobernae				(111	
		Odobenus rosmarus		(III Canada)	
Phocidae				Canada)	
		Mirounga leonina		(II)	
PROBOSCIDEA		inmoungu rooninu		(,	
Elephantidae					
		Loxodonta africana (only the populations			
		in Botswana, Namibia, South Africa (2) and		(11)	
		Zimbabwe ⁽³⁾ ; all other populations are		,	
		included in Annex I)			
PERISSODACTYLA					
Equidae					
		Equus onager (excluding the subspecies		(II)	
		included in Annex I)		1	
Taniridae		Equus zebra hartmannae		(II)	
Tapiridae		Tooling to mark to		(11)	
Phinocorotidos		Tapirus terrestris		(II)	
Rhinocerotidae					
		Ceratotherium simum simum (only the			
		populations in Swaziland, all other			
		populations are included in Annex I.			
		Exclusively for the purpose of enabling the			
		international trade in live specimens to		(11)	
		adequate and acceptable destinations and		'	
		trade in hunting trophies. All other specimens are considered specimens of			
		the species included in Annex I and the			
		trade shall be regulated accordingly)			
ADTIODACTVI A					
ARTIODACTYLA					
Tayassuidae					

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Tayassuidae spp. (excluding the species included in Annex I and excluding the populations of the species Pecari tajacu from Mexico and United States of America, which are not included in Annexes to this Ordinance)		(11)
Hippopotamidae		Hayanratadan liharianaia		(11)
		Hexaprotodon liberiensis Hippopotamus amphibius		(II)
Camelidae		r iippopotamus ampriibius		(11)
		Lama guanicoe		(II)
		Vicugna vicugna (only populations in Argentina (4) (populations in the regions of Jujuy and Catamarca and semi-closed populations in the regions of Jujuy, Salta, Catamarca, La Rioja and San Juan); Bolivia (5) (entire population); Chile (6) (population of the Primera region); Peru (7) (entire population); all other populations are included in Annex I)		(11)
Moschidae				
		Moschus spp. (excluding populations in Afghanistan, Bhutan, India, Mjanmau, Nepal and Pakistan; which are included in Annex I)		(II)
Cervidae				
		Cervus elaphus bactrianus		(II)
Bovidae		Pudu mephistophiles		(II)
Bovidao		Ammotragus Iervia		(II)
		Bison bison athabascae		(II)
		Budorcas taxicolor		(II)
		Cephalophus dorsalis		(II)
		Cephalophus monticola		(II)
		Cephalophus ogilbyi		(II)
		Cephalophus silvicultor		(II)
		Cephalophus zebra Damaliscus pygargus pygargus		(II)
		Gazella cuvieri		(III Tunisia)
		Gazella dorcas		(III Tunisia)
		Gazella leptoceros		(III Tunisia)
		Kobus leche Ovis ammon (excluding the subspecies		(II)
		included in Annex I)		(II)
		Ovis canadensis (only the population in Mexico; no other population is included in Annexes to this Ordinance)		(II)
		Ovis vignei (excluding the subspecies included in Annex I)		(II)
A1/F0	DIRE C	Saiga tatarica		(II)
AVES RHEIFORMES	BIRDS			
Rheidae	Rheas	+		
	Micas	Rhea americana		(II)
		Rhea pennata pennata (only the		
		populations from Argentina and Chile)		(II)
SPHENISCIFORMES	D			1
Spheniscidae	Penguins			400
	L	Spheniscus demersus		(II)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
CICONIIFORMES				
Balaenicipitidae	Shoebill			
		Balaeniceps rex		(II)
Threskiornithidae	Ibises			
		Eudocimus ruber		(II)
Phoenicopteridae	Flamingos			
		Phoenicopteridae spp. (excluding the		(II)
		species included in Annex I)		(11)
ANSERIFORMES				
Anatidae	Ducks, Geese, Swans			
		Anas bernieri		(II)
		Anas formosa		(II)
		Coscoroba coscoroba		(II)
		Cygnus melanocorypha		(II)
		Dendrocygna arborea		(II)
		Oxyura jamaicensis		
		Sarkidiornis melanotos		(II)
FALCONIFORMES				
		FALCONIFORMES spp. (excluding the		
		species included in Annex I and one		
		species of the genus Cathartidae included		(II)
		in Annex III; other species of the genus		(II)
		Cathartide are not included in Annexes to		
		this Ordinance)		
GALLIFORMES				
Cracidae	Guans, Chacalaca			
		Crax spp. (the following species are listed		
		in Appendix III to the Convention: Crax		
		alberti, Crax daubentoni and Crax		(III)
		globulosa for Columbia and Crax rubra for		()
		Columbia, Costa Rica, Guatemala and Honduras		
		Hondulas		
				(III
		Ortalis vetula		Guatemal
				a/ Honduras)
				i ioriaarao)
		Pauxi spp. (the species Pauxi pauxi is		
		mentioned in Appendix III to the		(III)
		Convention for Columbia)		(III
Phasianidae	Pheasants, Grouse	Penelopina nigra		Guatemal
Filasianiuae	Fileasanis, Giouse			(111
		Agelastes meleagrides		(III Ghana)
				,
		Arborophila charltonii		(111
		,		Malaysia)
				(III
		Arborophila orientalis		(III Malaysia)
		<u> </u>		
		Argusianus argus		(II)
		Galluss sonneratii		(II)
		Ithaginis cruentus		(II)
		Lophura bulweri		
		Lophura diardi		
		Lonhura anuthranhthalma		(III
		Lophura erythrophthalma		Malaysia)
		Lophura hatinhensis		
		Lophura hoogerwerfi		
		Lophara noogerwern		
				1
		Lophura ignita		(III Malaysia)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	TKE III ATTIC
		Lophura inornata		
		Lophura leucomelanos		
		Pavo muticus		(II)
		Polyplectron bicalcaratum		(II)
		Polyplectron germaini		(II)
		Polyplectron malacense		(II)
		Polyplectron schleiermacheri		(II)
GRUIFORMES				
Gruidae	Cranes			
		Gruidae spp. (excluding the species		an
		included in Annex I)		(II)
Otididae	Bustards			
		Otididae spp. (excluding the species		(II)
		included in Annex I)		(11)
COLUMBIFORMES				
Columbidae	Pigeons, Doves			
		Columba caribaea		
		Didunculus strigirostris		
		Gallicolumba luzonica		(II)
		Goura spp.		(II)
PSITTACIFORMES				
		PSITTACIFORMES spp. (excluding the		
		species included in Annex I and Annex III		
		and excluding the species Agapornis roseicolis, Melopsittacus undulatus and		(II)
		Nymphicus hollandicus, which are not		
		included in Annexes to this Ordinance)		
		,		
CUCULIFORMES				
Musophagidae	Turacos			
		Corythaeola cristata		(III
		•		Ghana) (III
		Crinifer piscator		(III Ghana)
		Musophaga porphyreolopha		(II)
				(III
		Musophaga violacea		(III Ghana)
_		Tauraco spp. (excluding the species		
		included in Annex I)		(II)
STRIGIFORMES		,		
		STRIGIFORMES spp. (excluding the		
		species included in Annex I)		(II)
APODIFORMES		,		
Trochilidae	Humminghirds			
	Hummingbirds	Trochilidae spp. (excluding the species		1
		included in Annex I)		(II)
CORACIIFORMES				1
Bucerotidae	Hornbills			1
		Aceros spp. (excluding the species		
		included in Annex I)		(II)
		Anorrhinus spp.		(II)
		Anthracoceros spp.		(II)
		•		(11)
		Buceros spp. (excluding the species		(II)
		included in Annex I)		
		Penelopides spp.		(II)
PICIFORMES				
Capitonidae	Barbets			
				(III
		Semnornis ramphastinus		Columbia)
Damanhaatidaa	Tauran			1/
Ramphastidae	Toucan			

GROUP		SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	KEWAKK	
				(III	
		Baillonius bailloni		Argentina)	
		Pteroglossus aracari		(II)	
		Pteroglossus castanotis		(III	
		Pteroglossus viridis		Argentina) (II)	
		Pterogiossus viriais		, ,	
		Ramphastos dicolorus		(III Argentina)	
		Ramphastos sulfuratus		(II)	
		Ramphastos toco		(II)	
		Ramphastos tucanus		(II)	
		Ramphastos vitellinus		(II)	
		Selenidera maculirostris		(III Argentina)	
PASSERIFORMES	SONGBIRDS				
Cotingidae	Cotingas				
		Rupicola spp.		(II)	
Pittidae	Pittas				
		Pitta guajana		(II)	
		Pitta nympha		(II)	
Pycnonotidae	Bulbuls				
		Pycnonotus zeylanicus		(II)	
Muscicapidae	Old World Warblers, Kinglets, Gnatcatchers, Thrushes				
		Cyornis ruckii		(II)	
		Garrulax canorus		(II)	
		Leiothrix argentauris		(II)	
		Leiothrix lutea		(II)	
		Liocichla omeiensis		(II)	
Nectariniidae	Honeyeaters				
		Anthreptes pallidigaster			
		Anthreptes rubritorques			
Emberizidae	Blackbirds, Tanagers, Grosbeaks, Sparrows				
		Gubernatrix cristata		(II)	
		Paroaria capitata		(II)	
		Paroaria coronata		(II)	
Fringillidae	Finches and Allies	Tangara fastuosa		(II)	
Fringillidae	Timories and Allies	Carduelis yarrellii		(II)	
Estrildidae	Waxbills	Carduens yarrenn		(11)	
		Amandava formosa		(II)	
		Padda fuscata		,	
		Padda oryzivora		(II)	
		Poephila cincta cincta		(II)	
Sturnidae	Starlings and Allies				
		Gracula religiosa		(II)	
Paradisaeidae	Birds of Paradise			1	
REPTILIA	REPTILES	Paradisaeidae spp.		(II)	
TESTUDINATA	KEPTILES				
Dermatemydidae					
Domacomyuluac		Dermatemys mawii		(II)	
Platysternidae		Dermaterny's mawil		(11)	
, 0.0		Platysternon megacephalum		(II)	
Emydidae		, sterrior megacopriaidin		(,	
		Annamemys annamensis		(II)	
				<u> </u>	

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Callagur borneoensis		(II)
		Chrysemys picta		
		Clemmys insculpta		(II)
		Cuora spp.		(II)
		Heosemys depressa		(II)
		Heosemys grandis		(II)
		Heosemys leytensis		(II)
		Heosemys spinosa		(II)
		Hieremys annandalii		(II)
		Kachuga spp. (excluding the species included in Annex I)		(II)
		Leucocephalon yuwonoi		(II)
		Malayemys subtrijuga		(II)
		Mauremys mutica		(II)
		Notochelys platynota		(II)
		Orlitia borneensis		(II)
		Pyxidea mouhotii		(II)
		Siebenrockiella crassicollis		(II)
		Terrapene spp. (excluding the species included in Annex I)		(II)
		Trachemys scripta elegans		
Testudinidae				
		Testudinidae spp. (excluding the species inlcuded in Annex I; the zero annual export quota has been established for the species Geochelone sulcata for specimens taken from the wild which are traded primarily for commercial purposes)		(11)
Trionychidae				4.0
		Amyda cartilaginea		(II)
		Chitra spp.		(II)
		Pelochelys spp.		(II)
Pelomedusidae		Lissemys punctata		(II)
reiomedusidae		For many about to many de many and in mails		(II)
		Erymnochelys madagascariensis		(II)
		Peltocephalus dumeriliana		(II)
Carettochelyidae		Podocnemis spp.		(II)
Carellochelyldae		Corretto ab ab as impossible		(II)
Chelydae		Carettochelys insculpta		(II)
Onelyade		Chelodina mccordi		(II)
CROCODYLIA		Sholodina mecordi		(11)
CROOD TEIN		CROCODYLIA spp. (excluding the species included in Annex I)		(II)
SAURIA		·		
Gekkonidae				
		Cyrtodactylus serpensinsula		(II)
		Phelsuma spp. (excluding the species included in Annex I)		(II)
		Uroplatus spp.		(II)
Agamidae		S. Spiatae opp.		('')
ganuuo		Uromastyx spp.		(II)
Chamaeleonidae		отолионух эрр.		(11)
		Bradypodion spp.		(II)
		Brookesia spp. (excluding the species		(II)
		included in Annex I)		
		Calumma spp.		(II)
		Chamaeleo spp. (excluding the species included in Annex I)		(II)
		Furcifer spp.		(II)

SCIENTIFIC NAME Iguanidae Iguanidae Cordylidae Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae Boidae	COMMON NAME	SCIENTIFIC NAME Amblyrhynchus cristatus Conolophus spp. Iguana spp. Liolaemus gravenhorstii Phrynosoma coronatum Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp. Corucia zebrata	COMMON NAME	(II) (II) (II) (II) (II) (II) (II) (II)
Cordylidae Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Conolophus spp. Iguana spp. Liolaemus gravenhorstii Phrynosoma coronatum Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II) (II) (II) (II)
Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Conolophus spp. Iguana spp. Liolaemus gravenhorstii Phrynosoma coronatum Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II) (II) (II) (II)
Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Iguana spp. Liolaemus gravenhorstii Phrynosoma coronatum Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II) (II) (II)
Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Liolaemus gravenhorstii Phrynosoma coronatum Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II) (II)
Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Phrynosoma coronatum Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II)
Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Cordylus spp. Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II)
Teiidae Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II)
Scincidae Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Crocodilurus amazonicus Dracaena spp. Tupinambis spp.		(II) (II)
Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Dracaena spp. Tupinambis spp.		(II)
Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Dracaena spp. Tupinambis spp.		(II)
Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Tupinambis spp.		(11)
Xenosauridae Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Corucia zebrata		. \ /
Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae		Corucia zebrata		
Helodermatidae Varanidae SERPENTES Loxocemidae Pythonidae				(II)
Varanidae SERPENTES Loxocemidae Pythonidae				
Varanidae SERPENTES Loxocemidae Pythonidae		Shinisaurus crocodilurus		(II)
SERPENTES Loxocemidae Pythonidae				<u> </u>
SERPENTES Loxocemidae Pythonidae		Heloderma spp.		(II)
Loxocemidae Pythonidae		Manager (and Partherne		+
Loxocemidae Pythonidae		Varanus spp. (excluding the species included in Annex I)		(II)
Loxocemidae Pythonidae		included in Almex I)		+
				+
		Loxocemidae spp.		(II)
Boidae				(**/
Boidae		Pythonidae spp. (excluding the species		(11)
Boidae		included in Annex I)		(II)
1		Boidae spp. (excluding the species		(II)
		included in Annex I)		(11)
Bolyeriidae				
		Bolyeriidae spp. (excluding the species		(11)
Tropidophiidae		included in Annex I)		
Поріворінівае		Tropidophiidae spp.		(II)
Colubridae		тториоргииае эрр.		(11)
		Clelia clelia		(II)
		Cyclagras gigas		(11)
		Dromicus chamissonis		(11)
		Elachistodon westermanni		(11)
		Ptyas mucosus		(II)
Elapidae				
		Hoplocephalus bungaroides		(II)
		Naja atra		(II)
		Naja kaouthia		(II)
		Naja mandalayensis		(II)
		Naja naja		(II)
		Naja oxiana		(II)
		Naja philippinensis		(II)
		Naja sagittifera		(II)
		Naja samarensis		(II)
		Naja siamensis Naja sputatrix		(II)
-		Naja sputatrix Naja sumatrana		(11)
		Ophiophagus hannah		(11)
Viperidae		Spinophagas Hailian	-	('')
1		Crotalus durissus unicolor		+
		Crotalus willardi		+
			1	+
AMPHIBIA		I Vinera wagneri		(II)
ANURA	AMPHIBIANS	Vipera wagneri		(II)

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	I LEMPARA
Dendrobatidae				
		Dendrobates spp.		(II)
		Epipedobates spp.		(II)
		Minyobates spp.		(II)
		Phyllobates spp.		(II)
Mantellidae				
		Mantella spp.		(II)
Microhylidae				
		Scaphiophryne gottlebei		(II)
Ranidae				
		Conraua goliath		
		Euphlyctis hexadactylus		(II)
		Hoplobatrachus tigerinus		(II)
		Rana catesbeiana		
Myobatrachidae				
		Rheobatrachus spp. (excluding a		400
		species included in Annex I)		(II)
CAUDATA				
Ambystomidae				
		Ambystoma dumerilii		(II)
		Ambystoma mexicanum		(II)
PISCES	FISH			
ELASMOBRANCHII				
ORECTOLOBIFORMES				
Rhincodontidae				
		Rhincodon typus		(II)
LAMNIFORMES		учите при		(/
Lamnidae				
		Carcharodon carcharias		(II)
Cetorhinidae		Suronarodon suronanas		(11)
		Cetorhinus maximus		(II)
ACTINOPTERYGII		Cotomina maxima		(11)
ACIPENSERIFORMES				
Acipenseridae				
riepencenaac				
		ACIPENSERIFORMES spp. (excluding		(II)
		the species included in Annex I)		
OSTEOGLOSSIFORMES				
Osteoglossidae				
		Arapaima gigas		(II)
CYPRINIFORMES				
Cyprinidae				
		Caecobarbus geertsi		(II)
SYNGNATHIFORMES				
Syngnathidae	·		-	
		Hippocampus spp.		(II)
PERCIFORMES				
Labridae				
		Cheilinus undulatus		(II)
CERATODONTIFORMES				
Ceratodontidae				
	<u> </u>	Neoceratodus forsteri		(II)
ARTHROPODA	ARTHROPODS			
ARACHNIDA	ARACHNIDS			
SCORPIONES				
Scorpionidae				1
		Pandinus dictator		(II)
		Pandinus gambiensis		(II)
		Pandinus imperator		(II)
ARANEAE		n ne permi		1
Theraphosidae		+		+

GRO	DUP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Aphonopelma albiceps		(II)
		Aphonopelma pallidum		(II)
		Brachypelma spp.		(II)
INSECTA	INSECTS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
LEPIDOPTERA				
Papilionidae				
		Atrophaneura jophon		(II)
		Atrophaneura palu		
		Atrophaneura pandiyana		(11)
		Baronia brevicornis		(/
		Bhutanitis spp.		(11)
		Graphium sandawanum		(,
		Graphium stresemanni		
		Ornithoptera spp.(excluding the species included in Annex I)		(II)
		Papilio benguetanus		
		Papilio benguetanus Papilio esperanza		-
		Papilio esperariza Papilio grosesmithi		
		Papilio maraho		
		Papilio morondavana		
		Papilio neumoegeni		
		Parides ascanius		
		Parides hahneli		(11)
		Teinopalpus spp.		(II)
		Trogonoptera spp.		(II)
		Troides spp.		(II)
ANNELIDA HIRUDINOIDEA	ANNELIDS			
ARHYNCHOBDELLA				
Hirudinidae				
nirudiriidae		I Parada and Parada		(11)
		Hirudo medicinalis		(II)
	MOLLUOO			
MOLLUSCA	MOLLUSCS			
BIVALVIA	CLAMS, MUSSELS			
VENERIDA				
Tridacnidae				
LINIONIDA		Tridacnidae spp.		(II)
UNIONIDA				
Unionidae				
		Cyprogenia aberti		(II)
		Epioblasma torulosa rangiana		(II)
		Pleurobema clava		(II)
MYTILOIDA		i icai obeilia ciava		(11)
Mytilidae				-
iviy unua c		Lithanhaga lithanha		(II)
GASTROPODA	SNAILS	Lithophaga lithophaga		(II)
STYLOMMATOPHORA	UNAILO			
Camaenidae				1
		Papustyla pulcherrima		(II)
MESOGASTROPODA		i apasiyia paloricitiilia		(11)
Strombidae				1
O. O. Molado		Strombus aigas		(11)
	1	Strombus gigas		(II)

SCIENTIFIC NAME	GROUP		SPECIES		REMARK
CNIDARIA ANTHOZOA ANTHOZOANS ANTHOZOA ANTHOZOANS HELIOPORACEA Helioporidae Helioporidae Helioporidae Helioporidae Tubiporidae Tubiporidae Tubiporidae spp. (II) ANTHEATHARIA SCLERACTINIA SCLERACTINIA SCLERACTINIA Spp. (III) HYDROZOA MILLEPORINA Milleporidae spp. (III) STYLASTERINA STYLASTERINA STYLASTERINA STYLASTERINA STYLASTERINA STYLASTERINA Sylvisteridae spp. (III) STYLASTERINA SSLERACTINIA spp. (III) AGAVACEAE FECRA FECRA AGAVACEAE AGAVACEAE AGAVACEAE AGAVACEAE ARACULIDACEAE ARAC	SCIENTIFIC NAME	COMMON NAME		COMMON NAME	KLWAKK
### ANTHOZOA ANTHOZOANS ### Helioporadee					
	The state of the s				
	HELIOPORACEA				
STOLOMERA	Helioporidae				
Tubiporidae			Heliporidae spp.		(II) ⁽⁸⁾
ANTIPATHARIA ANTIPATHARIA spp. (II)	STOLONIFERA				,
ANTIPATHARIA ANTIPATHARIA spp. (II) SCLERACTINIA SCLERACTINIA spp. (II) MILEPORINA MILEPORICA MILEPORINA MILEPORICA MILEPORINA MILEPORIA MILEPORINA MILEPORINA MILEPORINA MILEPORINA MILEPORINA M	Tubiporidae				
ANTIPATHARIA spp. (II) (III) (Tubiporidae spp.		(II) ⁽⁸⁾
SCLERACTINIA SCLERACTINIA spp. (iii) (ANTIPATHARIA				
SCLERACTINIA spp. (III)	201 50 1050111		ANTIPATHARIA spp.		(II)
Milleporidae Mill	SCLERACTINIA		OOLEDA OTIMIA		(8)
Milleporidae Mill	HVDDOZOA		SCLERACTINIA spp.		(II) ^(o)
Milleporidae Milleporidae spp. (III) (+		
Milleporidae spp. (III)					
Stylasteridae Stylasterida			Milleporidae spp		(II) ⁽⁸⁾
Stylasteridae spp. (III)	STYLASTERINA		іншорольшо орр.		(11)
Stylasteridae spp. (III)	Stylasteridae				
AGAVACEAE	-		Stylasteridae spp.		(II) ⁽⁸⁾
AGAVACEAE Agave victoriae-reginae (II) #1 AMARYLIDACEAE Galanthus spp. (III) #1 APOCYNACEAE #1 #1 #1 #1 #1 #1 #1 #1 #1 #			FLORA		1 /
AMARYLLIDACEAE Galanthus spp. (III) #1	AGAVACEAE				
AMARYLLIDACEAE Galanthus spp. (III) #1			Agave victoriae-reginae		(II) #1
Stembergia spp. (II) #1	AMARYLLIDACEAE		3		,
Stembergia spp. (II) #1			Galanthus spp.		(II) #1
Hoodia spp. (II) #9 Pachypodium spp. (excluding the species included in Annex I) (II) #1 #1 #2			• • • • • • • • • • • • • • • • • • • •		
Pachypodium spp. (excluding the species included in Annex I)	APOCYNACEAE				
Species included in Annex			Hoodia spp.		(II) #9
Species Included in Arthex i) Ravvolfia serpentina (II) #2					(II) #1
### Panax ginseng (only the population in the Russian Federation; no other population is included in Annexes to this Ordinance) ### Panax quinquefolius ### Panax quinque					
Panax ginseng (only the population in the Russian Federation; no other population is included in Annexes to this Ordinance) (II) #3	104/40545		Rauvolfia serpentina		(II) #2
Russian Federation; no other population is included in Annexes to this Ordinance) Panax quinquefolius (II) #3	ARALIACEAE				
Russian Federation; no other population is included in Annexes to this Ordinance) Panax quinquefolius (II) #3			Panax ginseng (only the population in the		
Panax quinquefolius			Russian Federation; no other population is		(II) #3
Podophyllum hexandrum			included in Annexes to this Ordinance)		
Podophyllum hexandrum			Panax quinquefolius		(II) #3
### Tillandsia harrisii (II) #1 Tillandsia kammii (II) #1 Tillandsia kautskyi (II) #1 Tillandsia mauryana (III) #1 Tillandsia surengeliana (III) #1 Tillandsia varengeraphica (III) #1 Tillandsia surene (III) #1 Tillandsi	BERBERIDACEAE		r anax quinquoionac		(,
### Tillandsia harrisii (II) #1 Tillandsia kammii (II) #1 Tillandsia kautskyi (II) #1 Tillandsia mauryana (III) #1 Tillandsia surengeliana (III) #1 Tillandsia varengeraphica (III) #1 Tillandsia surene (III) #1 Tillandsi			Podophyllum hexandrum		(II) #2
Tillandsia kammii	BROMELIACEAE				(,=
Tillandsia kautskyi			Tillandsia harrisii		(II) #1
Tillandsia mauryana			Tillandsia kammii		(II) #1
Tillandsia mauryana			Tillandsia kautskyi		
Tillandsia sucrei					
Tillandsia xerographica (II) #1			Tillandsia sprengeliana		(II) #1
CACTACEAE CACTACEAE spp. (excluding the species included in Annex I) (II) **1 CARYOCARACEAE (II) #1 CRASSULACEAE (II) #1 Dudleya stolonifera (II) #1 Dudleya traskiae (II) #1 CYATHEACEAE (II) #1 CYCADACEAE (II) #1 DIAPENSIACEAE (II) #1			Tillandsia sucrei		
CACTACEAE spp. (excluding the species included in Annex I) CARYOCARACEAE (II) #4 Caryocar costaricense (II) #1 CRASSULACEAE Dudleya stolonifera (II) #1 Dudleya traskiae (II) #1 CYATHEACEAE Cyathea spp. (II) #1 CYCADACEAE CYCADACEAE CYCADACEAE spp. (excluding the species included in Annex I) DIAPENSIACEAE			Tillandsia xerographica		(II) #1
included in Annex I)	CACTACEAE				
CARYOCARACEAE					(II) ⁽⁹⁾ #4
Caryocar costaricense (II) #1	CARYOCARACEAE		included in Alliex I)		(II) #1
CRASSULACEAE Dudleya stolonifera (II) #1 Dudleya traskiae (II) CYATHEACEAE (II) Cycathea spp. (II) #1 CYCADACEAE (II) #1 DIAPENSIACEAE (II) #1			Caryocar costaricense		
Dudleya traskiae (II)	CRASSULACEAE				1
Dudleya traskiae (II)			Dudleya stolonifera		(II) #1
CYATHEACEAE Cyathea spp. (II) #1 CYCADACEAE CYCADACEAE spp. (excluding the species included in Annex I) DIAPENSIACEAE					+
CYCADACEAE CYCADACEAE spp. (excluding the species included in Annex I) DIAPENSIACEAE	CYATHEACEAE		,		
CYCADACEAE CYCADACEAE spp. (excluding the species included in Annex I) DIAPENSIACEAE			Cyathea spp.		(II) #1
species included in Annex I) DIAPENSIACEAE	CYCADACEAE				1
species included in Annex I) DIAPENSIACEAE			CYCADACEAE spp. (excluding the		(11) #1
			species included in Annex I)		(11) #1
Shortia galacifolia (II) #1	DIAPENSIACEAE				
			Shortia galacifolia		(II) #1

GROUP		SPECIES		
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
DICKSONIACEAE				
		Cibotium barometz		(II) #1
		Dicksonia spp. (only the population in North and South America; no other population is included in Annexes to this Ordinance; including the species Dicksonia berteriana, D. externa, D. sellowiana and D. stuebelii)		(II) #1
DIDIEREACEAE		20052510515		40. 44
DIOSCOREACEAE		DIDIEREACEAE spp.		(II) #1
DROSERACEAE		Dioscorea deltoidea		(II) #1
EUPHORBIACEAE		Dionaea muscipula		(II) #1
EUPHURBIACEAE				
		Euphorbia spp. (excluding species that are included in Annex I; only the succulent species; artificially propagated specimens of the species Euphorbia trigona, artificially propagated, with the crest, fan-shaped, or the specimens whose colour was changed through the mutation of the species Euphorbia lactea, when they were grafted on the artificially propagated geniculated stems of the species Euphorbia neriifolia and artificially propagated specimens of the variety Euphorbia "Milii" when they are traded in shipments containing 100 or more plants, as well as specimens which are easily recogniseable as artificially propagated are not subject to the provisions of this Ordinance)		(II) #1
FOUQUIERIACEAE				
JUGLANDACEAE		Fouquieria columnaris		(II) #1
		Oreomunnea pterocarpa		(II) #1
LEGUMINOSAE (FABACEAE)				
		Pericopsis elata		(II) #5
		Platymiscium pleiostachyum		(II) #1
LILIACEAE		Pterocarpus santalinus		(II) #7
		Aloe spp. (excluding the species included in Annex I and the Aloe vera species, which is also mentioned as Aloe barbadensis, and which is not included in Annexes to this Ordinance)		(II) #1
MELIACEAE				
		Swietenia humilis		(II) #1
		Swietenia mahagoni		(II) #5
		Swietenia macrophylla (neotropis population - includes Central and South America and the Caribbean)		(II) #6
NEPENTHACEAE		Nepenthes spp. (excluding the species included in Annex I)		(II) #1
ORCHIDACEAE		ORCHIDACEAE spp. (excluding the species included in Annex I)	Orchids	(II) ⁽¹⁰⁾ #8
OROBANCHACEAE				

GROUP SPECIES			REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Cistanche deserticola		(II)

GRO	UP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
PALMAE (ARECACEAE)				
		Beccariophoenix madagascariensis		(II)
		Lemurophoenix halleuxii		(II)
		Marojejya darianii		(II)
		Neodypsis decaryi		(II) #1
		Ravenea louvelii		(II)
		Ravenea rivularis		(11)
		Satranala decussilvae		(11)
		Voanioala gerardii		(II)
PORTULACACEAE				
		Anacampseros spp.		(II) #1
		Avonia spp.		#1
		Lewisia serrata		(II) #1
PRIMULACEAE				
		Cyclamen spp.		(II) ⁽¹¹⁾ #1
PROTEACEAE				
		Orothamnus zeyheri		(II) #1
		Protea odorata		(II) #1
RANUNCULACEAE				
		Adonis vernalis		(II) #2
		Hydrastis canadensis		(II) #3
ROSACEAE				
		Prunus africana		(II) #1
SARRACENIACEAE				
		Sarracenia spp.(excluding the species		(II) #1
SCROPHULARIACEAE		included in Annex I)		, ,
SCROPHOLARIACEAE		Discontina Incomesa		40
STANGERIACEAE		Picrorhiza kurrooa		#3
STANGENIACEAE		Bowenia spp.		#1
TAXACEAE		вожена эрр.		#1
TAXAGEAE				(1.5)
		Taxus chinensis		(II) ⁽¹²⁾ #10
		Taxus cuspidata		(II) ⁽¹²⁾ #10
		Taxus cuspidata		(11)* 7#10
		Taxus fuana		(II) ⁽¹²⁾ #10
		Taxus sumatrana		(II) ⁽¹²⁾ #10
		Taxus wallichiana		(II) #10
THYMELEACEAE				
(AQUILARIACEAE)		A su Maria a su s		(11) //4
		Aquilaria spp.		(II) #1
		Gonystilus spp.		(II) #1
VALERIANACEAE		Gyrinops spp.		(II) #1
VALLIMANAVEAE		Nardostachys grandiflora		#3
WELWITSCHIACEAE		ivaruostacitys granulliora		#3
		Welwitschia mirabilis		(II) #1
ZAMIACEAE		VV CIWILISCHIIA HIII ADIIIIS		(11) #1
		ZAMIACEAE spp. (excluding the species		1
		included in Annex I)		(II) #1
ZINGIBERACEAE				
		Hedychium philippinense		(II) #1
ZYGOPHYLLACEAE				
		Guaiacum spp.		(II) #2
	•			

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	KEMAKK
		FAUNA		
CHORDATA	CHORDATES	I AOIIA		
MAMMALIA	MAMMALS			
CHIROPTERA	1117 (111111) (20			
Phyllostomidae				
. ny nectonnade		Platyrrhinus lineatus		(III Uruguay)
XENARTHRA				(III Oragaay)
Mermecophagidae				
g		Tamandua mexicana		(III Guatemala)
Megalonychidae				(III Guaternaia)
		Choloepus hoffmanni		(III Costa Rica)
Dasypodidae				(III Oosta Itioa)
,		Cabassous centralis		(III Costa Rica)
		Cabassous tatouay		(III Uruguay)
RODENTIA		,		(C. agad)
Sciuridae				
		Epixerus ebii		(III Ghana)
		Marmota caudata		(III India)
		Marmota himalayana		(III India)
		Sciurus deppei		(III Costa Rica)
Anomaluridae				(*** 5 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7
		Anomalurus beecrofti		(III Ghana)
		Anomalurus derbianus		(III Ghana)
		Anomalurus pelii		(III Ghana)
		Idiurus macrotis		(III Ghana)
Erethizontidae				,
		Sphiggurus mexicanus		(III Honduras)
		Sphiggurus spinosus		(III Uruguay)
Agoutidae				
		Agouti paca		(III Honduras)
Dasyproctidae				
		Dasyprocta punctata		(III Honduras)
CARNIVORA				
Canidae				
		Canis aureus		(III India)
		Vulpes bengalensis		(III India)
Procyonidae				
		Bassaricyon gabbii		(III Costa Rica)
		Bassariscus sumichrasti		(III Costa Rica)
		Nasua narica		(III Honduras)
		Nasua nasua solitaria		(III Uruguay)
		Potos flavus		(III Honduras)
Mellivorinae				
		Mellivora capensis		(III
Mustaliana				Botswana/Ghana)
Mustelinae		Cina haub - :		
		Eira barbara		(III Honduras)
	ļ	Galictis vittata		(III Costa Rica)
		Martes flavigula		(III India)
		Martes foina intermedia		(III India)
100		Martes gwatkinsii		(III India)
Viverridae				

GROUP		SPECIE	S	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Arctictis binturong		(III India)
		Civettictis civetta		(III Botswana)
		Paguma larvata		(III India)
		Paradoxurus hermaphroditus		(III India)
		Paradoxurus jerdoni		(III India)
		Viverra civettina		(III India)
		Viverra zibetha		(III India)
		Viverricula indica		(III India)
Herpestidae				(III India)
		Herpestes brachyurus fuscus		(III India)
		Herpestes edwardsii		(III India)
		Herpestes javanicus auropunctatus		(III India)
		Herpestes smithii		(III India)
		Herpestes urva		(III India)
		Herpestes vitticollis		(III India)
Hyaenidae				
		Proteles cristatus		(III Botswana)
ARTIODACTYLA				
Tragulidae				
0 11		Hyemoschus aquaticus		(III Ghana)
Cervidae		Communication by the street		
		Cervus elaphus barbarus		(III Tunisia)
		Mazama americana cerasina		(III Guatemala)
		Odocoileus virginianus mayensis		(III Guatemala)
Bovidae				
		Antilope cervicapra		(III Nepal)
		Bubalus arnee (excluding the domesticated form known under the name Bubalus bubaus)		(III Nepal)
		Damaliscus lunatus		(III Ghana)
		Tetracerus quadricornis		(III Nepal)
		Tragelaphus eurycerus		(III Ghana)
		Tragelaphus spekii		(III Ghana)
AVES	BIRDS			
CICONIIFORMES				
Ardeidae	Herons and Egrets			1
0:::	Otania	Ardea goliath		(III Ghana)
Ciconiidae	Storks	Enhinniarh matur		
		Ephippiorhynchus senegalensis		(III Ghana)
Throation: thirts	lhiana	Leptoptilos crumeniferus		(III Ghana)
Threskiornithidae	Ibises	Bostrychia hagedash		(III Oh)
		Bostrychia rara		(III Ghana)
<u> </u>	 	Threskiornis aethiopicus		(III Ghana)
ANSERIFORMES		THE SKIOTHS ACHHOPICUS		(III Ghana)
Anatidae	Ducks, Geese, Swans			1
	Daono, Goode, Gwalls	Alopochen aegyptiacus		(III Ghana)
-	+	Anas acuta		(III Ghana)
	<u> </u>	Anas capensis		(III Ghana)
	L			(Onana)

GROUP		SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	TCLIII (TCC	
		Anas clypeata		(III Ghana)	
		Anas crecca		(III Ghana)	
		Anas penelope		(III Ghana)	
		Cairina moschata		(III Honduras)	
		Dendrocygna autumnalis		(III Honduras)	
		Dendrocygna bicolor		(III	
				Ghana/Honduras)	
		Dendrocygna viduata		(III Ghana)	
		Nettapus auritus		(III Ghana)	
		Plectropterus gambensis		(III Ghana)	
		Pteronetta hartlaubii		(III Ghana)	
FALCONIFORMES					
Cathartidae	American vulture				
		Sarcoramphus papa		(III Honduras)	
GALLIFORMES					
Cracidae	Guans, Chacalaca				
		Penelope purpurascens		(III Honduras)	
Phasianidae	Pheasants, Grouse				
		Agriocharis ocellata		(III Guatemala)	
		Caloperdix oculea		(III Malaysia)	
		Melanoperdix nigra		(III Malaysia)	
		Polyplectron inopinatum		(III Malaysia)	
		Rhizothera longirostris		(III Malaysia)	
		Rollulus rouloul		(III Malaysia)	
		Tragopan satyra		(III Nepal)	
CHARADRIIFORMES					
Burhinidae	Thickknees				
		Burhinus bistriatus		(III Guatemala)	
COLUMBIFORMES				,	
Columbidae	Pigeons, Doves				
		Columba guinea		(III Ghana)	
		Columba iriditorques		(III Ghana)	
		Columba mayeri		(III Mauritius)	
		Columba unicincta		(III Ghana)	
		Oena capensis		(III Ghana)	
		Streptopelia decipiens		(III Ghana)	
		Streptopelia roseogrisea		(III Ghana)	
		Streptopelia semitorquata		(III Ghana)	
		Streptopelia senegalensis		(III Ghana)	
		Streptopelia vinacea	1	(III Ghana)	
		Treron calva		(III Ghana)	
		Treron waalia		(III Ghana)	
		Turtur abyssinicus		(III Ghana)	
		Turtur afer	1	(III Ghana)	
		Turtur brehmeri	1	(III Ghana)	
		Turtur tympanistria		(III Ghana)	
PSITTACIFORMES		A b		(Onana)	
Psittacidae	Parrots				
		Psittacula krameri		(III Ghana)	
PASSERIFORMES	SONGBIRDS			(in Oriana)	
Cotingidae	Cotingas		 	+	
	Juligus	Cephalopterus ornatus		(III Columbia)	
		Cephalopterus penduliger		(III Columbia)	
Muscicapidae		2 op. a. optor do portudingor	 	(III Columbia)	
masoloupiaus	l	1	<u> </u>		

GF	ROUP	SPECIE	S	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Terpsiphone bourbonnensis		(III Mauritius)
				(III Waunius)
Fringillidae	Finches and Allies			
		Serinus canicapillus		(III Ghana)
		Serinus leucopygius		(III Ghana)
E		Serinus mozambicus		(III Ghana)
Estrildidae	Waxbills			(III Ghana)
		Amadina fasciata		(III Ghana)
		Amandava subflava		(III Ghana)
		Estrilda astrild		(III Ghana)
		Estrilda caerulescens		(III Ghana)
		Estrilda melpoda		(III Ghana)
		Estrilda troglodytes		(III Ghana)
		Lagonosticta rara		(III Ghana)
		Lagonosticta rubricata		(III Ghana)
		Lagonosticta rufopicta		(III Ghana)
	1	Lagonosticta senegala Lagonosticta vinacea		(III Ghana)
		Lonchura bicolor		(III Ghana)
		Lonchura cantans		(III Ghana)
		Lonchura cucullata		(III Ghana)
		Lonchura fringilloides		(III Ghana)
		Mandingoa nitidula		(III Ghana)
		Nesocharis capistrata		(III Ghana)
		Nigrita bicolor		(III Ghana)
		Nigrita canicapilla		(III Ghana)
		Nigrita fusconota		(III Ghana)
		Nigrita luteifrons		(III Ghana)
		Ortygospiza atricollis		(III Ghana) (III Ghana)
		Parmoptila rubrifrons		(III Ghana)
		Pholidornis rushiae		(III Ghana)
		Pyrenestes ostrinus		(III Ghana)
		Pytilia hypogrammica		(III Ghana)
		Pytilia phoenicoptera		(III Ghana)
		Spermophaga haematina		(III Ghana)
		Uraeginthus bengalus		(III Ghana)
Ploceidae	Weavers			(III Griana)
	111111111111111111111111111111111111111	Amblyospiza albifrons		(III Ghana)
		Anaplectes rubriceps		(III Ghana)
		Anomalospiza imberbis		(III Ghana)
	1	Bubalornis albirostris		(III Ghana)
		Euplectes afer		(III Ghana)
		Euplectes ardens		(III Ghana)
		Euplectes franciscanus		(III Ghana)
		Euplectes hordeaceus		(III Ghana)
		Euplectes macrourus		(III Ghana)
		Malimbus cassini		(III Ghana)
	1	Malimbus malimbicus		(III Ghana)
	1	Malimbus nitens		(III Ghana)
	1	Malimbus rubricollis		(III Ghana)
	1	Malimbus scutatus		(III Ghana)
		Pachyphantes superciliosus		(III Ghana)
	1	Passer griseus		(III Ghana)

	GROUP		ES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Petronia dentata		(III Ghana)
		Plocepasser superciliosus		(III Ghana)
		Ploceus albinucha		(III Ghana)
		Ploceus aurantius		(III Ghana)
		Ploceus cucullatus		(III Ghana)
		Ploceus heuglini		(III Ghana)
		Ploceus luteolus		(III Ghana)
		Ploceus melanocephalus		(III Ghana)
		Ploceus nigerrimus		(III Ghana)
		Ploceus nigricollis		(III Ghana)
		Ploceus pelzelni		(III Ghana)
		Ploceus preussi		(III Ghana)
		Ploceus tricolor		(III Ghana)
		Ploceus vitellinus		(III Ghana)
		Quelea erythrops		(III Ghana)
		Sporopipes frontalis		(III Ghana)
		Vidua chalybeata		(III Ghana)
		Vidua interjecta		(III Ghana)
		Vidua larvaticola		(III Ghana)
		Vidua macroura		(III Ghana)
		Vidua orientalis		(III Ghana)
		Vidua raricola		(III Ghana)
		Vidua togoensis		(III Ghana)
		Vidua wilsoni		(III Ghana)
REPTILIA	REPTILES			
TESTUDINATA				
		Chinemys megalocenhala		(III China)
TESTUDINATA		Chinemys megalocephala		(III China)
TESTUDINATA		Chinemys nigricans		(III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii		(III China) (III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri		(III China) (III China) (III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni		(III China) (III China) (III China) (III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi		(III China) (III China) (III China) (III China) (III China) (III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma		(III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi		(III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni		(III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis		(III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei		(III China)
TESTUDINATA		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii Pelodiscus paviformis		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii Pelodiscus paviformis Pelodiscus sinensis		(III China)
TESTUDINATA Emydidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii Pelodiscus sinensis Rafetus swinhoei		(III China)
TESTUDINATA Emydidae Trionychidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii Pelodiscus sinensis Rafetus swinhoei		(III China)
TESTUDINATA Emydidae Trionychidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii Pelodiscus paviformis Pelodiscus sinensis Rafetus swinhoei Trionyx triunguis		(III China)
TESTUDINATA Emydidae Trionychidae		Chinemys nigricans Chinemys reevesii Geoemyda spengleri Mauremys iversoni Mauremys pritchardi Ocadia glyphistoma Ocadia philippeni Ocadia sinensis Sacalia bealei Sacalia pseudocellata Sacalia quadriocellata Palea steindachneri Pelodiscus axenaria Pelodiscus maackii Pelodiscus paviformis Rafetus swinhoei Trionyx triunguis Pelomedusa subrufa		(III China)

GROUP		SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
		Pelusios niger		(III Ghana)	
SAURIA					
Gekkonidae					
		Hoplodactylus spp.		(III New Zealand)	
		Naultinus spp.		(III New Zealand)	
SERPENTES					
Colubridae					
		Atretium schistosum		(III India)	
		Cerberus rhynchops		(III India)	
		Xenochrophis piscator		(III India)	
Elapidae					
		Micrurus diastema		(III Honduras)	
		Micrurus nigrocinctus		(III Honduras)	
Viperidae					
		Crotalus durissus		(III Honduras)	
		Daboia russelii		(III India)	
ECHINODERMATA	ECHINODERMS				
HOLOTHUROIDEA					
ASPODOCHIROTIDA					
Stichopodidae		Isostichopus fuscus		(III Ecuador)	
INSECTA	INSECTS				
COLEOPTERA					
Lucanidae					
		Colophon spp.		(III South Africa)	
		FLORA			
Gnetaceae					
		Gnetum montanum		(III Nepal) #1	
Leguminosae (Fabaceae)					
		Dipteryx panamensis		(III Costa Rica)	
Magnoliaceae					
		Magnolia liliifera var. obovata		(III Nepal) #1	
Meliaceae				. ,	
Iviellaceae		Cedrela odorata (Population			
		in Columbia and the		(III) #5	
		population in Peru)		(III) #5	
Danayaraaaa					
Papaveraceae		Management of the			
Dadaaanaa -		Meconopsis regia		(III Nepal) #1	
Podocarpaceae		Dada samua w "f "			
Tue see also a alue e -		Podocarpus neriifolius		(III Nepal) #1	
Trogodendrace		Total continue of the same			
(Tetracentraceae)		Tetracentron sinense		(III Nepal) #1	
Thymeleaceae					

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		FAUNA		
CHORDATA	CHORDATES			
MAMMALIA	MAMMALS			
CARNIVORA				
Canidae				
		Vulpes vulpes griffithi		(III India) §1
		Vulpes vulpes montana		(III India) §1
		Vulpes vulpes pusilla		(III India) §1
Mustelidae		Mustela altaica		(III India) §1
		Mustela erminea ferghanae		(III India) §1
		Mustela kathiah		(III India) §1
		Mustela sibirica		(III India) §1
AVES	BIRDS			
ANSERIFORMES				
Anatidae	Ducks, Geese, Swans			
		Anas melleri		
GALLIFORMES			_	
Megapodiidae	Brush turkeys			
		Megapodius wallacei		
Cracidae	Guans, Chacalaca			
		Penelope pileata		
Phasianidae	Pheasants, Grouse			
		Arborophila gingica		
		Syrmaticus reevesii		§2
COLUMBIFORMES				
Columbidae	Pigeons, Doves			
		Columba oenops		
		Ducula pickeringii		
		Gallicolumba criniger		
		Ptilinopus marchei		
		Turacoena modesta		
PASSERIFORMES	SONGBIRDS			
Cotingidae	Cotingas			
		Procnias nudicollis		
Pittidae	Pittas			
		Pitta nipalensis		
		Pitta steerii		
Bombycillidae	Waxwings and Allies			
		Bombycilla japonica		
Muscicapidae	Old World Warblers, Kinglets, Gnatcatchers, Thrushes			
		Cochoa azurea		1
		Cochoa purpurea		1
		Garrulax formosus		1
		Garrulax galbanus		1
		Garrulax milnei		1
		Niltava davidi		1
		Stachyris whiteheadi		1
		Swynnertonia swynnertoni		1
		Turdus dissimilis		1

GROUP		SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	KEWAKK	
Sittidae	Nuthatches and Allies				
		Sitta magna			
		Sitta yuanensis			
Emberizidae	Blackbirds, Tanagers, Grosbeaks, Sparrows				
	, 1	Dacnis nigripes			
		Sporophila falcirostris			
		Sporophila frontalis			
		Sporophila hypochroma			
		Sporophila palustris			
Icteridae	Blackbirds and Allies				
		Sturnella militaris			
Fringillidae	Finches and Allies				
		Carpodacus roborowskii			
		Carduelis ambigua			
		Carduelis atrata			
		Pyrrhula erythaca			
		Serinus canicollis			
		Serinus hypostictus			
Estrildidae	Waxbills				
		Amandava amandava			
		Cryptospiza reichenovii			
		Erythrura coloria			
		Erythrura viridifacies			
		Estrilda quartinia (often			
		traded under the name			
		Estrilda melanostis)			
		Hypargos niveoguttatus			
		Lonchura griseicapilla			
		Lonchura punctulata			
		Lonchura stygia			
Sturnidae	Starlings and Allies				
		Cosmopsarus regius			
		Mino dumontii			
		Sturnus erythropygius			
Corvidae	Crows and Allies				
		Cyanocorax caeruleus			
		Cyanocorax dickeyi			
REPTILIA	REPTILES				
TESTUDINATA					
Emydidae					
		Melanochelys trijuga			
SAURIA					
Gekkonidae					
		Rhacodactylus auriculatus			
		Rhacodactylus ciliatus			
		Rhacodactylus leachianus			
		Teratoscincus microlepis			
		Teratoscincus scincus			
Scincidae					
		Tribolonotus gracilis			
		Tribolonotus novaeguineae			
Cordylidae					
		Zonosaurus karsteni			
SERPENTES					
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GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	KEWAKK
Colubridae				
		Elaphe carinata		§1
		Elaphe radiata		§1
		Elaphe taeniura		§1
		Enhydris bocourti		§1
		Homalopsis buccata		§1
		Langaha nasuta		
		Lioheterodon		
		madagascariensis		
		Ptyas korros		§1
		Rhabdophis subminiatus		§1
/iperidae				
		Calloselasma rhodostoma		§1
Hydrophiidae				
		Lapemis curtus		§1
		FLORA		
AGAVACEAE				
		Calibanushookeri		
		Dasylirion longissimum		
ARACEAE				
		Arisaema dracontium		
		Arisaema erubescens		
		Arisaema galeatum		
		Arisaema nepenthoides		
		Arisaema sikokianum		
		Arisaema thunbergii		
		var.urashima		
		Arisaema tortuosum		
		Biarum davisii ssp.		
		marmarisense		
		Biarum ditschianum		
COMPOSITAE (ASTERACEAE)				
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Arnica montana		§3
		Othonna cacalioides		3-
		Othonna clavifolia		
		Othonna hallii		
		Othonna herrei		
		Othonna lepidocaulis		
	1	Othonna retrorsa		
ERICACEAE		Caronna ronorda		+
LINGAGEAE		Arctostaphylos uva-ursi		22
GENTIANACEAE		7 irotostapriyios uva-ursi		§3
JEN HANAGEAE		Gentiana lutea		22
VCODODIACEAE		Geпцапа пицеа		§3
LYCOPODIACEAE		Luciana alliuma altitut Guita		
14E-17/4-17/14 ^		Lycopodium clavatum		§3
MENYANTHACEAE		1		
		Menyanthes trifoliata		§3
PARMELIACEAE				
		Cetraria islandica		§3
PASSIFLORACEAE				
		Adenia glauca		
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ANNEX IV

GROUP		SPEC	IES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Adenia pechuelli		
PORTULACACEAE				
		Ceraria carrissoana		
		Ceraria fruticulosa		
LILIACEAE				
		Trillium pusillum		
		Trillium rugelii		
		Trillium sessile		
PEDALIACEAE				
		Harpagophytum spp.		§3
SELAGINELLACEAE				
		Selaginella lepidophylla		

GROUP		SPE	CIES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
AVES	BIRDS			
ANSERIFORMES				
Anatidae	Ducks, Geese, Swans			
		Anas laysanensis		
		Anas querquedula		
		Aytha nyroca		
		Branta ruficollis		
		Branta sandvicensis		
		Oxyura leucocephala		
GALLIFORMES				
Phasianidae	Pheasants, Grouse			
		Catreus wallichii		
		Colinus virginianus		
		ridgwayi		
		Crossoptilon		
		crossoptilon		
		Crossoptilon		
		mantchuricum		
		Lophophorus impejanus		
		Lophura edwardsi		
		Lophura swinhoii		
		Polyplectron		
		emphanum		
		Syrmaticus ellioti		
		Syrmaticus humiae		
		Syrmaticus mikado		
COLUMBIFORMES				
Colimbidae	Pigeons, Doves			
		Columba livia		
PSITTACIFORMES				
Psittacidae	Parrots			
		Cyanoramphus		
		novaezelandiae		
		Psephotus dissimilis		
PASSERIFORMES	SONGBIRDS			
Fringillidae	Finches and Allies			
		Carduelis cucullata		
ĺ				

Specimens of the species listed in Annex I to this Ordinance the introduction of which into the Republic of Croatia is prohibited **SPECIES SPECIMEN COUNTRY OF ORIGIN** COMMON NAME SCIENTIFIC NAME ORIGIN TYPE **MAMMALIA - MAMMALS** CARNIVORA **CAR NIVORES** Canidae Canis Iupus From the wild (W) Hunting trophies Belarus, Kyrgysztan, Turkey wolf Ursidae British Columbia Region From the wild (W) Hunting trophies Ursus arctos (Canada) Felidae Azerbaijan, the Republic of Lynx lynx lynx From the wild (W) Hunting trophies Moldova, Ukraine **EVEN-TOED ARTIODACTYLA UNGULATES** Bovidae Ovis ammon From the wild (W) Hunting trophies Kazakhstan nigrimontana **AVES - BIRDS FALCONIFORMES** Accipitridae Leucopternis From the wild (W) ΑII Ecuador, Peru occidentalis Specimens of the species listed in Annex II to this Ordinance the introduction of which into the Republic of Croatia is prohibited **SPECIMEN SPECIES COUNTRY OF ORIGIN** SCIENTIFIC NAME **COMMON NAME** ORIGIN TYPE **FAUNA MAMMALIA - MAMMALS** MONOTREMATA MONOTREMES Tachyglossidae Zaglossus bruijini From the wild (W) All All **PRIMATES** PRIMATES Loridae Central African Republic, Gabon Arctocebus aureus From the wild (W) ΑII Arctocebus calabarensis From the wild (W) ΑII Nigeria Cambodia, the Lao People's Nycticebus pygmaeus From the wild (W) ΑII Democratic Republic Perodicticus potto From the wild (W) Togo ΑII Galagonidae Euoticus pallidus (synonym Galago From the wild (W) ΑII Nigeria elegantulus pallidus) Galago matschiei From the wild (W) ΑII Rwanda (synonym G. inustus) Galago senegalensis From the wild (W) ΑII Djibouti Galago demidoff Burkina Faso, Central African From the wild (W) ΑII

Republic, Kenya, Senegal

(synonym G. demidovii)

SCIENTIFIC NAME	COMMON NAME			
		ORIGIN	TYPE	COUNTRY OF ORIGIN
Galagoides zanzibaricus (synonym Galago zanzibaricus)		From the wild (W)	All	Malawi
Callitrichidae				
Callithrix argentata		From the wild (W)	All	Paraguay
Callithrix geoffroyi (synonym C. jacchus geoffroyi)		From the wild (W)	All	Brazil
Saguinus labiatus		From the wild (W)	All	Colombia
Cebidae				
Alouatta fusca		From the wild (W)	All	All
Alouatta seniculus		From the wild (W)	All	Trinidad and Tobago
Ateles belzebuth		From the wild (W)	All	All
Ateles fusciceps		From the wild (W)	All	All
Ateles geoffroyi		From the wild (W)	All	All
Ateles paniscus		From the wild (W)	All	Peru
Callicebus torquatus		From the wild (W)	All	Ecuador
Cebus albifrons		From the wild (W)	All	Guyana
Cebus capucinus		From the wild (W)	All	Belize, Venezuela
Cebus olivaceus		From the wild (W)	All	Peru
Chiropotes satanas		From the wild (W)	All	Brazil, Guyana
Lagothrix lagotricha		From the wild (W)	All	All
Pithecia pithecia		From the wild (W)	All	Guyana
Cercopithecidae Allenopithecus nigroviridis		From the wild (W)	All	All
Cercocebus torquatus		From the wild (W)	All	Ghana
Cercopithecus ascanius		From the wild (W)	All	Burundi
Cercopithecus cephus		From the wild (W)	All	Central African Republic
Cercopithecus dryas (including C. salongo)		From the wild (W)	All	Democratic Republic of the Congo
Cercopithecus erythrogaster		From the wild (W)	All	All
Cercopithecus erythrotis		From the wild (W)	All	All
Cercopithecus hamlyni		From the wild (W)	All	All
Cercopithecus mona		From the wild (W)	All	Togo
Cercopithecus petaurista		From the wild (W)	All	Togo
Cercopithecus pogonias		From the wild (W)	All	Cameroon, Equatorial Guinea, Nigeria
Cercopithecus preussi (synonym C. Ihoesti preussi)		From the wild (W)	All	Cameroon, Equatorial Guinea, Nigeria
Colobus guerezza		From the wild (W)	All	Equatorial Guinea
Colobus polykomos		From the wild (W)	All	Côte d'Ivoire, Ghana, Nigeria, Togo
Lophocebus albigena (synonym Cercocebus albigena)		From the wild (W)	All	Kenya, Nigeria
Macaca arctoides		From the wild (W)	All	India, Malaysia, Thailand

SPEC	CIES	SPECIMEN			
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN	
Macaca assamensis		From the wild (W)	All	Nepal	
Macaca cyclopis		From the wild (W)	All	All	
Macaca fascicularis		From the wild (W)	All	Bangladesh, India	
Macaca maura		From the wild (W)	All	Indonesia	
Macaca nemestrina		From the wild (W)	All	China	
Macaca nemestrina pagensis		From the wild (W)	All	Indonesia	
Macaca nigra		From the wild (W)	All	Indonesia	
Macaca ochreata		From the wild (W)	All	Indonesia	
Macaca sylvanus		From the wild (W)	All	Algeria, Morocco	
Papio hamadryas		From the wild (W)	All	Guinea-Bissau, Liberia, Libya	
Procolobus badius (synonym Colobus badius)		From the wild (W)	All	All	
Procolobus verus (synonym Colobus verus)		From the wild (W)	All	Benin, Côte d'Ivoire, Ghana, Sierra Leone, Togo	
Trachypithecus phayrei (synonym Presbytis phayrei)		From the wild (W)	All	Cambodia, China, India	
Trachypithecus vetulus (synonym Presbytis senex)		From the wild (W)	All	Sri Lanka	
XENARTHRA					
Myrmecophagidae					
Myrmecophaga tridactyla		From the wild (W)	All	Belize, Uruguay	
RODENTIA	RODENTS				
Sciuridae	squirrels				
Ratufa affinis		From the wild (W)	All	Singapore	
Ratufa bicolor		From the wild (W)	All	China	
CARNIVORA	CARNIVORES				
Canidae	dogs				
Chrysocyon brachiurus		From the wild (W)	All	Bolivia, Peru	
Mustelidae					
Lutra maculicollis		From the wild (W)	All	the United Republic of Tanzania	
Viverridae					
Cynogale bennettii		From the wild(W)	All	Brunei Darussalam, China, Indonesia, Malaysia, Singapore, Thailand	
Eupleres gouldotii		From the wild(W)	All	Madagascar	
Fossa fossana		From the wild(W)	All	Madagascar	
Felidae	cats				
Leptailurus serval		From the wild (W)	All	Algeria	
Oncifelis colocolo		From the wild (W)	All	Chile	
Prionailurus bengalensis		From the wild (W)	All	Macao (China)	
Profelis aurata		From the wild (W)	All	Togo	
PERISSODACTYLA	ODD-TOED UNGULATES				
Equidae	horses	<u> </u>			
Equus zebra hartmannae		From the wild (W)	All	Angola	

SPEC	CIES	SPI	ECIMEN	
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
ARTIODACTYLA	EVEN-TOED UNGULATES			
Hippopotamidae	hippopotamuses			
Hexaprotodon liberiensis (synonym Choeropsis liberiensis)		From the wild (W)	All	Côte d'Ivoire, Guinea, Guinea- Bissau, Nigeria, Sierra Leone
Hippopotamus amphibius		From the wild (W)	All	Democratic Republic of the Congo, Gambia, Liberia, Malawi, Niger, Nigeria, Rwanda, Sierra Leone, Togo
Camelidae	camels			
Lama guanicoe		From the wild (W)	All, except: specimens of registered flocks in Argentina, for which the validity of the permit may be confirmed by the Secretariat of the Convention before their acceptance upon import by the competent administrative authority of the Republic of Croatia; -products obtained through the exchange of the live animals within authorized economic plans, appropriately marked and registered shipments of wool intended for industrial testing which are exported in a limited quantity of 500 kg per year.	Argentina
Moschidae				
Moschus berezovskii		From the wild (W)	All	China
Moschus chrysogaster		From the wild (W)	All	China
Moschus fuscus		From the wild (W)	All	China
Moschus moschiferus		From the wild (W)	All	China, Russian Federation
Cervidae Cervus elaphus	deers	From the wild (M)	All	Lizhokiaton
bactrianus .		From the wild (W)	All	Uzbekistan
Bovidae	bovids			
Saiga tatarica		From the wild (W)	All	Kazakhstan, Russian Federation
AVES - BIRDS				
CICONIIFORMES				
Balaenicipitidae	shoebills			
Balaeniceps rex	shoebill	From the wild (W)	All	Zambia
Anseriformes	duelle sees sur			
Anasharniari	ducks, geese, swans	Erom the wild (MA)	All	Madagasas
Anas bernieri		From the wild (W)	All	Madagascar

SPECIES		SPECIMEN		
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Oxyura jamaicensis		Live	All	All
FALCONIFORMES				
Accipitridae	hawks and eagles			
Accipiter brachyurus		From the wild (W)	All	Papua New Guinea
Accipiter gundlachi		From the wild (W)	All	Cuba
Accipiter imitator		From the wild (W)	All	Papua New Guinea, Solomon Islands
Buteo albonotatus		From the wild (W)	All	Peru
Buteo galapagoensis		From the wild (W)	All	Ecuador
Buteo platypterus		From the wild (W)	All	Peru
Buteo ridgwayi		From the wild (W)	All	Dominican Republic, Haiti
Erythrotriochis radiatus		From the wild (W)	All	Australia
Gyps bengalensis		From the wild (W)	All	All
Gyps coprotheres		From the wild (W)	All	Mozambique, Namibia, Swazi
Gyps indicus		From the wild (W)	All	All
Gyps rueppellii		From the wild (W)	All	Guinea
Harpyopsis novaeguineae		From the wild (W)	All	Indonesia, Papua New Guinea
Leucopternis lacernulata		From the wild (W)	All	Brazil
Lophoictinia isura		From the wild (W)	All	Australia
Polemaetus bellicosus		From the wild (W)	All	Guinea
Spizaetus bartelsi		From the wild (W)	All	Indonesia
Stephanoaetus coronatus		From the wild (W)	All	Guinea
Terathopius ecaudatus		From the wild (W)	All	Guinea
Trigonoceps occipitalis		From the wild (W)	All	Guinea, Côte d'Ivoire
Falconidae	falcons			
Falco deiroleucus		From the wild (W)	All	Belize, Guatemala
Falco fasciinucha		From the wild (W)	All	Botswana, Ethiopia, Kenya, Malawi, Mozambique, Republic of South Africa, the Sudan, the United Republic of Tanzania, Zambia, Zimbabwe
Falco hypoleucos		From the wild (W)	All	Australia, Papua New Guinea
Micrastur plumbeus		From the wild (W)	All	Colombia, Ecuador
Sagittariidae	secretary birds			
Sagittarius serpentarius	secretary bird	From the wild (W)	All	Guinea
GALLIFORMES				
Phasianidae	grouses, quails, pheasants			
Polyplectron		From the wild (W)	All	Indonesia, Malaysia
schleiermacheri				
GRUIFORMES	040			
Gruidae	cranes	From the wild (\A/)	ΛII	Guinea Mali
Balearica pavonina		From the wild (W)	All	Guinea, Mali

SPEC	CIES	SPECIMEN		
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Balearica regulorum		From the wild (W)	All	Angola, Botswana, Burundi, Democratic Republic of the Congo, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, Republic of South Africa, Swazi, Uganda, Zambia, Zimbabwe
Grus carunculatus		From the wild (W)	All	Republic of South Africa
Grus virgo		From the wild (W)	All	the Sudan
COLUMBIFORMES				
Columbidae	pigeons, doves			
Goura cristata		From the wild (W)	All	Indonesia
Goura scheepmakeri		From the wild (W)	All	Indonesia
Goura victoria		From the wild (W)	All	Indonesia
PSITTACIFORMES				
Cacatuidae	cockatoos			
Cacatua sanguinea		From the wild (W)	All	Indonesia
Cacatua sulphurea		From the wild (W)	All	Indonesia
Psittacidae	parrots			
Agapornis fischeri		From the wild (W)	All	the United Republic of Tanzania
		Captive-bred	All	Mozambique
Agapornis lilianae		From the wild (W)	All	the United Republic of Tanzania
Agapornis nigrigenis		From the wild (W)	All	All
Agapornis pullarius		From the wild (W)	All	Angola, Guinea, Kenya, Mali, Togo
Agapornis roseicollis		From the wild (W)	All	Botswana
Ailsterus chloropterus chloropterus		From the wild (W)	All	Indonesia
Amazona agilis		From the wild (W)	All	Jamaica
Amazona autumnalis		From the wild (W)	All	Ecuador
Amazona collaria		From the wild (W)	All	Jamaica
Amazona mercenaria		From the wild (W)	All	Venezuela
Amazona xanthops		From the wild (W)	All	Bolivia, Paraguay
Ara ararauna		From the wild (W)	All	Trinidad and Tobago
Ara chloroptera		From the wild (W)	All	Argentina, Panama
Ara severa		From the wild (W)	All	Guyana
Aratinga acuticauda		From the wild (W)	All	Uruguay
Aratinga aurea		From the wild (W)	All	Argentina
Aratinga auricapilla		From the wild (W)	All	All
Aratinga erythrogenys		From the wild (W)	All	Peru
Aratinga euops		From the wild (W)	All	Cuba
Aratinga solsitialis		From the wild (W)	All	Venezuela
Bolborhynchus ferrugineifrons		From the wild (W)	All	Colombia
Charmosyna amabilis		From the wild (W)	All	Fiji
Charmosyna diadema		From the wild (W)	All	All
Cyanoliseus patagonus		From the wild (W)	All	Chile, Uruguay
Deroptyus accipitrinus		From the wild (W)	All	Peru, Suriname
Eclectus roratus		From the wild (W)	All	Indonesia
Forpus xanthops		From the wild (W)	All	Peru
Hapalopsittaca amazonina		From the wild (W)	All	All

SPEC	SPECIES SPECIMEN			
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Hapalopsittaca fuertesi		From the wild (W)	All	Colombia
Hapalopsittaca pyrrhops		From the wild (W)	All	All
Leptosittaca branickii		From the wild (W)	All	All
Lorius domicella		From the wild (W)	All	Indonesia
Nannopsittaca panychlora		From the wild (W)	All	Brazil
Neophema splendida		From the wild (W)	All	Australia
Pionus chalcopterus		From the wild (W)	All	Peru
Poicephalus cryptoxanthus		From the wild (W)	All	the United Republic of Tanzania
Poicephalus gulielmi		From the wild (W)	All	Democratic Republic of the Congo, Côte d'Ivoire
Poicephalus meyeri		From the wild (W)	All	the United Republic of Tanzania
Poicephalus robustus		From the wild (W)	All	Botswana, Democratic Republic of the Congo, Gambia, Guinea, Mali, Namibia, Nigeria, Senegal, Republic of South Africa, Swazi, Togo, Uganda
Poicephalus rufiventris		From the wild (W)	All	the United Republic of Tanzania
Polytelis alexandrae		From the wild (W)	All	Australia
Prioniturus luconensis		From the wild (W)	All	Philippines
Psittacula alexandri		From the wild (W)	All	Indonesia
Psittacula finschii		From the wild (W)	All	Bangladesh, Cambodia
Psittacula roseata		From the wild (W)	All	China
Psittacus erithacus		From the wild (W)	All	Benin, Burundi, Liberia, Mali, Nigeria, Togo
Psittacus erithacus timneh		From the wild (W)	All	Guinea, Guinea-Bissau
Psittrichas fulgidus		From the wild (W)	All	All
Pyrrhura albipectus		From the wild (W)	All	Ecuador
Pyrrhura caliptera		From the wild (W)	All	Colombia
Pyrrhura leucotis		From the wild (W)	All	Brazil
Pyrrhura orcesi		From the wild (W)	All	Ecuador
Pyrrhura picta		From the wild (W)	All	Colombia
Pyrrhura viridicata		From the wild (W)	All	Colombia
Tanygnathus gramineus		From the wild (W)	All	Indonesia
Touit melanonota		From the wild (W)	All	Brazil
Touit surda		From the wild (W)	All	Brazil
Trichoglossus johnstoniae		From the wild (W)	All	Philippines
Triclaria malachitacea		From the wild (W)	All	Argentina, Brazil
CUCULIFORMES				
Musophagidae	turacos			
Musophaga		From the wild (W)	All	Uganda
porphyreolopha		` '		
Tauraco corythaix		From the wild (W)	All	Mozambique
Tauraco fischeri		From the wild (W)	All	the United Republic of Tanzania

SPEC	CIES	SPECIMEN		
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Tauraco macrorhynchus		From the wild (W)	All	Guinea
STRIGIFORMES	OWLS			
Tytonidae	barn owls			
Phodilus prigoginei		From the wild (W)	All	Democratic Republic of the Congo
Tyto aurantia		From the wild (W)	All	Papua New Guinea
Tyto inexpectata		From the wild (W)	All	Indonesia
Tyto manusi		From the wild (W)	All	Papua New Guinea
Tyto nigrobrunnea		From the wild (W)	All	Indonesia
Tyto sororcula		From the wild (W)	All	Indonesia
Strigidae	owls			
Asio clamator		From the wild (W)	All	Peru
Bubo philippensis		From the wild (W)	All	Philippines
Bubo vosseleri		From the wild (W)	All	the United Republic of Tanzania
Glaucidium albertinum		From the wild (W)	All	Democratic Republic of the Congo, Rwanda
Ketupa blakistoni		From the wild (W)	All	China, Japan, Russian Federation
Ketupa ketupu		From the wild (W)	All	Singapore
Nesasio solomonensis		From the wild (W)	All	Papua New Guinea, Solomon Islands
Ninox affinis		From the wild (W)	All	India
Ninox rudolfi		From the wild (W)	All	Indonesia
Otus angelinae		From the wild (W)	All	Indonesia
Otus fulginosus		From the wild (W)	All	Philippines
Otus longicornis		From the wild (W)	All	Philippines
Otus magicus		From the wild (W)	All	Seychelles
Otus mindorensis		From the wild (W)	All	Philippines
Otus mirus		From the wild (W)	All	Philippines
Otus pauliani		From the wild (W)	All	Comoros
Otus roboratus		From the wild (W)	All	Peru
Otus rutilus		From the wild (W)	All	Comoros
Pulsatrix melanota		From the wild (W)	All	Peru
Scotopelia ussheri		From the wild (W)	All	Côte d'Ivoire, Ghana, Guinea, Liberia, Sierra Leone
Strix davidi		From the wild (W)	All	China
Strix woodfordii		From the wild (W)	All	Guinea
APODIFORMES				
Trochilidae	hummingbirds			
Chalostigma olivaceum		From the wild (W)	All	Peru
Heliodoxa rubinoides		From the wild (W)	All	Peru
CORACIFORMES				
Bucerotidae	hornbills			
Buceros rhinoceros		From the wild (W)	All	Thailand
PASSERIFORMES				
Pittidae	pittas			
Pitta nympha		From the wild (W)	All	All (except Vietnam)
Pycnonotidae	bulbuls			
Pycnonotus zeylanicus		From the wild (W)	All	Malaysia
		REPTILIA - REPTIL	ES	
TESTUDINES	TURTLES			

SPEC	CIES	SPECIMEN		
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Emydidae				
Callagur borneoensis		From the wild (W)	All	All
Chrysemys picta		All	Live	All
Cuora amboinensis		From the wild (W)	All	Malaysia
Trachemys scripta elegans		From the wild (W)	Live	All
Testudinae				
Geochelone chilensis		From the wild (W)	All	Argentina
		From the wild (W)	Live	All
Geochelone denticulata		From the wild (W)	All	Bolivia, Ecuador
0		From the wild (W)	Live	All
Geochelone elegans		From the wild (W)	All	Bangladesh, Pakistan
Casabalana sisantas		From the wild (W)	Live	All
Geochelone gigantea		From the wild (W)	All	Seychelles
Geochelone pardalis		From the wild (W)	All	Democratic Republic of the Congo, Mozambique, the United Republic of Tanzania
		Captive-bred	All	Mozambique
Geochelone platynota		From the wild (W)	All	Myanmar
Gopherus agassizii		From the wild (W)	All	All
Gopherus berlandieri		From the wild (W)	All	All
Gopherus polyphemus		From the wild (W)	All	United States of America
Homopus areolatus		From the wild (W)	Live	All
Homopus boulengeri		From the wild (W)	Live	All
Homopus femoralis		From the wild (W)	Live	All
Homopus signatus		From the wild (W)	All	All
Indotestudo elongata		From the wild (W)	All	Bangladesh, China, India
Indotestudo forstenii		From the wild (W)	All	All
Kinixys belliana		From the wild (W)	All	Mozambique
		Captive-bred	All	Benin, Mozambique
Windows and a		From the wild (W)	Live	All
Kinixys erosa		From the wild (W)	All	Togo
Viniva a homoono		From the wild (W)	Live	All
Kinixys homeana		Captive-bred From the wild (W)	All	Benin All
Kinixvs natalensis		From the wild (W)	All	All
Manouria emys		From the wild (W)	All	Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, the Lao People's Democratic Republic, Myanmar, Thailand
		From the wild (W)	Live	All
Manouria impressa		From the wild (W)	All	All (except Vietnam)
		From the wild (W)	Live	All
Psammobates spp.		From the wild (W)	Live	All
Pyxis arachnoides		From the wild (W)	All	All
		From the wild (W)	Live	All
Testudo horsfieldii		From the wild (W)	Live	All
		From the wild (W)	All	China, Pakistan
Pelomedusidae Erymnochelys madagassarionsis		From the wild (W)	All	Madagascar
madagascariensis				

SPEC	SPECIES SPECIMEN			
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Podocnemis erythrocephala		From the wild (W)	All	Colombia, Venezuela
Podocnemis expansa		From the wild (W)	All	Colombia, Ecuador, Guyana, Peru, Trinidad and Tobago, Venezuela
Podocnemis lewyana		From the wild (W)	All	All
Podocnemis sextuberculata		From the wild (W)	All	Peru
Podocnemis unifilis		From the wild (W)	All	Suriname
CROCODYLIA	CROCODILES			
Alligatoridae				
Caiman crocodilus		From the wild (W)	All	El Salvador, Guatemala, Mexico
Palaeosuchus trigonatus		From the wild (W)	All	Guyana
Crocodylidae				
Crocodylus niloticus		From the wild (W)	All	Madagascar
SAURIA	LIZARDS			
Gekkonidae				
Phelsuma abbotti		From the wild (W)	All	Madagascar
Phelsuma antanosy		From the wild (W)	All	Madagascar
Phelsuma barbouri		From the wild (W)	All	Madagascar
Phelsuma befotakensis		From the wild (W)	All	Madagascar
Phelsuma breviceps		From the wild (W)	All	Madagascar
Phelsuma cepediana		From the wild (W)	All	Madagascar
Phelsuma chekei		From the wild (W)	All	Madagascar
Phelsuma comorensis		From the wild (W)	All	Comoros
Phelsuma dubia		From the wild (W)	All	Comoros, Madagascar
Phelsuma edwardnewtonii		From the wild (W)	All	Mauritius
Phelsuma flavigularis		From the wild (W)	All	Madagascar
Phelsuma guttata		From the wild (W)	All	Madagascar
Phelsuma klemmeri		From the wild (W)	All	Madagascar
Phelsuma laticauda		From the wild (W)	All	Comoros
Phelsuma leiogaster		From the wild (W)	All	Madagascar
Phelsuma minuthi		From the wild (W)	All	Madagascar
Phelsuma modesta		From the wild (W)	All	Madagascar
Phelsuma mutabilis		From the wild (W)	All	Madagascar
Phelsuma pronki		From the wild (W)	All	Madagascar
Phelsuma pusilla		From the wild (W)	All	Madagascar
Phelsuma seippi		From the wild (W)	All	Madagascar
Phelsuma serraticauda		From the wild (W)	All	Madagascar
Phelsuma standingi		From the wild (W)	All	Madagascar
Phelsuma trilineata		From the wild (W)	All	Madagascar
Phelsuma v-nigra		From the wild (W)	All	Comoros
Agamidae				
Uromastyx acanthinura		From the wild (W)	All	the Sudan

SPECIES SPECIMEN				
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Uromastyx aegyptia		Animals born in captivity, but which do not fulfil the criteria prescribed by Article 26 of the Ordinance on transboundary movement and trade in protected species	All	Egypt
Uromastyx dispar		From the wild (W)	All	Algeria, Mali
Chalaeleonidae		, ,		<u> </u>
Calumma boettgeri		From the wild (W)	All	Madagascar
Calumma brevicornis		From the wild (W)	All	Madagascar
Calumma capuroni		From the wild (W)	All	Madagascar
Calumma cucullata		From the wild (W)	All	Madagascar
Calumma fallax		From the wild (W)	All	Madagascar
Calumma furcifer		From the wild (W)	All	Madagascar
Calumma gallus		From the wild (W)	All	Madagascar
Calumma gastrotaenia		From the wild (W)	All	Madagascar
Calumma globifer		From the wild (W)	All	Madagascar
Calumma guibei		From the wild (W)	All	Madagascar
Calumma hilleniusi		From the wild (W)	All	Madagascar
Calumma linota		From the wild (W)	All	Madagascar
Calumma malthe		From the wild (W)	All	Madagascar
Calumma nasuta		From the wild (W)	All	Madagascar
Calumma oshaughnessyi		From the wild (W)	All	Madagascar
Calumma parsonii		From the wild (W)	All	Madagascar
Calumma peyrierasi		From the wild (W)	All	Madagascar
Calumma tsaratananensis		From the wild (W)	All	Madagascar
Chamaleo deremensis		From the wild (W)	All	the United Republic of Tanzania
Chamaleo eisentrauti		From the wild (W)	All	Cameroon
Chamaleo ellioti		From the wild (W)	All	Burundi
Chamaleo feae		From the wild (W)	All	Equatorial Guinea
Chamaleo gracilis		From the wild (W)	All	Benin
		Captive-bred	All	Benin, Togo
Chamaleo pfefferi		From the wild (W)	All	Cameroon
Chamaleo werneri		From the wild (W)	All	the United Republic of Tanzania
Chamaleo wiedersheimi		From the wild (W)	All	Cameroon
Furcifer angeli		From the wild (W)	All	Madagascar
Furcifer antimena		From the wild (W)	All	Madagascar
Furcifer balteatus		From the wild (W)	All	Madagascar
Furcifer belalandaensis		From the wild (W)	All	Madagascar
Furcifer bifidus		From the wild (W)	All	Madagascar
Furcifer campani		From the wild (W)	All	Madagascar
Furcifer labordi		From the wild (W)	All	Madagascar
Furcifer minor		From the wild (W)	All	Madagascar
Furcifer monoceras		From the wild (W)	All	Madagascar

Varanus niloticus From the wild (W) All Burundi, Mozambique Varanus prasinus beccarii From the wild (W) All Indonesia Varanus rudicollis From the wild (W) All Philippines Varanus salvadorii From the wild (W) All Indonesia Varanus salvator From the wild (W) All China, India, Singapore Varanus salvator From the wild (W) All Papua New Guinea Varanus teriae From the wild (W) All Australia Varanus yemenensis From the wild (W) All All SERPENTES SNAKES Pythonidae Morelia boeleni From the wild (W) All India, Malaysia (peninsula), Singapore Python reticularis From the wild (W) All Maurithania, Mozambique Python sebae From the wild (W) All Maurithania, Mozambique Boidae Boo constictor From the wild (W) All Benin, Togo Eunectes deschauenseei From the wild (W) All Benin, Togo From the wild (W) All Paraguay	SPEC	CIES	SPEC	CIMEN	
Furcifer petteri Furcifer princeratus Furcifer indiceratus Furcifer indi	SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Furcifor minocoratus Furcifor minocoratus Furcifor minocoratus Furcifor minocoratus Furcifor miliai From the wild (W) All Madagascar Furcifor williai From the wild (W) All Madagascar Gunolpus palidus Conolopus palidus From the wild (W) All Ecuador Conolopus palidus Corolopus palidus From the wild (W) All Ecuador Corolylus tropidostemum From the wild (W) All Esalvador Corolylus tropidostemum Scincidae Corolylus tropidostemum From the wild (W) All Solomon Islands Helodermatidae From the wild (W) All Gustemala, Mexico Helodermatidae From the wild (W) All Gustemala, Mexico America Varanus abigularis From the wild (W) All From the wild (W) All From the wild (W) All Gustemala, Mexico America Varanus bogerti From the wild (W) All Fapus New Guinea From the wild (W) All Fapus New Guinea From the wild (W) From the wild (W) All Fapus New Guinea From the wild (W) From the wild (W) All Fapus New Guinea From the wild (W) From the wild (W) All Fapus New Guinea From the wild (W) From the wild (W) All Fr	Furcifer pardalis		Captive-bred	All	Madagascar
Function ruzetae From the wild (W) All Madagascar Function wilding	Furcifer petteri		From the wild (W)	All	Madagascar
Furcifer willsii From the wild (W) All Becusdor Conologues pallidus From the wild (W) All Ecusdor Ecusdor Conologues pallidus From the wild (W) All Ecusdor Ecusdor Georgia subcristatus From the wild (W) All Ecusdor Ecusdor Georgia subcristatus From the wild (W) All Ecusdor Georgia subcristatus From the wild (W) All El Salvador Georgia subcristatus From the wild (W) All Georgia subcristatus From the wild (W) All Mozambique Georgia subcristatus From the wild (W) All Guatemala, Mexico Georgia subcristatus From the wild (W) All Guatemala, Mexico Georgia subspectum From the wild (W) All Guatemala, Mexico Georgia subspectum From the wild (W) All Guatemala, Mexico Georgia subspectum From the wild (W) All Guatemala, Mexico Georgia subspectum From the wild (W) All Guatemala, Mexico Georgia From the wild (W) All Lesotho Paranus bugerti From the wild (W) All Papua New Guinea Paranus dumerilii From the wild (W) All Papua New Guinea From the wild (W) All Benin Georgia From the wild (W) All Benin Georgia From the wild (W) All Benin Georgia Georgia From the wild (W) All Benin Georgia Georgia From the wild (W) All Georgia Ge	Furcifer rhinoceratus		From the wild (W)	All	Madagascar
Indicate Image: Conclopus pallidus From the wild (W) All Ecuador			From the wild (W)	All	Madagascar
Conologus subcristatus From the wild (W) All Ecuador Conologus subcristatus From the wild (W) All Ecuador Iguana iguana From the wild (W) Cordylus tropidostermum From the wild (W) Scincidae Concidae Concidae Concidae Concidae From the wild (W) All Solomon Islands Helodermatidae From the wild (W) All Guatemala, Mexico Mexico, United States of America Varanidae Varanus abigularis From the wild (W) All Lesotho America Varanus bogerti Varanus concerti Varanus concerti Varanus concerti Varanus concerti From the wild (W) All Benin, Togo Varanus praeirus From the wild (W) All Burundi, Mozambique Captive-bred All Burundi, Mozambique Varanus praeirus Deceari From the wild (W) All Burundi, Mozambique From the wild (W) All Burundi, Mozambique Captive-bred All Burundi, Mozambique Varanus salvadori From the wild (W) All Indonesia From the wild (W) All Burundi, Mozambique Captive-bred All Burundi, Mozambique From the wild (W) All Indonesia From the wild (W) All Burundi, Mozambique Varanus salvadori From the wild (W) All Indonesia From the wild (W) All Denin, Togo Varanus salvadori From the wild (W) All Burundi, Mozambique From the wild (W) All Indonesia From the wild (W) All Philippines Varanus salvadori From the wild (W) All Philippines Varanus salvadori From the wild (W) All Philippines From the wild (W) All Indonesia From the wild (W) All Papua New Guinea From the wild (W) All Indonesia From the wild (W) All Indonesia From the wild (W) All Papua New Guinea From the wild (W) All Indonesia From the wild (W) All Papua New Guinea From the wild (W) All Pap			From the wild (W)	All	Madagascar
Conologius subcristatus From the wild (W) All Ecuador					
Iguana Iguana From the wild (W) All El Salvador	Conolopus pallidus		From the wild (W)	All	Ecuador
Cordylidae Cordylidae Cordylidae Scincidae Corus aebrata Helodermatidae From the wild (W) From the wild (W) All Solomon Islands Helodermatidae From the wild (W) All Guatemala, Mexico Heloderma horridum From the wild (W) All Guatemala, Mexico Heloderma suspectum From the wild (W) All Heloderma suspectum From the wild (W) All Lesotho America Varanus abligularis From the wild (W) All Papua New Guinea Varanus bogerti From the wild (W) All Benin Captive-bred All Benin, Togo Varanus prasinus Captive-bred All Benin, Togo Varanus prasinus Beccari From the wild (W) All Indonesia Varanus prasinus From the wild (W) All Benin, Togo Varanus prasinus From the wild (W) All Benin, Togo Varanus prasinus From the wild (W) All Benin, Togo Varanus prasinus From the wild (W) All Benin, Togo Varanus prasinus From the wild (W) All Benin, Togo Varanus prasinus From the wild (W) All Benin, Togo Varanus prasinus From the wild (W) All Indonesia Varanus prasinus From the wild (W) All Indonesia From the wild (W) All Inda, Singapore From the wild (W) All Inda, Singapore From the wild (W) All Inda, Singapore Python molurus From the wild (W) All Inda, Singapore From the wild (W) All Inda, Singapore Python reticularis From the wild (W) All Inda, Singapore From the wild (W) All Inda, Singapore Python reticularis From the wild (W) All Inda, Singapore From th	Conolopus subcristatus		From the wild (W)	All	
Cordylus ropidosternum	Iguana iguana		From the wild (W)	All	El Salvador
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From the wild (W) All Sciomon Islands	Cordylus tropidosternum		From the wild (W)	All	Mozambique
Helodermatidae					
Heloderma horridum Heloderma suspectum From the wild (W) Heloderma suspectum From the wild (W) Heloderma suspectum From the wild (W) Hall Hespectum Varanidae Varanus albigularis From the wild (W) Hall Hespectum Varanus albigularis From the wild (W) Hall Hespectum Varanus dumerilii From the wild (W) Hall Helodersia (W) Helodersia From the wild (W) Hall Helodersia From the wild (W) Helodersia Helodersia Helodersia Helodersia Helode	Corucia zebrata		` '	All	Solomon Islands
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Calabaria reinhardtii Captive-bred All Benin, Togo Eunectes deschauenseei From the wild (W) All Brazil Eunectes murinus From the wild (W) All Paraguay	Boidae				
Eunectes deschauenseei From the wild (W) All Brazil Eunectes murinus From the wild (W) All Paraguay	Boa constictor		From the wild (W)	All	El Salvador, Honduras
Eunectes deschauenseei From the wild (W) All Brazil Eunectes murinus From the wild (W) All Paraguay	Calabaria reinhardtii		Captive-bred	All	Benin, Togo
Eunectes murinus From the wild (W) All Paraguay			From the wild (W)	All	Brazil
			From the wild (W)	All	Paraguay
Gorigiophis Colubinius From the wild (W) All the United Republic of Tanzania	Gongylophis colubrinus		From the wild (W)	All	the United Republic of Tanzania

SPEC	SPECIES SPECIMEN			
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Colubridae				
Ptyas mucosus		From the wild (W)	All, with the exception of: -marked specimens of skins registered as a part of stock of 102285 skins acquired before 30 September 1993 for which the Secreteriat of the Convention confirmed the validity of the Indonesian export permit	Indonesia
Elapidae				
<i>Naja</i> spp.		From the wild (W)	All	the Lao People's Democratic Republic
		AMPHIBIA-AMPH	IIBIANS	
ANURA	TAIL-LESS AMPHIBIANS			
Dendrobatidae				
Dendrobates auratus		From the wild (W)	All	Nicaragua
Dendrobates pumilio		From the wild (W)	All	Nicaragua
Dendrobates tinctorius		From the wild (W)	All	Suriname
Mantellidae				
Mantella auriantiaca		From the wild (W)	All	Madagascar
Mantella baroni (synonym Phrynomantis maculatus)		From the wild (W)	All	Madagascar
Mantella aff. baroni		From the wild (W)	All	Madagascar
Mantella bernhardi		From the wild (W)	All	Madagascar
Mantella cowani		From the wild (W)	All	Madagascar
Mantella crocea		From the wild (W)	All	Madagascar
Mantella expectata		From the wild (W)	All	Madagascar
Mantella haraldmeieri (synonym M. madagascariensis haraldmeieri)		From the wild (W)	All	Madagascar
Mantella laevigata		From the wild (W)	All	Madagascar
Mantella madagascariensis		From the wild (W)	All	Madagascar
Mantella manery		From the wild (W)	All	Madagascar
Mantella milotympanum (synonym M. aurantiaca milotympanum)		From the wild (W)	All	Madagascar
Mantella nigricans (synonym M. cowani nigricans)		From the wild (W)	All	Madagascar
Mantella pulchra		From the wild (W)	All	Madagascar
Mantella viridis		From the wild (W)	All	Madagascar
Ranidae				
Conraua goliath		From the wild (W)	All	Cameroon
Rana catesbeiana		All	Live	All
		THROPODA - ART	THROPODS	
ARACHNIDA	ARACHNIDS			

SPECIES		SPE	CIMEN		
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN	
ARANEAE	SPIDERS				
Theraphosidae					
Brachypelma		From the wild (W)	All	Nicaragua	
albopilosum	11105050			agua	
INSECTA	MOTHS AND				
LEPIDIPTERA	BUTTERFLIES				
Papilionidae	swallowtails				
Ornithoptera croesus		From the wild (W)	All	Indonesia	
Ornithoptera tithonus		From the wild (W)	All	Indonesia	
Ornithoptera urvillianus		From the wild (W)	All	Solomon Islands	
Ornithoptera victoriae		From the wild (W)	All	Solomon Islands	
Troides andromache		From the wild (W)	All	Indonesia	
		Captive-bred	All	Indonesia	
		MOLLUSCA-MOL	LUSCS		
BIVALVIA VENEROIDA	CLAMS,MUSSELS				
Tridacnidae					
Hippopus hippopus		From the wild (W)	All	New Caledonia (French overseas territory)	
Tridacna crocea		From the wild (W)	All	Vietnam	
Tridacna derasa		From the wild (W)	All	Tonga, New Caledonia (French overseas territory), Philippines, Palau	
Tridacna gigas		From the wild (W)	All	Micronesia, Fiji, Indonesia, Marshall Islands, Palau, Papua New Guinea, Vanuatu	
Tridacna maxima		From the wild (W)	All	New Caledonia (French overseas territory)	
Tridacna squamosa		From the wild (W)	All	New Caledonia (French overseas territory), Tonga, Vietnam	
MESOGASTROPODA					
Strombidae					
Strombus gigas		From the wild (W)	All	Antigua and Barbuda, Barbados, Dominica, Haiti, Trinidad and Tobago	
	(CNIDARIA - CNID	ARIANS		
SCLERATINIA					
Acroporidae					
Montipora caliculata		From the wild (W)	All	Tonga	
Caryophylliidae Catalaphyllia jardinei		From the wild (W)	All, except specimens from the mariculture attached to artificial substrates	Indonesia	
Plerogyra spp.		From the wild (W)	All, except specimens from the mariculture attached to artificial substrates	Indonesia	
Mussidae					

SPEC	IES SPECIMEN			
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Blastomussa spp.		From the wild (W)	All, except specimens from the mariculture attached to artificial substrates	Indonesia
Trachyphilliidae				
Trachyphyllia geoffroyi		From the wild (W)	All, except specimens from the mariculture attached to artificial substrates	Indonesia
		FLORA		
Amaryllidaceae				
Galanthus nivalis		From the wild (W)	All	Bosnia and Herzegovina, Bulgaria, Switzerland, Ukraine
Apocynaceae				
Pachypodium inopinatum		From the wild (W)	All	Madagascar
Pachypodium rosulatum		From the wild (W)	All	Madagascar
Pachypodium sofiance		From the wild (W)	All	Madagascar
Euphorbiaceae				
Euphorbia bulbispina		From the wild (W)	All	Madagascar
Euphorbia guillauminiana		From the wild (W)	All	Madagascar
Euphorbia millotii		From the wild (W)	All	Madagascar
Orchidaceae				
Anacamptis pyramidalis		From the wild (W)	All	Switzerland, Turkey
Barlia robertiana		From the wild (W)	All	Turkey
Cephalanthera rubra		From the wild (W)	All	Norway
Cypripedium japonicum		From the wild (W)	All	China, Democratic People's Republic of Korea, Japan, Republic of Korea
Cypripedium macranthos		From the wild (W)	All	Republic of Korea, Russian Federation
Cypripedium margaritaceum		From the wild (W)	All	China
Cypripedium micranthum		From the wild (W)	All	China
Dactylorhiza incarnata		From the wild (W)	All	Norway
Dactylorhiza latifolia		From the wild (W)	All	Norway
Dactylorhiza romana		From the wild (W)	All	Turkey
Dactylorhiza russowii		From the wild (W)	All	Norway
Dactylorhiza traunsteineri		From the wild (W)	All	Liechtenstein
Himantoglossum hircinum		From the wild (W)	All	Switzerland
Nigritella nigra		From the wild (W)	All	Norway
Ophrys holoserica		From the wild (W)	All	Turkey
Ophrys insectifera		From the wild (W)	All	Liechtenstein, Norway, Romania
Ophrys pallida		From the wild (W)	All	Algeria
Ophrys sphegodes		From the wild (W)	All	Romania, Switzerland

SPEC	IES	SPECII	SPECIMEN	
SCIENTIFIC NAME	COMMON NAME	ORIGIN	TYPE	COUNTRY OF ORIGIN
Ophrys tenthredinifera		From the wild (W)	All	Turkey
Orchis umbilicata		From the wild (W)	All	Turkey
Orchis coriophora		From the wild (W)	All	Russian Federation, Switzerland
Orchis italica		From the wild (W)	All	Turkey
Orchis laxiflora		From the wild (W)	All	Switzerland
Orchis mascula		From the wild (W) Captive-bred	All	Albania
Orchis morio		From the wild (W)	All	Turkey
Orchis pallens		From the wild (W)	All	Russian Federation
Orchis papilionacea		From the wild (W)	All	Romania
Orchis provincialis		From the wild (W)	All	Switzerland
Orchis punctulata		From the wild (W)	All	Turkey
Orchis purpurea		From the wild (W)	All	Switzerland, Turkey
Orchis simia		From the wild (W)	All	Bosnia and Herzegovina, Macedonia, Romania, Switzerland, Turkey
Orchis tridentata		From the wild (W)	All	Turkey
Orchis ustulata		From the wild (W)	All	Russian Federation
Serapias cordigera		From the wild (W)	All	Turkey
Serapias parviflora		From the wild (W)	All	Turkey
Serapias vomeracea		From the wild (W)	All	Switzerland, Turkey
Spiranthes spiralis		From the wild (W)	All	Liechtenstein/Switzerland
Primulaceae				
Cyclamen intaminatum		From the wild (W)	All	Turkey
Cyclamen mirabile		From the wild (W)	All	Turkey
Cyclamen pseudibericum		From the wild (W)	All	Turkey
Cyclamen trochopteranthum		From the wild (W)	All	Turkey

G	ROUP	SPE	SPECIES	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
MAMMALIA	MAMMALS			
RODENTIA	RODENTS			
Castoridae	beavers			
		Castor canadensis	Canadian beaver	
Muridae	rats and voles			
		Ondatra zibethicus	muskrat	
CARNIVORA	CARNIVORES			
Canidae	dogs			
		Canis latrans	coyote	
		Canis lupus	wolf	
Felidae	cats			
		Lynx canadensis	Canadian lynx	
		Lynx rufus	red lynx (bobcat)	
Mustelidae	martens			
		Lutra canadensis	Canadian river otter	
		Martes americana	American marten	
		Martes pennanti	fisher	
		Martes zibellina	sable	
		Mustela erminea	ermine	
		Taxidea taxus	American badger	
Procyonidae	raccoons			
		Procyon lotor	North American raccoon	

HEADING NUMBER	DESCRIPTION
ex 4103	Other animal raw hides and skins (fresh or salted, dried, limed, pickeled or otherwise preserved, but not tanned, parchment-dressed or furhter processed), whether or not dehaired or split, other than those excluded by note 1b) or 1c) to chapter 41
ex 4103 90 00	Other
ex 4310	Raw furskins (including heads, tails, paws or other pieces or cuttings, suitable for furriers' use), other than raw hides and skins of heading 4101, 4102 or 4103
ex 4310 40 00	Of beavers, whole, with or without head, tail or paws
ex 4301 80	Other furs, entire, with or without head, tail or paws
ex 4301 80 50	Of wild felines
ex 4301 80 90	Other
ex 4301 90 00	Heads, tails, paws and other parts or residues useful to furriers
ex 4302	Tanned or dressed furskins (including heads, tails, paws or other pieces or cuttings) unassemled or assembled (without the addition of other materials) other than those of heading 4303: -whole skins, with or without head, tails and paws, not assembled
ex 4302 19	Other
ex 4302 19 10	Of beavers
ex 4302 19 70	Of wild felines
ex 4302 19 90	Other
ex 4302 20 00	Heads, tails, paws and other pieces or cuttings, unassembled
ex 4302 30	Whole skins and their parts or pieces, assembled
ex 4302 30 10	Dropped furskins'; Other
ex 4302 30 35	Of beavers
ex 4302 30 71	Of wild felines
ex 4302 30 75	Other
ex 4303	Articles of apparel, clothing accessories and other articles
ex 4303 10	Articles of apparel and clothing accessories
ex 4303 10 90	Other
ex 4303 90 00	Other

ANNEX VII CHAPTER 3

	SPEC	CIFS
COUNTRY	SCIENTIFIC NAME	COMMON NAME
Belize	Procyon lotor	North American raccoon
Bulgaria	Canis lupus	wolf
Canada	Canis latrans	coyote
	Canis lupus	wolf
	Castor canadensis	Canadian beaver
	Lutra canadensis	Canadian river otter
	Lynx canadensis	Canadian lynx
	Lynx rufus	red lynx (bobcat)
	Martes americana	American marten
	Martes pennanti	fisher
	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
	Procyon lotor	North American raccoon
	Taxidea taxus	American badger
China	Canis lupus	wolf
	Martes zibellina	sable
	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
Czech Republic	Canis lupus	wolf
Ozeon Republic	Mustela erminea	lermine
	Ondatra zibethicus	muskrat
El Salvador	Procyon lotor	North American raccoon
Grenland (autonomous overseas territory of Denmark)	Canis lupus	wolf
Hungary	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
Jordan	Canis lupus	wolf
Republic of Korea	Martes zibellina	sable
·	Canis lupus	wolf
Lebanon	Canis lupus	wolf
Mexico	Canis lupus	wolf
	Canis latrans	coyote
	Castor canadensis	Canadian beaver
	Lynx rufus	red lynx (bobcat)
	Ondatra zibethicus	muskrat
	Procyon lotor	North American raccoon
	Taxidea taxus	American badger
Republic of Moldova	Canis lupus	wolf
-	Mustela erminea	ermine
Nicaragua	Procyon lotor	North American raccoon
Norway	Canis lupus	wolf
-	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
Pakistan	Canis lupus	wolf
	Mustela erminea	ermine
Panama	Procyon lotor	North American raccoon
Poland	Canis lupus	wolf
	Martes zibellina	sable
	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
Romania	Canis lupus	wolf
	i	

ANNEX VII CHAPTER 3

COUNTRY		SPECIES
COUNTRY	SCIENTIFIC NAME	COMMON NAME
Russian Federation	Canis lupus	wolf
	Martes zibellina	sable
	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
	Procyon lotor	North American raccoon
Slovakia	Canis lupus	wolf
	Martes zibellina	sable
	Mustela erminea	ermine
Slovenia	Canis lupus	wolf
	Ondatra zibethicus	muskrat
Turkey	Canis lupus	wolf
United States of America	Canis latrans	coyote
	Canis lupus	wolf
	Castor canadensis	Canadian beaver
	Lutra canadensis	Canadian river otter
	Lynx canadensis	Canadian lynx
	Lynx rufus	red lynx (bobcat)
	Martes americana	American marten
	Martes pennanti	fisher
	Mustela erminea	ermine
	Ondatra zibethicus	muskrat
	Procyon lotor	North American raccoon
	Taxidea taxus	American badger

Annex VII Chapter 4

		_		
	CERTIFICATE		etent authority:	
		(name,	address, country)	
	FOR SKINS AND FURS AND DERIVATIVES			
	THEREOF ORIGINATING FROM ANIMAL			
	SPECIES LISTED IN ANNEX VII TO THE			
	ORDINANCE ON TRANSBOUNDARY			
	MOVEMENT AND TRADE IN PROTECTED SPECIES	Certific	cate no.:	
	Description of the derivative:	ocrtini	sate no	2. Quantity:
				3. Net mass:
				(kg)
	4. Scientific name of the species:			5. Heading no.:
A	1. Solentine figure of the species.			5. Heading He
	6. Derivatives originate from specimens of	f the an	mals that are (1):	
	□ captured in (indica	te the co	ountry)	
	□ born and bred in captivity			
	1. Description of the derivative:			2. Quantity:
				3. Net mass:
				(kg)
В	4. Scientific name of the species:			5. Heading no.:
В	1. Scientific flame of the species.			o. Heading no
	6. Derivatives originate from specimens	of the ar	nimals that are ⁽¹⁾ :	
	□ captured in (indica	ate the c	ountry)	
	 born and bred in captivity 			
	 Description of the derivative: 			2. Quantity:
				3. Net mass:
				(kg)
	4. Description of the derivative:			5. Heading no.:
			(4)	
	6. Derivatives originate from specimens			
	□ captured in(indica	ate the c	ountry)	
	□ born and bred in captivity			
	Description of the derivative:			2. Quantity:
	1. Description of the derivative.			z. Quantity.
				3. Net mass:
				(kg)
D	4. Scientific name of the species:			5. Heading no.:
	Derivatives originate from specimens of the specimen	of the ar	simals that are (1).	l
	captured in (indicate it of the speciments of			
	born and bred in captivity			
	25 Traina broa in captivity			
	Place and date of issue:		Signature and seal of the	ne competent authority:
			J	1

(1) Mark the appropriate box In case boxes B, C and D are left empty, they should be crossed out

Instructions and explanations

- 1. Indicate the description of the derivative with the heading listed in Chapter 2 of Annex VII of the Ordinance on transboundary movement and trade in protected species
- 2, 3. Indicate quantity and net mass
- 4. Indicate the scientific name of the species referred to in Chapter 1 of Annex VII to the Ordinance on transboundary movement and trade in protected species
- 5. For derivatives indicate a heading number referred to in Chapter 2 to Annex VII to the Ordinance on transboundary movement and trade in protected species
- 6. Indicate the name of the country in which the animal species for which the certificate is issued are taken from the wild or indicate in the appropriate place if the specimens are born and bred in captivity

Boxes A, B, C and D are used for various specimens of animal species or the relevant derivatives thereof. Cross out unused boxes.

GRO	UP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
MAMMALS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Talpidae	Talpa europaea		+P806
	Rhinolophidae	Rhinolophus blasii		
		Rhinolophus euryale		
		Rhinolophus ferrumequinum		
		Rhinolophus hipposideros		
		Rhinolophus mehelyi		
	Vespertilionide	Barbastella barbastellus		
		Eptesicus nilssoni		
		Eptesicus serotinus		
		Hypsugo savii		
		Miniopterus schreibersi		
		Myotis aurascens		
		Myotis bechsteini		
		Myotis blythii		
		Myotis brandti		
		Myotis capaccinii		
		Myotis dasycneme		
		Myotis daubentoni		
		Myotis emarginatus		
		Myotis myotis		
		Myotis mystacinus		
		Myotis nattereri		
		Nyctalus lasiopterus		
		Nyctalus leisleri		
		Nyctalus noctula		
		Pipistrellus kuhlii		
		Pipistrellus nathusii		
		Pipistrellus pipistrellus		
		Pipistrellus pygmaeus		
		Plecotus auritus		
		Plecotus austriacus		
		Plecotus kolombatovici		
		Plecotus macrobullaris		
		Vespertilio murinus		
	Molossidae	Tadarida teniotis		
	Sciuridae	Spermophilus citellus		
	Myoxidae	Dryomys nitedula		
		Muscardinus avellanarius		
		Myoxus glis		+P801
	Muridae	Apodemus flavicollis		+P802
		Cricetus cricetus		
		Dinaromys bogdanovi		
		Nannospalax leucodon		

GRO	DUP	SPECIES		REMARK
SCIENTIFIC NAME COMMON NAME		SCIENTIFIC NAME	COMMON NAME	
BIRDS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Accipitridae	Aquila nipalensis (only the specimens taken from the wild in the Republic of Croatia; other specimens of that species are listed in Annex II to this Ordinance)		
	Aegithalidae	Aegithalos caudatus		
	Alaudidae	Calandrella brachydactyla		
		Eremophila alpestris		
		Lullula arborea		
		Melanocorypha calandra		
	Alcedinidae	Alcedo atthis		
	Anatidae	Anas acuta		
		Anas clypeata		
		Anas penelope		
		Anas strepera		
		Anser albifrons flavirostris		
		Anser anser		
		Anser brachyrhynchus		
		Anser erythropus		
		Aythya marila		
		Branta bernicla		
		Bucephala clangula		
		Clangula hyemalis		
		Cygnus columbianus		
		Cygnus cygnus		
		Melanita fusca		
		Melanita nigra		
		Mergus albellus		
		Mergus merganser		
		Mergus serrator		
		Netta rufina		
		Somateria mollisima		
		Tadorna feruginea		
		Tadorna tadorna		
	Apodidae	Apus apus		
		Apus pallidus		
		Tachymarptis melba		
	Ardeidae	Ardea purpurea		1
		Ardeola ralloides		
		Botaurus stellaris		
		Egretta garzetta gularis		
		Ixobrychus minutus		
		Nycticorax nycticorax		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Bombycillidae	Bombycilla garrulus		
	Burhinidae	Burhinus oedicnemus		
	Caprimulgidae	Caprimulgus europaeus		
	Certhiidae	Certhia brachydactyla		
		Certhia familiaris		
	Charadriidae	Charadrius alexandrinus		
		Charadrius dubius		
		Charadrius hiaticula		
		Charadrius morinellus		
		Pluvialis apricaria		
		Pluvialis squatarola		
		Charadrius alexandrinus		
	Ciconiidae	Ciconia ciconia		
	Cinclidae	Cinclus cinclus		
	Columbidae	Columba oenas		
	Coracidae	Coracias garrulus		
	Corvidae	Corvus corax		
		Nucifraga caryocatactes		
		Pyrrhocorax graculus		
	Cuculidae	Clamator glandarius		
	Emberizidae	Calcarius Iapponicus		
		Emberiza cia		
		Emberiza cirlus		
		Emberiza citrinella		
		Emberiza hortulana		
		Emberiza leucocephala		
		Emberiza melanocephala		
		Emberiza schoeniclus		
		Plectrophenax nivalis		
	Fringilidae	Acanthis cannabina		
		Acanthis flammea		
		Acanthis flavirostris		
		Carduelis carduelis		
		Carduelis chloris		
		Carduelis spinus		
		Carpodacus erythrinus		
		Coccothraustes coccothraustes		
		Loxia curvirostra		
		Loxia pytyopsittacus		
		Montifringilla nivalis		
		Pyrrhula pyrrhula		
		Serinus citrinella		
		Serinus serinus		
	Gaviidae	Gavia adamsii		
		Gavia arctica		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Gavia immer		
		Gavia stellata		
	Glareolidae	Cursorius cursor		
		Glareola nordmani		
		Glareola pratincola		
	Haematopodidae	Haematopus ostralegus		
	Hirundinidae	Delichon urbica		
		Hirundo daurica		
		Hirundo rupestris		
		Hirundo rustica		
		Riparia riparia		
	Hydrobatidae	Hydrobates pelagicus		
	Laniidae	Lanius collurio		
		Lanius excubitor		
		Lanius minor		
		Lanius senator		
	Laridae	Larus argentatus		
		Larus audouinii		
		Larus canus		
		Larus delawarensis		
		Larus fuscus		
		Larus genei		
		Larus marinus		
		Larus melanocephalus		
		Larus minutus		
		Rissa tridactyla		
	Meropidae	Merops apiaster		
	Motacillidae	Anthus campestris		
		Anthus cervinus		
		Anthus novaeseelandiae		
		Anthus pratensis		
		Anthus spinoletta		
		Anthus trivialis		
		Motacilla alba		
		Motacilla cinerea		
		Motacilla citreolla		
		Motacilla flava		
	Muscicapidae	Acrocephalus agricola		
		Acrocephalus arundinaceus		
		Acrocephalus melanopogon		
		Acrocephalus paludicola		
		Acrocephalus palustris		
		Acrocephalus schoenobaenus		
		Acrocephalus scirpaceus		
		Cettia cetti		

GROUP		SPEC	IES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Cisticola juncidis		
		Erithacus Iuscinia		
		Erithacus megarhynchos		
		Erithacus rubecula		
		Erithacus svecicus		
		Ficedula albicollis		
		Ficedula hypoleuca		
		Ficedula parva		
		Ficedula semitorquata		
		Hippolais icterina		
		Hippolais olivetorum		
		Hippolais pallida		
		Hippolais polyglotta		
		Locustella fluviatilis		
		Locustella luscinioides		
		Locustella naevia		
		Monticola saxatilis		
		Monticola solitarius		
		Muscicapa striata		
		Oenanthe hispanica		
		Oenanthe oenanthe		
		Oenanthe pleschanka		
		Panurus biarmicus		
		Phoenicurus ochruros		
		Phoenicurus phoenicurus		
		Phylloscopus bonelli		
		Phylloscopus collybitus		
		Phylloscopus inornatus		
		Phylloscopus proregulus		
		Phylloscopus sibilatrix		
		Phylloscopus trochilus		
		Regulus ignicapillus		
		Regulus regulus		
		Saxicola rubetra		
		Saxicola torquata		
		Sylvia atricapilla		
		Sylvia borin		
		Sylvia cantillans		
		Sylvia communis		
		Sylvia curruca		
		Sylvia hortensis		
		Sylvia melanocephala		
		Sylvia nisoria		
		Sylvia undata		
		Turdus pilaris		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Turdus torquatus		
	Oriolidae	Oriolus oriolus		
	Paridae	Parus ater		
		Parus caeruleus		
		Parus cristatus		
		Parus cyanus		
		Parus lugubris		
		Parus major		
		Parus montanus		
		Parus palustris		
	Passeridae	Petronia petronia		
	Pelecanidae	Pelecanus onocrotalus		
	Phalacrocoracidae	Phalacrocorax aristotelis		
		Phalacrocorax carbo		nesting population
		Phalacrocorax pygmaeus		
	Picidae	Dendrocopos leucotos		
		Dendrocopos major		
		Dendrocopos medius		
		Dendrocopos minor		
		Dendrocopos syriacus		
		Dryocopus martius		
		Jynx torquilla		
		Picoides tridactylus		
		Picus canus		
		Picus viridis		
	Podicipedidae	Podiceps auritus		
		Podiceps grisegena		
		Podiceps nigricollis		
	Procellaridae	Calonectris diomedea		
		Puffinus yelkouan		
	Prunellidae	Prunella collaris		
		Prunella modularis		
	Pteroclididae	Syrrhaptes paradoxus		
	Rallidae	Crex crex		
		Porphyrio porphyrio		
		Porzana parva		
		Porzana porzana		
		Porzana pusilla		
		Rallus aquaticus		
	Recurvirostridae	Himantopus himantopus		
		Recurvirostra avosetta		
	Remizidae	Remiz pendulinus		
	Scolopacidae	Actitis hypoleucos		
		Arenaria interpres		
		Calidris alba		1

GROUP		SPEC	ES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Calidris alpina		
		Calidris canutus		
		Calidris ferruginea		
		Calidris maritima		
		Calidris minuta		
		Calidris temminckii		
		Gallinago media		
		Limicola falcinellus		
		Limosa lapponica		
		Limosa limosa		
		Lymnocryptes minima		
		Numenius arquata		
		Numenius phaeopus		
		Phalaropus fulicaria		
		Phalaropus lobatus		
		Philomachus pugnax		
		Gallinago gallinago		nesting population
		Scolopax rusticola		nesting population
		Tringa erythropus		
		Tringa glareola		
		Tringa nebularia		
		Tringa ochropus		
		Tringa stagnatilis		
		Tringa totanus		
		Xenus cinereus		
	Sittidae	Sitta europaea		
		Sitta neumayer		
		Tichodroma muraria		
	Stercorariidae	Catharacta skua		
		Stercorarius longicaudus		
		Stercorarius parasiticus		
		Stercorarius pomarinus		
	Sternidae	Chlidonias hybridus		
		Chlidonias leucopterus		
		Chlidonias nigra		
		Gelochelidon nilotica		
		Hydroprogne caspia		
		Sterna albifrons		
		Sterna hirundo		
		Thalasseus sandvicensis		
	Sturnidae	Sturnus roseus		
	Sulidae	Sula bassana		
	Tetraonidae	Bonasa bonasia		
		Tetrao tetrix		

GRO	OUP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Tetrao urogallus		
	Threskiornithidae	Plegadis falcinellus		
	Troglodytidae	Troglodytes troglodytes		
	Upupidae	Upupa epops		
REPTILES	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Emyidae	Emys orbicularis		
		Mauremys caspica		
	Gekkonidae	Hemidactylus turcicus		
		Tarentola mauretanica		
	Lacertidae	Algyroides nigropunctatus		
		Lacerta horvathi		=P801
		Lacerta mosorensis		=P802
		Lacerta agilis		
		Lacerta trilineata		
		Lacerta viridis		
		Lacerta bilineata		
		Lacerta vivipara		
		Podarcis melisellensis melisellensis		
		Podarcis melisellensis ssp.n.		islands of Lastovo
		Podarcis muralis		+P803
		Podarcis sicula adriatica		Mala Palagruža and Sušac
		Podarcis sicula ragusae		Dubrovnik
	Anguidae	Pseudopus apus		=P803
	Scincidae	Ablepharus kitaibelii		
	Amphisbaenidae	Blanus strauchi		
	Typhlopidae	Typhlops vermicularis		
	Colubridae	Coluber caspius		=P804
		Coluber gemonensis		=P805
		Coluber najadum		=P806
		Coluber viridiflavus		=P807
		Coronella austriaca		
		Elaphe longissima		=P808
		Elaphe quatuorlineata		1
		Elaphe situla		=P809
		Malpolon monspessulanus		†
		Natrix tessellata		1
		Telescopus fallax		†
AMPHIBIANS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Salamandridae	Salamandra atra		
		Triturus carnifex		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Triturus dobrogicus		
		Triturus vulgaris		+P804
	Proteidae	Proteus anguinus		
	Discoglossidae	Bombina bombina		
		Bombina variegata		
	Pelobatidae	Pelobates fuscus		
	Bufonidae	Bufo viridis		
	Hylidae	Hyla arborea		
	Ranidae	Rana arvalis		
		Rana dalmatina		
		Rana latastei		
		Rana lessonae		
		Rana temporaria		
FISH	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Cetorhinidae	Cetorhinus maximus (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
	Lamnidae	Carcharodon carcharias (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
	Myliobatidae	Mobula mobular		
	Sygnathidae	Hippocampus hippocampus (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
		Hippocampus guttulatus (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		=P810
	Petromyzontidae	Eudontomyzon danfordi		
		Eudontomyzon mariae		
		Lampetra planeri		
		Lethenteron zanandreai		
		Petromyzon marinus		
	Acipenseridae	Acipenser naccarii (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Huso huso (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
	Clupeidae	Alosa fallax		
		Alosa pontica		
	Cyprinidae	Alburnus albidus		
		Aulopyge huegelii		
		Barbus balcanicus		
		Barbus plebejus		
		Chalcalburnus chalcoides		
		Chondrostoma phoxinus		
		Gobio albipinnatus		
		Gobio kesslerii		
		Gobio uranoscopus		
		Leucaspius delineatus		
		Telestes ukliva		
		Squalius illyricus		
		Squalius microlepis		
		Telestes polylepis		
		Leuciscus souffia		
		Leuciscus svallize		
		Telestes turskyi		
		Scardinius plotizza		
		Squalius zrmanjae		
		Pelecus cultratus		
		Phoxinellus adspersus		
		Phoxinellus alepidotus		
		Phoxinellus croaticus		
		Phoxinellus dalmaticus		
		Phoxinellus fontinalis		
		Phoxinellus ghetaldii		
		Phoxinellus jadovensis		
		Phoxinellus krbavensis		
		Phoxinellus metohiensis		ļ
		Phoxinellus pstrossii		
		Rhodeus amarus		1
	Cabitidas	Rutilus basak		
	Cobitidae	Cobitis elongata		_
		Cobitis dalmatina		+
		Cobitis narentana		
		Misgurnus fossilis		
	Cunvinada: tida -	Sabanejewia balcanica		
	Cyprinodontidae	Aphanius fasciatus		
	Umbridae	Umbra krameri		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Percidae	Gymnocephalus baloni		
		Gymnocephalus schraetser		
		Sander volgense		
		Zingel streber		
		Zingel zingel		
	Gobiidae	Knipowitschia croatica		
		Knipowitschia mrakovcici		
		Padogobius bonelli		
		Pomatoschistus canestrinii		
		Pomatoshistus tortonesei		
	Blennidae	Salaria fluviatilis		
	Salmonidae	Hucho hucho		+P805
		Salmo dentex		
		Salmo marmoratus		
		Salmo farioides		
		Salmo visovacensis		
		Salmothymus obtusirostris krkensis		
		Salmothymus obtusirostris oxyrhynchus		
	Cottidae	Cottus ferrugineus		
ECHINODERMS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
SEA STARS	Ophiasteridae	Ophidiaster ophidianus		
INSECTS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
BUTTERFLIES	Lycaenidae	Lycaena dispar		
		Maculinea alcon		
		Maculinea arion		
		Maculinea nausithous		
		Maculinea rebeli		
		Maculinea teleius		
	Nymphalidae	Apatura metis		
		Coenonympha oedippus		
		Erebia gorge vagana		
		Erebia medusa		
		Erebia oeme megaspodia		
		Erebia styrius gorana		
		Erebia styrius kleki		
		Euphydryas aurinia		
		Lopinga achine		
		Nymphalis vaualbum		
		Nymphalis xanthomelas		
	1			1
		Proterebia afra dalmata		
	Papilionidae	Proterebia afra dalmata Papilio alexanor		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Parnassius mnemosyne		
		Zerynthia cerisyi dalmacijae		
		Zerynthia polyxena		
	Pieridae	Leptidea morsei		
		Leptidea morsei major		
DARNERS	Calopterygidae	Calopteryx balcanica		
	Lestidae	Chalcolestes parvidens		
		Lestes barbarus		
		Lestes virens		
		Lestes macrostigma		
		Lestes sponsa		
		Lestes dryas		
	Coenagrionidae	Erythromma najas		
		Coenagrion mercuriale		
		Coenagrion ornatum		
		Coenagrion pulchellum		
		Ceriagrion tenellum		
	Aeshnidae	Aeshna viridis		
		Anax parthenope		
		Hemianax ephippiger		
		Calieschna microstigma		
	Gomphidae	Gomphus pulchellus		
		Lindenia tetraphylla		
		Lindenia sp.		
		Ophiogomphus cecilia		
	Cordulegastridae	Cordulegaster heros		
	Corduliidae	Epitheca bimaculata		
	Libellulidae	Orthetrum coerulescens		
		Orthetrum ramburi		
		Sympetrum vulgatum		
		Sympetrum meridionale		
		Sympetrum fonscolombei		
		Sympetrum flaveolum		
		Sympetrum depressiusculum		
		Sympetrum pedemontanum		
		Leucorrhinia caudalis		
		Leucorrhinia pectoralis		
CRABS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Acartiidae	Acartia italica		
	Astacidae	Astacus astacus		
		Austropotamobius pallipes		
		Austropotamobius torrentium		

GRO	GROUP SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
LEECHES	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Hirudidae	Hirudo medicinalis (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
		Haemopis sanguisuga		
CLAMS, MUSSELS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Mytilidae	Lithophaga litophaga (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
	Pinnidae	Atrina fragilis		
		Pinna nobilis		
	Unionidae	Unio crassus		
	Pholadidae	Pholas dactylus		
SNAILS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Neritidae	Theodoxus transversalis		
	Aciculidae	Platyla elisabethae		
		Platyla maasseni		
	Tonnidae	Tonna galea		
	Cyclophoridae	Cochlostoma braueri		
		Cochlostoma elegans		
		Cochlostoma tergestinum		
		Cochlostoma nanum		
		Cochlostoma kleciaki		
		Cochlostoma gracile		
		Cochlostoma sturan		
		Cochlostoma scalarinum		
	Cypropoidos	Cochlostoma auritum		
	Cypraeacidae Mitridae	Luria lurida Mitra zonata		
	Pyramidulidae	Pyramidula rupestris		
	Ellobiidae	Carychium mariae		
		Zospeum alpestre		
		Zospeum pretneri		
	Planorbidae	Anisus vorticularis		
	Vertiginidae	Truncatellina lussinensis		
		Truncatellina velkovrhi		
		Vertigo angustior		
		Vertigo moulinsiana		
	Chondrinidae	Granaria illyrica		
		Chondrina spelta		

GROI	GROUP SPECIES		ES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Pupillidae	Lauria reischuetzi		
		Agardhiella stenostoma		
	Enidae	Chondrula tridens		
		Chondrula mletaki		
		Chondrula quinquedentata		
		Chondrula dalmatica		
		Spelaeoconcha paganettii		
	Ferussaciidae	Cecilioides acicula		
		Cecilioides dalmatina		
	Clausiliidae	Herilla bosniensis		
		Medora albescens		
		Medora almissana		
		Medora dalmatina		
		Medora hiltrudae		
		Medora armata		
		Medora stenostoma		
		Medora equestris		
		Medora agnatha		
		Medora contracta		
		Agathylla exarata		
		Agathylla sulcosa		
		Agathylla abrupta		
		Agathylla lamellosa		
		Agathylla narentana		
		Agathylla strigillata		
		Agathylla formosa		
		Agathylla viperina		
		Cochlodina laminata		
		Cochlodina costata		
		Cochlodina commutata		
		Cochlodina polita		
		Cochlodina triloba		
		Cochlodina fimbriata		
		Delima laevissima		
		Delima binotata		
		Delima pfeifferi		
		Delima conspurcata		
		Delima pellucida		
		Delima decipiens		
		Delima helenae		
		Delima pachystoma		
		Delima albocincta		
		Delima substricta		
		Delima subcylindrica		
		Delima semirugata		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Delima bilabiata		
		Delima vidovichii		
		Delima hiltrudis		
		Delima giselae		
		Dilataria succineata		
		Dilataria pirostoma		
		Dilataria marcki		
		Dilataria raricosta		
		Dilataria pulchella		
		Dilataria marchesetti		
		Dilataria capillacea		
		Dilataria mathildae		
		Dilataria dazuri		
		Charpentieria ornata		
		Siciliaria stigmatica		
		Siciliaria gibbula		
		Papillifera papillaris		
		Ruthenica filograna		
		Pseudofusulus varians		
		Macrogastra ventricosa		
		Macrogastra densestriata		
		Macrogastra plicatula		
		Macrogastra asphaltina		
		Clausilia pumila		
		Fusulus interruptus		
		Balea biplicata		
		Bulgarica vetusta		
	Agriolimacidae	Deroceras absoloni		
	Vitrinidae	Semilimax velebitica		
	Zonitidae	Vitrea zilchi		
		Vitrea poljanica		
		Gyralina mljetica		
		Meledella werneri		
		Troglaegopis mosorensis		
		Aegopis septentrionalis		
		Aegopis compressus		
		Oxychilus dalmatinus		
		Oxychilus wagneri		
	Milacidae	Tandonia croatica		
		Tandonia dalmatina		
		Tandonia fejervaryi		
		Tandonia jablanacensis		
		Tandonia lagostoma		
		Tandoniax reuleauxi		<u> </u>
		Tandonia schleschi		

GRO	UP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Helicidae	Cernuella jonica		
		Helicella vukotinovici		
		Helicella homoleuca		
		Trichia erjaveci		
		Liburnica crinita		
		Liburnica setigera		
		Vidovicia coerulans		
		Eobania vermiculata		
CNIDARIANS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
CORALS	Gerardidae	Gerardia savaglia		
	Dendrophyllidae	Asteroides calcycularis		
SPONGES	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Geodiidae	Geodia cydonium		
	Tethyidae	Tethya sp. Plur.		
	Axinellidae	Axinella canabina		
	Axinellidae	Axinella polypoides		
Entire underground fauna in the Republic of Croatia				
FLORA	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
ALGAE	Cystoseiraceae	Cystoseira amentacea		including var. stricta and var. spicata
	Cystoseiraceae	Cystoseira mediterranea		
	Cystoseiraceae	Cystoseira spinosa		including the species Cystoseira adriatica
	Cystoseiraceae	Cystoseira zosteroides		
	Laminariaceae	Laminaria rodriguezii		1
		-		
LICHENS		Arthonia cretacea		
		Bacidia clavigera		
		Caloplaca likensis		
		Caloplaca spalatensis		
		Dermatocarpon microphyllinum		
		1	- 	
		Lecania heterocarpa		
		Lecania heterocarpa Lecania guarnerica		
		Lecania quarnerica		
		Lecania quarnerica Lecania subisabellina		
		Lecania quarnerica Lecania subisabellina Lecanora latzelii		
		Lecania quarnerica Lecania subisabellina		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Ramalina scoriseda		
		Solenopsora marina		
		Verrucaria adriatica		
		Verrucaria bicincta		
		Verrucaria dalmatica		
		Verrucaria dinarica		
		Verrucaria gravosana		
		Verrucaria parapinguis		
MOSSES	Amblystegiaceae	Drepanocladus vernicosus (Mitt.) Warnst.		=P811
	Aytoniaceae	Mannia triandra (Scop.) Grolle		
	Buxbaumiaceae	Buxbaumia viridis (Moug.) Moug. & Nestl.		
	Cephaloziellaceae	Cephaloziella letzeliana Schiffn.		
	Pottiaceae	Pottia illyrica Latz.		
		Weissia dalmatica Latz.		
	Ricciaceae	Riccia latzelii Schiff.		
		Riccia levierii Schiffn.		
	Sphagnaceae	Sphagnum spp.		
FERNS	Aspleniaceae	Asplenium hybridum (Milde) Bange		
		Asplenium sagittatum (DC.) Bange		
	Dryopteridaceae	Polystichum illyricum Borbas		
	Equisetaceae	Equisetum hyemale L.		
		Equisetum variegatum Schleich.		
	Lycopodiaceae	Lycopodiella inundata (L.) Holub		
		Diphasiastrum complanatum (L.) Holub		
	Marsileaceae	Marsilea quadrifolia L.		
		Pilularia globulifera L.		
		Pilularia minuta Durie ex A.Braun		
	Ophioglossaceae	Botrychium matricariifolium (Retz.) A. Br. ex Koch		
		Ophioglossum lusitanicum L.		
	Osmundaceae	Osmunda regalis L.		
	Selaginellaceae	Selaginella helvetica (L.) Spring.		
SPERMATOPHYTA	Alismataceae	Alisma gramineum Lej.		
		Baldellia ranunculoides (L.) Parl.		
		Caldesia parnassifolia (L.) Parl.		
		Damasonium polyspermum Cosson		
		Luronium natans (L.) Rafin.		
	Altheniaceae	Althenia filiformis Petit		
	Amaryllidaceae	Pancratium maritimum L.		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Sternbergia colchiciflora Waldst. et		
	Apiaceae	Kit. Apium repens (Jacq.) Lag.		
	Tiplacodo			+
		Angelica palustris (Besser) Hoffm.		
		Athamanta turbith (L.) Brot. ssp. haynaldii (Borbás et Uechtr.) Tutin		
		Bupleurum lancifolium Hornem.		
		Bupleurum karglii Vis.		
		Cachrys ferulacea (L.) Calestani		
		Chaerophyllum coloratum L.		
		Eryngium alpinum L.		
		Echinophora spinosa L.		
		Eryngium planum L.		
		Grafia golaka (Hacq.) Rchb.		
		Hydrocotyle vulgaris L.		
		Orlaya kochii Heywood		
		Petroselinum segetum (L.) Koch		
		Peucedanum aegopodioides (Boiss.) Vandas		
		Peucedanum coriaceum Rchb.		
		Portenschlagiella ramosissima (Port.) Tutin		
		Seseli malyi A. Kern.		
		Seseli tomentosum Vis.		
		Turgenia latifolia (L.) Hoffm.		
	Aquifoliaceae	llex aquifolium L.		
	Araceae	Arum orientale M.Bieb. ssp. longispathum (Rchb.) Engl.		
		Calla palustris L.		
	Aristolochiaceae	Aristolochia croatica Horvatić		
		Asarum europaeum L. ssp. italicum Kukkonen et Uotila		
	Asclepiadaceae	Cynanchum acutum L.		
		Periploca graeca L.		1
		Vincetoxicum hirundinaria Medik.		1
	1_	ssp. adriaticum (Beck) Markgr.		
	Asteracee	Achillea ptarmica L.		
		Achillea virescens (Fenzl) Heimerl		
		Amphoricarpos neumayeri Vis. ssp. neumayeri		
		Anthemis dalmatica Scheele		
		Anthemis tomentosa L.		
		Arnica montana L.		
		Artemisia santonicum L.		
		Aster sedifolius L. ssp. illyricus (Murb.) Merxm.		
		Aster tripolium L. ssp. pannonicus (Jacq.) Soó		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Asteriscus aquaticus (L.) Less.		
		Carduus collinus Waldst. et Kit. ssp. cylindricus (Borbás) Soó		
		Carduus micropterus (Borbás) Teyber ssp. micropterus		
		Carduus pycnocephalus L. ssp. pycnocephalus		
		Carlina acanthifolia All. ssp. acanthifolia		
		Carlina fiumensis Simonk.		
		Centaurea biokovensis Teyber		
		Centaurea brachtii Rchb.		
		Centaurea crithmifolia Vis.		
		Centaurea cuspidata Vis.		
		Centaurea dalmatica A.Kern.		
		Centaurea friderici Vis.		
		Centaurea glaberrima Tausch		
		Centaurea haynaldii Borbás ex Vuk.		
		Centaurea incompta Vis.		
		Centaurea jabukensis Ginzb. et Teyber		
		Centaurea nicolai Bald.		
		Centaurea nigrescens Willd. ssp. nigrescens		
		Centaurea radichii Plazibat		
		Centaurea ragusina L.		
		Centaurea rupestris L. ssp. ceratophylla (Ten.) Gugler		
		Centaurea spinosociliata Seenus		
		Centaurea spinosociliata Seenus ssp. tommasinii (A.Kern.) Dostál		
		Centaurea stenolepis A.Kern. ssp. joannis Kárpáti		
		Centaurea triumfettii All. ssp. triumfettii		
		Centaurea tuberosa Vis.		
		Centaurea visianiana Plazibat		
		Centaurea x aliena J.Wagner		
		Centaurea x pomoënsis Teyber Centaurea x rossiana J.Wagner et		
		Degen		
		Centaurea x velinacensis Degen et Lengyel		
		Cirsium brachycephalum Jur.		
		Doronicum hungaricum Rchb.f.		
		Echinops ritro L. ssp. ruthenicus (M.Bieb.) Nyman		
		Echinops sphaerocephalus L. ssp. albidus (Boiss. et Spruner) Kožuharov		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Leontopodium alpinum Cass. ssp. krasense Derganc		
		Leucanthemella serotina (L.) Tzvelev		
		Leucanthemum atratum (Jacq.) DC. ssp. platylepis (Borbás) Heywood		
		Leucanthemum chloroticum A.Kern. et Murb.		
		Ligularia sibirica (L.) Cass.		
		Omalotheca norvegica (Gunn.) Sch.Bip. et F.W.Schultz		
		Pseudognaphalium luteoalbum (L.) Hilliard et B.L.Burtt		
		Senecio caroli-maly Horvatić		
		Senecio papposus (Rchb.) Less. ssp. kitaibelii (Jáv.) Cufod.		
		Senecio thapsoides DC. ssp.		
		visianus (Papaf. ex Vis.) Vandas Serratula lycopifolia (Vill.) A.Kern.		
		Serratula rycopnolia (VIII.) A.Nerii. Serratula radiata (Waldst. et Kit.) M.Bieb. ssp. cetingensis (Rohlena) Hayek		
		Tanacetum cinerariifolium (Trevir.) Sch.Bip.		
		Xeranthemum annuum L.		
	Berberidaceae	Berberis croatica Horvat		
	Betulaceae	Betula pubescens Ehrh.		
	Boraginaceae	Cerinthe glabra Mill. ssp. glabra		
		Cerinthe glabra Mill. ssp. smithiae (A.Kern.) Domac		
		Cerinthe glabra Mill. ssp. velebitica Degen et Lengyel		
		Cerinthe tristis Teyber		
		Cynoglossum velebiticum K.Malý		
		Heliotropium supinum L.		
		Myosotis incrassata Guss.		
		Myosotis ramosossima Rochel ssp. ramosossima		
		Myosotis suaveolens Willd.		
		Myosotis sylvatica Hoffm. ssp. subarvensis Grau		
		Nonea pulla DC.		
		Onosma arenaria Waldst. et Kit. ssp. arenaria		
		Onosma echioides L.		
		Onosma javorkae Simonk.		
		Onosma pseudoarenaria Schur ssp. fallax (Borbás) Rauschert		
		Onosma pseudoarenaria Schur ssp. tridentina (Wettst.) Braun-Blanq.		
		Onosma stellulata Waldst. et Kit.		
		Pulmonaria visianii Degen et Lengyel		

GROUP	SPECIES		REMARK
SCIENTIFIC NAME COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
Brassicaceae	Aethionema saxatile (L.) R. Br. ssp. scopulorum (Ronniger) I. A. Anderson, A. Carlström, Franzén, Karlen et H. Nybom		
	Alyssum austrodalmaticum Trinajstic		
	Alyssum montanum L. ssp. gmelinii (Jord.) Em. Schmid		
	Alyssum montanum L. ssp. pagense (Baumgartner) Hayek		
	Alyssum montanum L. ssp. pluscanescens (Raim. ex Baumgartner) Trpin		
	Arabis scopoliana Boiss.		
	Armoracia macrocarpa (Waldst. et Kit.) Kit. ex Baumg.		
	Aubrieta columnae Guss. ssp. croatica (Schott, Nyman et Kotschy) Mattf.		
	Aurinia leucadea (Guss.) C. Koch		
	Aurinia microcarpa (Vis.) Trinajstic		
	Aurinia sinuata (L.) Griseb.		
	Biscutella laevigata L. ssp. gracilis MachLaur.		
	Brassica botterii Vis.		
	Brassica cazzae Ginzb. et Teyber		
	Brassica mollis Vis.		
	Brassica rupestris Raf.		
	Cardamine carnosa Waldst. et Kit.		
	Cardamine chelidonia L.		
	Cardamine kitaibelii Becherer		
	Cardamine maritima Port. ex DC.		
	Cardamine waldsteinii Dyer		
	Cardaminopsis croatica (Schott,		
	Nyman et Kotschy) Jáv. Cardaminopsis halleri (L.) Hayek		
	Crambe tataria Sebeók		+
	Degenia velebitica (Degen) Hayek		
	Erysimum carniolicum Dolliner		+
	Erysimum linariifolium Tausch		+
	Erysimum sylvestre (Crantz) Scop.		
	Euclidium syriacum (L.) R. Br.		
	Fibigia triquetra (DC.) Boiss. ex Prantl		
	Hymenolobus procumbens (L.) Nutt.		
	Iberis linifolia L. ssp. linifolia		
	Peltaria alliacea Jacq.		
	Raphanus raphanistrum L. ssp. landra (Moretti ex DC.) Bonnier et Layens		

GROUP		SPECIES	3	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Rorippa lippizensis (Wulfen) Rchb.		
		Thlaspi dinaricum Degen et Janch.		
	Callitrichaceae	Callitriche brutia Petagna		
		Callitriche cophocarpa Sendtn.		
		Callitriche hamulata Kütz. ex Koch		
		Callitriche hermaphroditica L.		
		Callitriche obtusangula Le Gall		
		Callitriche platycarpa Kütz.		
		Callitriche stagnalis Scop.		
		Callitriche truncata Guss. ssp. truncata		
	Campanulaceae	Adenophora liliifolia (L.) A.DC.		
		Campanula cespitosa Scop.		
		Campanula cochlearifolia Lam.		
		Campanula fenestrellata Feer		
		Campanula hercegovina Degen et Fiala		
		Campanula istriaca Feer		
		Campanula justiniana Witasek		
		Campanula moravica (Spitzn.) Kovanda		
		Campanula portenschlagiana Schult.		
		Campanula poscharskyana Deg.		
		Campanula serrata (Kit.) Hendrych		
		Campanula thyrsoides L. ssp. carniolica (Sünd.) Podlech		
		Campanula tommasiniana C. Koch		
		Campanula trachelium L. ssp. trachelium		
		Campanula velebitica Borbás		
		Campanula waldsteiniana Schult.		
		Edraianthus dalmaticus (A.DC.) A.DC.		
		Edraianthus dinaricus (A.Kern.) Wettst.		
		Edraianthus pumilio (Schult.) A.DC.		
		Edraianthus serpyllifolius (Vis.) A.DC.		
		Physoplexis comosa (L.) Schur		
	Caprifoliaceae	Lonicera borbasiana (Kuntze) Degen		
		Lonicera glutinosa Vis.		
	Caryophyllaceae	Arenaria gracilis Waldst. et Kit.		
		Arenaria orbicularis Vis.		
		Cerastium dinaricum G. Beck et Szysz.		
		Cerastium grandiflorum Waldst. et Kit.		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Dianthus armeria L. ssp. armeria		
		Dianthus collinus Waldst. et Kit. ssp. collinus		
		Dianthus spp.		
		Dianthus viridescens Clementi		
		Drypis spinosa L. ssp. jacquiniana Murb. et Wettst. ex Murb. Lunds.		
		Gypsophila fastigiata L.		
		Minuartia verna (L.) Hiern ssp. insularis Trinajstić et Zi. Pavletić		
		Moehringia tommasinii Marchesetti		
		Silene alpestris Jacq.		
		Silene armeria L.		
		Silene catholica (L.) Aiton f.		
		Silene chromodonta Boiss. et Reuter		
		Silene flavescens Waldst. et Kit.		
		Silene hayekiana HandMazz. et Janchen		
		Silene heuffelii Soó		
		Silene latifolia Poiret		
		Silene noctiflora L.		
		Silene reichenbachii Vis.		
		Silene remotiflora Vis.		
		Silene retzdorffiana (K. Maly) H. Neumayer		
		Silene sendtneri Boiss.		
		Silene tommasinii Vis.		
		Silene velebitica (Degen) Wrigley		
		Silene veselskyi (Janka) H. Neumayer		
		Silene waldsteinii Grieseb.		
		Stellaria alsine Grimm		
		Stellaria palustris Retz.		
		Vaccaria hispanica (Miller) Rauschert		
	Chenopodiaceae	Bassia laniflora (S.G.Gmel.) A. J. Scott		
		Camphorosma annua Pallas		
		Chenopodium ambrosioides L.		
		Chenopodium botrys L.		
		Chenopodium capitatum (L.) Ambrosi		
		Chenopodium chenopodioides (L.) Aellen		
		Chenopodium ficifolium Sm.		
		Chenopodium foliosum Asch.		
		Chenopodium giganteum D. Don	_	
		Chenopodium multifidum L.		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Chenopodium murale L.		
		Chenopodium opulifolium Schrader ex Koch et Ziz		
		Chenopodium probstii Aellen		
		Chenopodium rubrum L.		
		Chenopodium schraderianum Schultes in Roemer et Schultes		
		Chenopodium strictum Roth		
		Chenopodium suecicum J. Murr.		
		Chenopodium urbicum L.		
		Chenopodium vulvaria L.		
		Corispermum canescens Kit. in Schultes		
		Corispermum nitidum Kit. in Schultes		
		Polycnemum arvense L.		
		Polycnemum majus A. Braun		
		Salicornia veneta Pignatti et Lausi		
		Salsola kali L.		
		Salsola soda L.		
		Suaeda maritima (L.) Dumort.		
		Suaeda maritima (L.) Dumort. ssp. maritima		
		Suaeda vera J.F. Gmelin in L.		
	Cichoriaceae	Crepis mollis (Jacq.) Asch.		
		Crepis pantocsekii (Vis.) Latzel		
		Crepis pyrenaica (L.) Greuter		
		<i>Hieracium amphithale</i> s K.Malý et Zahn		
		Hieracium brachycaule Vuk.		
		Hieracium brevilanosum Degen et Zahn		
		Hieracium calophyllum Uechtr.		
		Hieracium cymosum L. ssp. laxiflorum (Vuk.) Nägeli et Peter		
		Hieracium cymosum L. ssp. samoboricum Nägeli et Peter		
		Hieracium cymosum L. ssp. xanthophyllum (Vuk.) Nägeli et Peter		
		Hieracium echioides Lumn.		
		Hieracium falcatiforme Degen et Zahn		
		Hieracium janchenii Zahn		
		Hieracium leucopelmatum Nägeli et Peter		
		Hieracium macrodon Nägeli et Peter		
		<i>Hieracium malovanicum</i> Degen et Zahn		
		Hieracium mirificissimum Rohlena et Zahn		
		Hieracium neilreichii Beck		

GRO	UP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Hieracium obrovacense Degen et		
		Zahn Hieracium pelliculatum Zahn		
		Hieracium pilosella L. ssp.		
		zagrabiense Nägeli et Peter		
		Hieracium pseudotommasinii Rohlena et Zahn		
		Hieracium scheppigianum Freyn		
		Hieracium sphaerophyllum Vuk.		
		Hieracium velebiticum Degen et Zahn		
		Lactuca quercina L. ssp. quercina		
		Leontodon rossianus (Degen et Lengyel) Hayek		
		Picris scaberrima Guss.		
		Scorzonera purpurea L. ssp. rosea		+
		(Waldst. et Kit.) Nyman		
	Cistaceae	Helianthemum canum (L.) Baumg. ssp. canum		
	Clusiaceae	Hypericum spruneri Boiss.		
	Convolvulaceae	Calystegia soldanella (L.) R. Br.		
		Convolvulus lineatus L.		
	Crassulaceae	Sempervivum spp.		
	Cucurbitaceae	Ecballium elaterium (L.) A. Rich.		
	Cuscutaceae	Cuscuta epilinum Weihe		
	Cymodoceaceae	Cymodocea nodosa (Ucria) Asch.		
	Cyperaceae	Blysmus compressus (L.) Panz. ex Link		
		Carex acuta L.		
		Carex appropinquata Schumach.		
	Cyperaceae	Carex bohemica Schreb.		
		Carex capillaris L.		
		Carex cespitosa L.		
		Carex curta Gooden.		
		Carex davalliana Sm.		
		Carex depauperata Curtis ex With.		
		Carex diandra Schrank		
		Carex dioica L.		
		Carex disticha Huds.		
		Carex divisa Huds.		
		Carex echinata Murray		
		Carex elongata L.		
		Carex ericetorum Pollich		
		Carex extensa Gooden.		
		Carex flava L.		1
		Carex hordeistichos Vill.		
		Carex hostiana DC.		
		Carex lepidocarpa Tausch		
		Carex limosa L.		

GROU	P	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Carex liparocarpos Gaudin		
		Carex michelii Host		
		Carex nigra (L.) Reichard		
		Carex panicea L.		
		Carex pulicaris L.		
		Carex riparia Curtis		
		Carex rostrata Stokes ex With.		
		Carex rupestris All.		
		Carex serotina Mérat		
		Carex strigosa Huds.		
		Carex supina Willd. ex Wahlenb.		
		Carex vesicaria L.		
		Cyperus capitatus Vand.		
		Cyperus difformis L.		
		Cyperus esculentus L.		
		Cyperus flavescens L.		
		Cyperus fuscus L.		
		Cyperus glaber L.		
		Cyperus glomeratus L.		
		Cyperus longus L.		
		Cyperus michelianus (L.) Link		
		Cyperus rotundus L.		
		Cyperus serotinus Rottb.		
		Eleocharis carniolica Koch		
		Eleocharis ovata (Roth) Roem. et Schult.		
		Eleocharis quinqueflora (Hartmann) O.Schwarz		
		Eleocharis uniglumis (Link) Schult.		
		Eriophorum angustifolium Honck.		
		Eriophorum gracile Koch ex Roth		
		Eriophorum latifolium Hoppe		
		Eriophorum vaginatum L.		
		Fimbristylis bisumbellata (Forssk.) Bubani		
		Rhynchospora alba (L.) Vahl		
		Scirpus cespitosus L.		
		Scirpus lacustris L. ssp. tabernaemontani (C.C.Gmel.) Syme		
		Scirpus mucronatus L.		
		Scirpus radicans Schkuhr		
		Scirpus setaceus L.		
		Scirpus supinus L.		
	Dipsacaceae	Knautia adriatica Ehrend.		
		Knautia clementii (Beck) Ehrend.		
		Knautia dalmatica Beck		

SCIENTIFIC NAME Knautia illyrica Beck Knautia sarajevensis (Beck) Szabó Knautia visianii Szabó Knautia pectinata Ehrend. Knautia travnicensis (Beck) Szabó Knautia travnicensis (Beck) Szabó Knautia velebitica Szabó Scabiosa lucida Vill. ssp. stricta (Waldst. et Kit.) Jasiewicz Succisella petteri (J.Kern. et Murb.) Beck Droseraceae Drosera spp. Aldrovanda vesiculosa L. Elaeagnaceae Hippophaë rhamnoides L. Elatine alsinastrum L. Elatine hexandra (Lapierre) DC. Elatine hydropiper L. Elatine triandra Schkuhr Ericaceae Arctostaphylos uva-ursi (L.) Spreng. Vaccinium uliginosum L. Euphorbiaceae Euphorbia paralias L.	AE
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Ericaceae Arctostaphylos uva-ursi (L.) Spreng. Vaccinium uliginosum L.	
Vaccinium uliginosum L.	
Euphorbiaceae Euphorbia paralias L.	
Euphorbia rigida M. Bieb.	
Euphorbia seguieriana Neck.	
Fabaceae (incl. Caesalpinaceae, Mimosaceae) Anthyllis aurea Host ssp. velebitica Degen	
Anthyllis montana L. ssp. atropurpurea (Vuk.) Pignatti	
Anthyllis vulneraria L. ssp. rubiflora (DC.) Arcang.	
Anthyllis vulneraria L. ssp. weldeniana (Rchb.) Cullen	
Argyrolobium dalmaticum (Vis.) Asch. et Graebn.	
Astragalus angustifolius Lam. ssp. biokovensis Kušan	
Astragalus glacialis Lovrić	
Astragalus monspessulanus L. ssp. illyricus (Bernhardt) Chater	
Astragalus muelleri Steud. et Hochst.	
Astragalus pelecinus (L.) Barneby ssp. dalmatica Trinajstić	
Chamaecytisus ratisbonensis (Schaeff.) Rothm.	
Chamaecytisus spinescens (C. Presl) Rothm. ssp. ala-venti Radić	
Dorycnium rectum (L.) Ser.	
Genista holopetala (Koch) Bald.	
Genista pulchella Vis.	
Genista sericea Wulfen	1

GROUP		SPECIES REMA		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Genista sylvestris Scop. ssp.		
		dalmatica (Bartl.) H. Lindb.		
		Hedysarum hedysaroides ssp. exaltatum (A. Kern.) Žertová		
		, , ,		
		Hedysarum spinosissimum L. ssp. capitatum (Rouy) Asch. et Graebn.		
		Laburnum anagyroides Medik. ssp.		-
		alschingeri (Vis.) Hayek		
		Lathyrus alpestris (Waldst. et Kit.)		
		Čelak. ssp. alpestris		_
		Lathyrus alpestris (Waldst. et Kit.) Čelak. ssp. friedrichsthalii (Griseb.) K.		
		Malý		
		Lathyrus angulatus L.		
		Lathyrus ochrus (L.) DC.		
		Lathyrus palustris L.		1
		Lathyrus pannonicus (Jacq.) Garcke		
		ssp. pannonicus		
		Lathyrus saxatilis (Vent.) Vis.		
		Lotus cytisoides L.		
		Lotus preslii Ten.		_
		Lotus stenodon (Boiss. et Heldr.) Heldr.		
		Medicago marina L.		
		Medicago pironae Vis.		
		Medicago tenoreana DC.		
		Onobrychis arenaria (Kit.) DC. ssp. tommasinii (Jord.) Asch. et Graebn.		
		Onobrychis montana DC. ssp. scardica (Griseb.) P. W. Ball		
		Onobrychis oxyodonta Boiss.		
		Ononis adenotricha Boiss.		
		Oxytropis dinarica (Murb.) Wettst.		
		Oxytropis dinarica (Murb.) Wettst. ssp. velebitica Chrtek et Chrtková		
		Oxytropis dinarica (Murb.) Wettst. ssp. weberi Chrtek et Chrtková		
		Oxytropis purpurea (Bald.) Markgr.		
		Petteria ramentacea (Sieber) C. Presl		
		Trifolium cinctum DC.		
		Trifolium constantinopolitanum Ser.		
		Trifolium dalmaticum Vis.		
		Trifolium echinatum M. Bieb.		
		Trifolium filiforme L.		
		Trifolium glomeratum L.		
		Trifolium incarnatum L. ssp. molineri		1
		(Hornem.) Syme		
		Trifolium leucanthum M. Bieb.		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Trifolium michelianum Savi		
		Trifolium mutabile Port.		
		Trifolium noricum Wulfen		
		Trifolium pannonicum Jacq.		
		Trifolium physoides M. Bieb.		
		Trifolium pignantii Fauché et Chaub.		
		Trifolium resupinatum L.		
		Trifolium retusum L.		
		Trifolium sebastianii Savi		
		Trifolium setiferum Boiss.		
		Trifolium spumosum L.		
		Trifolium squarrosum L.		
		Trifolium striatum L. ssp. tenuiflorum (Ten.) Arcang.		
		Trifolium uniflorum L.		
		Trifolium velebiticum Degen		
		Trifolium vesiculosum Savi		
		Vicia leucantha Biv.		
		<i>Vicia ochroleuca</i> Ten. ssp. <i>dinara</i> (K. Malý) Rohlena		
		Vicia onobrychioides L.		
		Vicia sativa L. ssp. amphicarpa (L.) Batt.	_	
		Vicia sativa L. ssp. macrocarpa (Moris) Arcang.		
		Vicia sativa L. ssp. sativa		
	Fumariaceae	Corydalis acaulis (Wulfen) Pers.		
		Corydalis solida (L.) Swartz ssp. oligantha (Trinajstić) Greuter et Burdet		
		Fumaria ragusina (Pugsley) Pugsley		
	Gentianaceae	Blackstonia perfoliata (L.) Huds. ssp. serotina (Koch ex Rchb.) Vollm.		
		Cicendia filiformis (L.) Delarbre		
		Gentiana acaulis L.		
		Gentiana lutea L. ssp. symphyandra (Murb.) Hayek		
		Gentiana pneumonanthe L.		
		Swertia perennis L.		
	Geraniaceae	Geranium dalmaticum (Beck) Rech.f.		
		Geranium palustre L.		
		Geranium pratense L.		
	Hippuridaceae	Hippuris vulgaris L.		
	Hydrocharitaceae	Stratiotes aloides L.		
		Vallisneria spiralis L.		1
	Hymenophyllaceae	. Hymenophyllum tunbrigense (L.) Sm.		\top
	туппепорпупасеае	Trymenophyliain turibrigense (L.) 3III.		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Iridaceae	Crocus dalmaticus Vis.		
		Crocus malyi Vis.		
		Crocus thomasii Ten.		
		Gladiolus spp.		
		Iris spp.		
	Juncaceae	Luzula sylvatica (Huds.) Gaudin ssp.		
		croatica Beyer Juncus acutiflorus Ehrh. ex Hoffm.		
		Juncus alpinoarticulatus Chaix		
		Juncus anceps Laharpe		
		Juncus capitatus Weigel		
		Juncus filiformis L.		
		Juncus fontanesii Gay		
		Juncus littoralis C.A.Mey.		
		Juncus squarrosus L.		+
		Juncus tenageia L.f.		+
	Juncaginaceae	Triglochin bulbosa L.		1
	Juncaginaceae	Triglochin maritimum L.		
		Triglochin palustris L.		+
	Lamiaceae	Dracocephalum ruyschiana L.		
	Lamaceae	Hyssopus officinalis L.		
		Marrubium peregrinum L.		
				+
		Micromeria croatica (Pers.) Schott Micromeria dalmatica Benth.		
		Micromeria kerneri Murb.		
		Micromeria pseudocroatica Šilić		
		Salvia brachyodon Vandas		
		Salvia nemorosa L.		
		Salvia sonklarii Pant.		
		Satureja visianii Šilić		
		Stachys alpina L. ssp. dinarica Murb.		
		Stachys cretica L. ssp. cassia		+
		(Boiss.) Rech. f.		
		Stachys menthifolia Vis.		
		Teucrium arduini L.		
		Thymus bracteosus Benth.		
		Thymus serpyllum L. ssp. serpyllum		
	Lemnaceae	Lemna gibba L.		
		Wolffia arrhiza (L.) Horkel ex Wimm.		
	Lentibulariaceae	Pinguicula vulgaris L.		
	Liliaceae	Allium angulosum L.		
		Allium horvatii Lovrić		
		Allium incensiodorum Radić		
		Allium suaveolens Jacq.		

GRO	UP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Colchicum arenarium Waldst. et Kit.		
		Fritillaria meleagris L.		+
		Fritillaria messanensis Raf. ssp.		
		gracilis (Ebel) Rix		+
		Hyacinthella dalmatica (Baker) Chouard		
		Lilium bosniacum (Beck) Beck ex Fritsch		
		Lilium carniolicum Bernh. ex Koch		
		Lilium martagon L.		
		Lilium spp.		
		Lloydia serotina (L.) Rchb.		
		Ornithogalum dalmaticum Speta		
		Ornithogalum televrinum Speta		
		Ornithogalum visianicum Tomm.		
		Polygonatum latifolium (Jacq.) Desf.		
		Scilla litardierei Breistr.		
		Tofieldia calyculata (L.) Wahlenb.		
		Tulipa praecox Ten.		
		Veratrum album L.		
	Linaceae	Linum elegans Spruner ex Boiss.		
	Lythraceae	Lythrum portula (L.) D.A.Webb		
		Lythrum tribracteatum Salzm. ex Spreng.		
	Malvaceae	Hibiscus trionum L.		
		Kitaibela vitifolia Willd.		
		Malva parviflora L.		
	Menyanthaceae	Menyanthes trifoliata L.		
	Onagraceae (= Oenotheraceae)	Ludwigia palustris (L.) Elliott		
	Orchidaceae	Orchidaceae spp. (only specimens of the species taken from the nature in the Republic of Croatia, with the exception of specimens of the species Cypripedium calceolus, Liparis loeselii and Spiranthes aestivalis that are included in Annex I to this Ordinance; all other specimens are included in Annex II to this Ordinance)		
	Orobanchaceae	Orobanche borbasiana Beck		
	Paeoniaceae	Paeonia spp.		
	Papaveraceae	Glaucium flavum Crantz		
		Papaver argemone L.		
		Papaver hybridum L.		
	Plantaginaceae	Armeria canescens (Host) Boiss. in DC. ssp. dalmatica (G. Beck) Trinajstić		
		Goniolimon dalmaticum (C.Presl.)		
		Reichb.		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Limonium anfractum (Salmon) Salmon		
		Limonium oleifolium Miller		
		Limonium subanfractum Trinajstić		
		Limonium vestitum (Salmon) Salmon		
		Littorella uniflora (L.) Asch.		
		Plantago indica L.		
		Plantago schwarzenbergiana Schur		
		Plantago subulata L.		
		Plantago tenuiflora Waldst. et Kit.		
	Poaceae	Achnatherum calamagrostis (L.) P.Beauv.		
		Aeluropus littoralis (Gouan) Parl.		
		Agropyron cristatum (L.) Gaertn. ssp. pectinatum (M.Bieb.) Tzvelev		
		Agrostis alpina Scop.		
		Agrostis castellana Boiss. et Reut.		
		Agrostis parlatoeri Breistr.		
		Aira caryophyllea L.		
		Aira praecox L.		
		Alopecurus aequalis Sobol.		
		Alopecurus bulbosus Gouan		
		Alopecurus geniculatus L.		
		Alopecurus rendlei Eig		
		Ammophila arenaria (L.) Link ssp. arundinacea H.Lindb.		
		Andropogon distachyos L.		
		Anthoxanthum aristatum Boiss.		
		Anthoxanthum ovatum Lag.		
		Arundo plinii Turra		
		Avena fatua L.		
		Avena strigosa Schreb.		
		Beckmannia eruciformis (L.) Host		
		Brachypodium phoenicoides (L.) Roem. et Schult.		
		Bromus commutatus Schrad.		
		Bromus diandrus Roth		
		Bromus pannonicus Kumm. et Sendtn.		
		Bromus scoparius L.		
		Catabrosa aquatica (L.) P.Beauv.		
		Cenchrus capitatus L.		
		Corynephorus canescens (L.) P.Beauv.		
		Corynephorus divaricatus (Pourr.) Breistr.		
		Cutandia maritima (L.) Barbey		
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GROUP		SPECIES	3	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Danthoniastrum compactum (Boiss. et Heldr.) Holub		
		Deschampsia cespitosa (L.) P.Beauv. ssp. cespitosa		
		Deschampsia media (Gouan) Roem. et Schult.		
		Desmazeria marina (L.) Druce		
		Dichanthium ischaemum (L.) Roberty		
		Digitaria ciliaris (Retz.) Koeler		
		Elymus elongatus (Host) Runemark		
		Elymus farctus (Viv.) Runemark ex Melderis		
		Festuca alpina Suter Festuca arundinacea Schreb. ssp.		
		fennas (Lag.) Arcang.		
		Festuca lapidosa (Degen) Markgr Dann.		
		Festuca paniculata (L.) Schinz et Thell.		
		Festuca quadriflora Honck.		
		Festuca stenantha (Hack.) K.Richt.		
		Festuca stricta Host		
		Festuca trichophylla (Ducros ex Gaudin) K.Richt.		
		Festuca vaginata Waldst. et Kit. ex Willd.		
		Glyceria fluitans (L.) R.Br.		
		Glyceria plicata (Fr.) Fr.		
		Hainardia cylindrica (Willd.) Greuter		
		Helictotrichon sempervirens (Vill.) Pilg.		
		Hordeum hystrix Roth		
		Hordeum marinum Huds.		
		Hordeum secalinum Schreb.		
		Imperata cylindrica (L.) Raeusch.		1
		Koeleria glauca (Schrad.) DC.		1
		Lamarckia aurea (L.) Moench		
		Lolium remotum Schrank		
		Lolium subulatum Vis. Melica altissima L.		
		Melica bauchinii All.		1
		Melica transsilvanica Schur		
		Milium vernale M.Bieb.		
		Parapholis filiformis (Roth) C.E.Hubb.		
		Parapholis incurva (L.) C.E.Hubb.		
		Parvotrisetum myrianthum (Bertol.) Chrtek		
		Phalaris aquatica L.		1
		Phalaris brachystachys Link		
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GROUP		SPECIES	3	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Phalaris coerulescens Desf.		
		Phalaris minor Retz.		
		Phalaris paradoxa L.		
		Phleum alpinum L.		
		Phleum arenarium L.		
		Phleum paniculatum Huds.		
		Pholiurus pannonicus (Host) Trin.		
		Piptatherum paradoxum (L.) P.Beauv.		
		Poa badensis Haenke ex Willd.		
		Poa cenisia All.		
		Poa chaixii Vill.		
		Poa hybrida Gaudin		
		Poa minor Gaudin		
		Poa perconcinna J.R.Edm.		
		Poa pumila Host		
		Poa remota Forselles		
		Polypogon viridis (Gouan) Breistr.		
		Puccinellia distans (L.) Parl. ssp. distans		
		Puccinellia distans (L.) Parl. ssp. limosa (Schur) Jáv.		
		Puccinellia festuciformis (Host) Parl.		
		Saccharum ravennae (L.) Murray		
		Saccharum strictum (Host) Spreng.		
		Sesleria argentea (Savi) Savi		
		Sesleria caerulea (L.) Ard.		
		Sesleria sadlerana Janka		
		Sesleria tenuifolia Schrad. ssp. kalnikensis (Jav.) Deyl		
		Spartina maritima (Curtis) Fernald	_	
		Sporobolus pungens (Schreb.) Kunth		
		Stipa capensis Thunb.		
		Stipa capillata L.		
		Stipa joannis Čelak.		
		Stipa spp.		
		Trisetum aureum Ten.		
		Ventenata dubia (Leers) Coss.		
	Polygalaceae	Polygala alpestris ssp. croatica (Chodat) Hayek	_	
	Polygonaceae	Polygonum arenarium Waldst. et Kit.		
		Polygonum salicifolium Brouss. ex Willd.		
		Rumex maritimus L.		
	Portulaceae	Montia fontana L.		
	Posidoniaceae	Posidonia oceanica (L.) Delile		

GROUP		SPECIES	S	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Potamogetonaceae	Groenlandia densa (L.) Fourr.		
		Potamogeton alpinus Balb.		
		Potamogeton compressus L.		
		Potamogeton polygonifolius Pourr.		
	Primulaceae	Centunculus minimus L.		
		Hottonia palustris L.		
		Primula carniolica Jacq.		
		Primula kitaibeliana Schott		
		Primula wulfeniana Schott		
	Pyrolaceae (incl. Monotropaceae)	Pyrola rotundifolia L.		
	Rafflesiaceae	Cytinus hypocistis (L.) L. ssp. hypocystis		
		Cytinus hypocistis (L.) L. ssp.clusii Nyman		
	Ranunculaceae	Aconitum angustifolium Bernh. ex Reichenb.		
		Aconitum napellus L. ssp. fissurae (E.I. Nyarady) W. Seitz		
		Aconitum napellus L. ssp. superbum (Fritsch) W. Seitz		
		Aconitum toxicum Reichenb.		
		Adonis aestivalis L.		
		Adonis annua L. emend. Huds.		
		Adonis flammea Jacq.		
		Adonis flammea Jacq. ssp. cortiana C. Steinb.		
		Adonis vernalis L. (only specimens taken from the wild in the Republic of Croatia; other specimens of this species are listed in Annex II to this Ordinance)		
		Anemone sylvestris L.		
		Aquilegia dinarica G. Beck		
		Aquilegia grata Zimmeter		
		Aquilegia kitaibelii Schott		
		Ceratocephala falcata (L.) Pers.		
		Ceratocephala testiculata (Crantz) Roth		
		Clematis integrifolia L.		
		Consolida ajacis (L.) Schur		
		Consolida brevicornis (Vis.) Soo		
		Consolida incana (E.D. Clarke) Munz		
		Consolida orientalis (Gay) Schrödinger		
		Consolida uechtriziana (Panč.) Soó		
		Delphinium halteratum Sm. in Sibth. et Sm.		
		Delphinium peregrinum L.		
		Delphinium staphisagria L.		

GROL	JP	SPECIES	3	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Helleborus atrorubens Waldst. et Kit.		
		Helleborus croaticus Martinis		
		Helleborus hercegovinus Martinis		
		Helleborus multifidus Vis.		
		Helleborus multifidus Vis. ssp.		
		istriacus (Schiffn.) Merxm. et Podl.		
		Helleborus niger L. ssp. macranthus (Freyn) Schiffner		
		Helleborus odorus Waldst. et Kit. ex Willd. ssp. laxus (Host) Merxm. et Podl.		
		Myosurus minimus L.		
		Nigella sativa L.		
		Pulsatilla spp.		
		Ranunculus concinnatus Schott		
		Ranunculus croaticus Schott		
		Ranunculus dalmaticus Grossg.		
		Ranunculus fontanus C. Presl. in J. et C. Presl.		
		Ranunculus lingua L.		
		Ranunculus ophioglossifolius Vill.		
		Ranunculus traunfellneri Hoppe		
	Rhamnaceae	Rhamnus intermedius Steud. et Hohst.		
		Rhamnus orbiculatus Bornm.		
	Rosaceae	Aphanes microcarpa (Boiss. et Reut.) Rothm.		
		Dryas octopetala L.		
		Malus x florentina (Zuccagni) C. K. Schneid.		
		Potentilla carniolica A. Kern.		
		Potentilla palustris (L.) Scop.		
		Prunus tenella Batsch		
		Sanguisorba officinalis L.		
		Sibiraea altaiensis (Laxm.) C. K. Schneid. ssp. <i>croatica</i> Degen		
		Sorbus aria (L.) Crantz ssp. lanifera (A Kerner) Jáv.		
		Sorbus austriaca (Beck) Hedl. ssp. croatica Karpati		
		Sorbus borbasii Jav.		
		Sorbus velebitica Kárpáti		
		Spiraea cana Waldst. et Kit.		
	Rubiaceae	Asperula beckiana Degen		
		Asperula borbasiana Korica		
		Asperula hercegovina Degen		
		Asperula scutellaris Vis.		
		Asperula staliana Vis.		
		Asperula staliana Vis. ssp. arenaria		
		Korica		

GROUP		SPECIES	SPECIES	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Asperula staliana Vis. ssp. issaea Korica		
		Asperula visianii Korica		
		Asperula wettsteinii Adamović		
		Asperula woloszczakii Korica		
		Cruciata balcanica Ehrend.		
		Galium boreale L.		
		Galium rubioides L.		
		Galium uliginosum L.		
	Ruppiaceae	Ruppia cirrhosa (Petagna) Grande		
		Ruppia maritima L.		
	Salicaceae	Salix hastata L.		
	Salicaceae	Salix daphnoides Vill.		
	Santalaceae	Thesium dollineri Murb. ssp. simplex (Velen.) Stoj. et Stef.		
	Saxifragaceae	Saxifraga exarata Vill. ssp. moschata (Wulfen) Cavill.		
		Saxifraga oppositifolia L.		
		Saxifraga sedoides L. ssp. prenja (Beck) Hayek		
	Scheuchzeriaceae	Scheuchzeria palustris L.		
	Scrophulariaceae	Cymbalaria muralis P.Gaertn., Mey. et Scherb. ssp. visianii D.A.Webb		
		Digitalis ferruginea L.		
		Digitalis lanata Ehrh.		
		Euphrasia dinarica (Beck) Murb.		
		Euphrasia illyrica Wettst.		
		Euphrasia marchesettii Wettst.		
		Euphrasia simonkaiana Degen et Lengyel ex Jáv.		
		Kickxia elatine (L.) Dumort. ssp. elatine		
		Limosella aquatica L.		
		Linaria chalepensis (L.) Mill.		
		Linaria loeselii Schweigg.		
		Linaria microsepala A.Kern.		
		Lindernia procumbens (Krock.) Philcox		
		Melampyrum fimbriatum Vandas		
		Pedicularis acaulis Scop.		
		Pedicularis brachyodonta Schloss. et Vuk.		
		Pedicularis friderici-augusti Tomm.		
		Pedicularis hoermanniana K.Malý		
		Pedicularis palustris L.		
		Pseudolysimachion longifolium (L.) Opiz		
		Rhinanthus asperulus (Murb.) Soó		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Rhinanthus burnatii (Chabert) Soó		
		Rhinanthus freynii (A.Kern. ex Sterneck) Fiori		
		Rhinanthus rumelicus Velen.		
		Scrophularia bosniaca Beck		
		Verbascum chaixii Vill. ssp. austriacum (Schott ex Roem. et Schult.) Hayek		
		Verbascum niveum Ten. ssp. visianium (Rchb.) Murb.		
		Veronica dillenii Crantz		
		Veronica saturejoides Vis.		
	Sparganiaceae	Sparganium minimum Wallr.		
	Solanaceae	Mandragora officinarum L.		
	Tamaricaceae	Myricaria germanica (L.) Desv.		
	Taxaceae	Taxus baccata L.		
	Thymelaeaceae	Daphne blagayana Freyer		
		Daphne cneorum L.		
	Typhaceae	Typha laxmannii Lepech.		
		Typha minima Funck		
		Typha shuttleworthii Koch et Sond.		
	Urticaceae	Urtica membranacea Poiret in Lam.		
		Urtica pilulifera L.		
	Violaceae	Viola adriatica Freyn		
		Viola dinarica Trinajstić		
		Viola elegantula Schott		
		Viola palustris L. ssp. palustris		
		Viola uliginosa Besser		
	Zosteraceae	Zostera marina L.		
		Zostera noltii		
GLJIVE	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
		Agaricus fuscofibrillosus		
		Albatrellus pes-caprae		
		Aleuria boudieri		
		Aleuria flavorubens		
		Aleurocystidiellum subcruentatum		
		Amanita caesarea		
		Amanita friabilis		
		Amanita lepiotoides		
	1	Amanita pachyvolvata		
	1	Amanita vittadinii		
		Amylocorticium subincarnatum		
		Amylocystis lapponicus		
		Anomoporia bombycina		
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GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Antrodia crassa		
		Antrodia variiformis		
		Antrodiella citrinella		
		Antrodiella fragrans		
		Ascobolus behnitziensis		
		Ascobolus epimyces		
		Atheloderma mirabile		
		Auriporia aurulenta		
		Baeospora myriadophylla		
		Bisporella calycellinoides		
		Boletinus cavipes		
		Boletus adonis		
		Boletus depilatus		
		Boletus dupainii		
		Boletus fechtneri		
		Boletus fragrans		
		Boletus impolitus		
		Boletus regius		
		Boletus torosus		
		Callistosporium donadinii		
		Callistosporium elaeodes		
		Callistosporium luteoolivaceum		
		Calocybe constricta		
		Caloscypha fulgens		
		Camarophyllopsis foetens		
		Camarophyllopsis micacea		
		Camarophyllopsis phaeophylla		
		Campanella caesia		
		Cantharellus friesii		
		Catathelasma imperiale		
		Ceriporiopsis jelicii		
		Ceriporiopsis myceliosa		
		Ceriporiopsis subrufa		
		Chalciporus rubinus		
		Cheilymenia magnifica		
		Ciboria aestivalis		
		Clavulicium macounii		
		Clitocybe collina		
		Clitocybula lacerata		
		Contumyces rosella		
		Coprinus strossmayeri		
		Cordyceps bifusispora		
		Cordyceps intermedia		
		Cordyceps longisegmentis		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Cordyceps riverae		
		Cordyceps sphecocephala		
		Cortinarius ionochlorus		
		Cortinarius praestans		
		Cudonia circinans		
		Dacryobolus karstenii		
		Dentipellis fragilis		
		Dermoloma cuneifolium		
		Dermoloma josserandii		
		Dermoloma pseudocuneifolium		
		Desmazierella acicola		
		Discina fastigiata		
		Discina gigas		
		Discina leucoxantha		
		Discina parma		
		Disciseda bovista		
		Disciseda candida		
		Elaphomyces anthracinus		
		Endoptychum agaricoides		
		Entoloma aprile		
		Entoloma bloxamii		
		Entoloma caesiocinctum		
		Entoloma catalaunicum		
		Entoloma corvinum		
		Entoloma cyanulum		
		Entoloma kervernii		
		Entoloma opacum		
		Entoloma plebeioides		
		Entoloma porphyrophaeum		
		Entoloma pseudoturci		
		Entoloma reinwaldii		
		Entoloma rhombisporum		
		Entoloma saundersii		
		Flammulina ononidis		
		Flavophlebia sulphureoisabellina		
		Fomitopsis rosea		
		Fomitopsis spraguei		
		Galerina jaapii		
		Galerina paludosa		
		Galerina tibiicystis		
		Gastrosporium simplex		
		Geastrum minimum		
		Geoglossum cookeianum		
		Geoglossum glutinosum		
		Geoglossum umbratile		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Geopora nicaeensis		
		Geopyxis majalis		
		Gloeocystidiellum subasperisporum		
		Gomphidius maculatus		
		Gomphidius roseus		
		Gymnopilus bellulus		
		Gymnopilus picreus		
		Haasiella splendidissima		
		Haasiella venustissima		
		Hapalopilus croceus		
		Hapalopilus salmonicolor		
		Hebeloma gigaspermum		
		Helvella albella		
		Helvella branzeziana		
		Helvella helvellula		
		Helvella lactea		
		Helvella phlebophora		
		Helvella queletiana		
		Helvella spadicea		
		Hericium coralloides		
		Hericium erinaceus		
		Hericium flagellum		
		Hexagonia nitida		
		Holwaya mucida		
		Humaria aurantia		
		Hydropus atramentosus		
		Hygrocybe calciphila		
		Hygrocybe calyptriformis		
		Hygrocybe cantharellus		
		Hygrocybe citrinovirens		
		Hygrocybe coccineocrenata		
		Hygrocybe colemanniana		
		Hygrocybe flavipes		
		Hygrocybe fornicata		
		Hygrocybe ingrata		
		Hygrocybe intermedia		
		Hygrocybe irrigata		
		Hygrocybe lacmus		
		Hygrocybe nitrata		
		Hygrocybe ovina		
		Hygrocybe perplexa		
		Hygrocybe punicea		
		Hygrocybe russocoriacea		
		Hygrocybe sciophanoides		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Hygrocybe spadicea		
		Hygrocybe splendidissima		
		Hygrocybe subpapillata		
		Hygrophorus aureus		
		Hygrophorus calophyllus		
		Hygrophorus camarophyllus		
		Hygrophorus capreolarius		
		Hygrophorus hyacinthinus		
		Hygrophorus hypothejus		
		Hygrophorus marzuolus		
		Hygrophorus mesotephrus		
		Hygrophorus poetarum		
		Hygrophorus queletii		
		Hyphoderma cremeoalbum		
		Hyphoderma guttuliferum		
		Hyphoderma litschaueri		
		Hyphoderma macedonicum		
		Hypholoma elongatum		
		Hypholoma myosotis		
		Inonotus dryophilus		
		Inonotus nidus-pici		
		Jaapia ochroleuca		
		Junghuhnia collabens		
		Junghuhnia fimbriatella		
		Kuehneromyces lignicola		
		Laccaria pumila		
		Lactarius cistophilus		
		Lactarius lacunarum		
		Lactarius lilacinus		
		Lactarius omphaliformis		
		Lactarius porninsis		
		Lambertella corni-maris		
		Leccinum versipelle		
		Lentinus degener		
		Leptosporomyces roseus		
		Leucoagaricus pilatianus		
		Leucogaster nudus		
		Leucopaxillus compactus		
		Leucopaxillus giganteus		
		Leucoscypha ovilloides		
		Limacella guttata		
		Lyophyllum piperatum		
		Marasmiellus humillimus		
		Marasmius anomalus		
		Marasmius buxi		

GROU	Р	SPECIES	3	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Marasmius caricis		
		Marasmius collinus		
		Marasmius cornelii		
		Marasmius hudsonii		
		Marasmius menieri		
		Melanogaster vittadinii		
		Microglossum olivaceum		
		Mitrula paludosa		
		Moelerodiscus iodotingens		
		Moelerodiscus tenuistipes		
		Mollisia olivascens		
		Mucronella bresadolae		
		Mucronella calva		
		Mycena latifolia		
		Mycenastrum corium		
		Myriosclerotinia dennisii		
		Myriostoma coliforme		
		Oligoporus cerifluus		
		Oligoporus Iowei		
		Oligoporus placentus		
		Ombrophila rivulorum		
		Omphalina baeospora		
		Omphalina chrysophylla		
		Omphalina obatra		
		Onygena equina		
		Orbilia polyspora		
		Ossicaulis lignatilis		
		Otidea propinquata		
		Pachyella peltata		
		Pachyella pseudosuccosa		
		Pachyella punctispora		
		Pachyella violaceonigra		
		Panaeolus semiovatus		
		Parmastomyces transmutans		
		Peziza alborosea		
		Peziza ammophila	_	
		Peziza apiculata		
		Peziza boltonii		
		Peziza buxea		
		Peziza flavida		
		Peziza merdae		
		Peziza muscicola		
		Peziza nivalis		
		Peziza obtusapiculata		
		Peziza saccardiana		

GROUP		SPECI	ES	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Peziza subuliginosa		
		Peziza subumbrina		
		Phaeocollybia jennyi		
		Phaeomarasmius muricatus		
		Phallogaster saccatus		
		Phallus hadriani		
		Phellinus nigrolimitatus		
		Phellinus pouzarii		
		Phlebia albida		
		Phlebia centrifuga		
		Phlebia cornea		
		Phlebia griseoflavescens		
		Phlebia subulata		
		Piptoporus quercinus		
		Piptoporus soloniensis		
		Plectania melastoma		
		Plectania platensis		
		Pleurotus calyptratus		
		Pleurotus cornucopiae		
		Pleurotus eryngii		
		Polyporus umbellatus		
		Poronia punctata		
		Psathyrella ammophila		
		Psathyrella melanthina		
		Psathyrella typhae		
		Pseudoomphalina compressipes		
		Pseudoplectania melaena		
		Pseudorhizina sphaerospora		
		Psilopezia nummularialis		
		Ptychoverpa bohemica		
		Pulveroboletus hemichrysus		
		Pulveroboletus lignicola		
		Pulvinula globifera		
		Pulvinula laeterubra		
		Pulvinula ovalispora		
		Pycnopeziza sejournei		
		Pycnoporellus fulgens		
		Pyronema dubium		
		Resupinatus vetlinianus		
		Rhodocybe fallax		
		Rigidoporus crocatus		
		Rodwayella sessilis		
		Russula alnetorum		
		Sarcoscypha macaronesica		

GROUP		SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Scleroderma polyrhizum		
		Scutellinia pilatii		
		Scutellinia tuberculata		
		Scytinostroma galactinum		
		Scytinostroma odoratum		
		Scytinostromella heterogenea		
		Skeletocutis odora		
		Skeletocutis papyracea		
		Skeletocutis stellae		
		Sparassis crispa		
		Sparassis spathulata		
		Spathularia flavida		
		Spongipellis delectans		
		Steccherinum subcrinale		
		Stropharia dorsipora		
		Stropharia semiglobata		
		Strossmayeria rackii		
		Suillus lakei		
		Suillus tridentinus		
		Tatraea dumbirensis		
		Trichoglossum confusum		
		Trichoglossum hirsutum		
		Trichoglossum variabile		
		Tricholoma aurantium		
		Tricholoma caligatum		
		Tricholoma colossus		
		Tricholoma goniospermum		
		Tulostoma fimbriatum		
		Tulostoma melanocyclum		
		Urnula craterium		
		Veluticeps ambigua		
		Verpa conica		
		Vibrissea truncorum		
		Xerula caussei		

ANNEX IX

GRO	OUP	SPECIES		REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
MAMMALS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Erinaceidae	Erinaceus concolor		
	Soricidae	Crocidura leucodon		
		Crocidura suaveolens		
		Neomys anomalus		
		Neomys fodiens		
		Sorex alpinus		
		Sorex araneus		
		Sorex minutus		
		Suncus etruscus		
	Myoxidae	Eliomys quercinus		
	Muridae	Mus spicilegus		
		Micromys minutus		
		Chionomys nivalis		
	Sciuridae	Sciurus vulgaris		
	Mustelidae	Mustela erminea		
BIRDS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Alaudidae	Alauda arvensis		
		Galerida cristata		
	Anatidae	Cygnus olor		
	Ardeidae	Ardea cinerea		
	Charadriidae	Vanellus vanellus		
	Columbidae	Streptopelia decaocto		
		Streptopelia turtur (only the specimens taken from the wild in the Republic of Croatia, other specimens are listed in Annex I to this Ordinance)		
	Cuculidae	Cuculus canorus		
	Emberizidae	Emberiza calandra		
	Fringillidae	Fringilla coelebs		
		Fringilla montifringilla		
	Muscicapidae	Turdus iliacus		
		Turdus merula		
		Turdus philomelos		
		Turdus viscivorus		
			1	non-nesting
	Phalacrocoracidae	Phalacrocorax carbo		population
	Phalacrocoracidae Podicipedidae	Phalacrocorax carbo Podiceps cristatus		_
				_

ANNEX IX

GRO	DUP	SPECIES		REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
REPTILES	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK	
	Anguidae	Anguis fragilis			
	Lacertidae	Lacerta oxycephala			
		Podarcis muralis		-P901	
	Colubridae	Natrix natrix			
	Viperidae	Vipera ammodytes			
		Vipera berus			
AMPHIBIANS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK	
	Salamandridae	Salamandra salamandra			
		Triturus vulgaris		-P902	
		Triturus alpestris			
	Bufonidae	Bufo bufo			
	Ranidae	Rana esculenta			
		Rana ridibunda			
FISH	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK	
	Anguillidae	Anguilla anguilla			
	Clupeidae	Alosa nordmanni			
	Cyprinidae	Abramis sapa			
		Alburnoides bipunctatus			
		Aspius aspius			
		Barbus barbus			
		Carassius carassius			
		Chondrostoma kneri			
		Cyprinus carpio		native population	
		Gobio gobio			
		Leuciscus cavedanus			
		Leuciscus idus			
		Rutilus pigus			
		Scardinius dergle			
		Vimba vimba			
	Gadidae	Lota lota			
	Gobiidae	Proterorhinus marmoratus			
	Salmonidae	Hucho hucho		-P903	
		Salmo trutta			
		Salmo zrmanjaensis Salmothymus obtusirostris		1	
		salonitana			
		Thymallus thymallus			
	Coregonidae	Coregonus lavaretus		+P901	
	Cottidae	Cottus gobio			

ANNEX IX

GRO	UP	SPECII	S	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
ECHINODERMS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
SEA CUCUMBERS		All species in the Adriatic Sea		
ECHINOIDS	Echinidae	Paracentrotus lividus		
INSECTS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
STAG BEETLES	Lucanidae	Lucanus cervus		
BUTTERFLIES	Hesperiidae	Heteropterus morpheus		
		Thymelicus acteon		
	Lycaenidae	Glaucopsyche alexis		
		Lycaena hippothoe		
		Lycaena thersamon		
		Pseudophilotes vicrana		
		Scolitantides orion		
	Nymphalidae	Apatura ilia		
	, ,	Apatura iris		
		Boloria titania		
		Euphydryas maturna		
		Limenitis populi		
		Mellicta aurelia		
		Mellicta britomartis		
DARNERS	Aeshnidae	Aeshna grandis		
D/IIII/E/IO	ricominaco	Anacieshna isosceles		
	Gomphidae	Ophiogomphus cecilia		
	Corduliidae	Somatochlora flavomaculata		
	Libellulidae	Selysiothemis nigra		
	Libeliulidae	Gerysiothernis riigra		
CRABS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
SPIDER CRABS	Majidae	Maja squinado		
	Scyllaridae	Scyllarides latus		
		Scyllarides pigmaeus		
		Scyllarus arctus		
SNAILS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Helicidae	Helix aspersa		
	Helicidae	Helix cincta		
	Helicidae	Helix lucorum		
	Helicidae	Helix pomatia		
CLAMS, MUSSELS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
	Margaritanidae	Margaritifera margaritifera		

GROUP		SPECIE	REMARK	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
CNIDARIANS	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
CORALS	Coralliidae	Corallium rubrum		
FLORA	FAMILY	SPECIES - Scientific name	SPECIES - Common name	REMARK
LICHENS		Cladonia spp.		
		Cetraria islandica		
		Evernia prunastri		
		Pseudevernia furfuracea		
		Usnea spp.		
FERNS	Adiantaceae	Adiantum capillus-veneris L.		
	Lycopodiaceae	Lycopodium clavatum L.		
	Lycopodiaceae	Lycopodium annotinum L.		
	Ophioglossaceae	Ophioglossum vulgatum L.		
	Polypodiaceae	Polypodium vulgare L.		
	Polytrichaceae	Polytrichum spp.		
	Salviniaceae	Salvinia natans (L.) All.		
SPERMATOPHYTA	Cupresaceae	Juniperus sabina L.		
	Ephedraceae	Ephedra distachya L.		
		Ephedra fragilis Desf. ssp. campylopoda (C. A. Mayer) Asch. et Graeb.		
		Ephedra major Host		
	Pinaceae	Pinus nigra Arnold ssp. dalmatica (Vis.) Franco		
	Acanthaceae	Acanthus spp.		
	Acoraceae	Acorus calamus L.		
	Amaryllidaceae	Narcissus tazetta L.		
	Anacardiaceae	Cotinus coggygria Scop.		
	Apiaceae	Aethusa cynapium L.		
		Angelica archangelica L.		
		Anthriscus cerefolium (L.) Hoffm.		
		Carum carvi L.		
		Caucalis platycarpos L.		
		Cicuta virosa L.		
		Conium maculatum L.		
		Eryngium campestre L.		
		Heracleum sphondylium L. ssp. orsinii (Guss.) H. Neumayer		
		Meum athamanticum Jacq.		
		Oenanthe aquatica (L.) Poir.		
		Opopanax chironium (L.) Koch		
		Peucedanum ostruthium (L.) Koch		
	ļ	Pimpinella major (L.) Huds.		
	ļ	Pimpinella saxifraga L.		
		Sanicula europaea L.		
		Scandix pecten-veneris L. ssp. pecten-veneris		
		Smyrnium olusatrum L.		

GRO	DUP	SPECIE	S	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Apocynaceae	Vinca minor L.		
	Araceae	Arum italicum Mill.		
		Arum maculatum L.		
		Arum nigrum Schott		
		Dracunculus vulgaris Schott		
	Aristolochiaceae	Aristolochia clematitis L.		
		Asarum europaeum L.		
	Asclepiadaceae	Vincetoxicum hirundinaria Medik.		
	Aspleniaceae	Asplenium trichomanes-ramosum L.		
	Asteracee	Achillea clavenae L.		
		Antennaria dioica (L.) Gaertn.		
		Arctium nemorosum Lej.		
		Arctium tomentosum Mill.		
		Calendula arvensis L.		
		Carlina acaulis L.		
		Carthamus lanatus L.		
		Centaurea alpina L.		
		Centaurea cyanus L.		
		Centaurea rupestris L.		
		Cnicus benedictus L.		
		Doronicum orientale Hoffm.		
		Helichrysum italicum (Roth) G.Don		
		Inula helenium L.		
		Inula salicina L. ssp. aspera (Poir.) Hayek		
		Onopordum acanthium L.		
		Onopordum illyricum L.		
		Pulicaria dysenterica (L.) Bernh.		
		Senecio jacobaea L.		
		Silybum marianum (L.) Gaertn.		
		Solidago gigantea Aiton		
		Solidago virgaurea L.		
		Tanacetum vulgare L.		
		Xanthium spp.		
	Berberidaceae	Berberis vulgaris L.		
	Boraginaceae	Alkanna tinctoria Tausch ssp. tinctoria		
		Anchusa officinalis L.		
		Cynoglossum officinale L.		
		Lithospermum officinale L.		
		Symphytum tuberosum L.		
	Brassicaceae	Alliaria petiolata (M. Bieb.) Cavara et Grande		
		Alyssum repens Baumg. ssp. transsilvanicum (Schur) Nyman		
		Alyssum tortuosum Willd.		
		Alyssum wierzbickii Heuff.		

GROUP		SPECIES	S REMARK		
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
		Aurinia petraea (Ard.) Schur			
		Aurinia saxatilis (L.) Desv. ssp. saxatilis			
		Brassica incana Ten.			
		Brassica nigra (L.) Koch			
		Erysimum spp. (except the species listed in Annex VIII to this Ordinance)			
		Iberis pruitii Tineo			
		Isatis tinctoria L.			
		Matthiola incana (L.) R. Br.			
		Nasturtium officinale R. Br.			
	Butomaceae	Butomus umbellatus L.			
	Campanulaceae	Campanula carnica Schiede ex Mert. et Koch ssp. carnica			
		Phyteuma pseudoorbiculare Pant.			
	Caprifoliaceae	Lonicera caprifolium L.			
		Sambucus racemosa L.			
		Viburnum lantana L.			
	Caryophyllaceae	Agrostemma githago L.			
		Gypsophila spp.			
		Herniaria glabra L.			
		Herniaria hirsuta L.			
		Saponaria officinalis L.			
		Spergularia rubra (L.) J. Presl et C. Presl			
	Celastraceae	Euonymus europaea L.			
	Chenopodiaceae	Chenopodium bonus-henricus L.			
	Cichoriaceae	Hieracium pilosella L.			
		Lactuca virosa L.			
	Clusiaceae	Hypericum perforatum L.			
	Convolvulaceae	Convolvulus cneorum L.			
	Crassulaceae	Rhodiola rosea L.			
		Sedum acre L.			
		Sedum telephium L.			
		Sedum telephium L. ssp. maximum (L.) Krock.			
	Cucurbitaceae	Bryonia alba L.			
		Bryonia dioica Jacq.			
	Cyperaceae	Carex acutiformis Ehrh.			
		Carex buekii Wimm.			
		Carex ferruginea Scop.			
		Carex mucronata All.			
		Carex pilulifera L.			
		Carex praecox Schreb.			
		Scirpus cernuus Vahl			
		Scirpus holoschoenus L.			
		Scirpus litoralis Schrad.			
		Scirpus maritimus L.			

GRO	DUP	SPECIE	S	REMARK
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
	Dioscoreaceae	Tamus communis L.		
	Dryopteridaceae	Dryopteris filix-mas (L.) Schott		
	Empetraceae	Empetrum nigrum L.		
	Ericaceae	Arbutus andrachne L.		
		Arbutus x andrachnoides Link		
		Calluna vulgaris (L.) Hull		
		Erica herbacea L.		
		Rhododendron spp.		
		Vaccinium myrtillus L.		
		Vaccinium vitis-idaea L.		
	Fabaceae (incl. Caesalpinaceae, Mimosaceae)	Anthyllis barba-jovis L.		
		Anthyllis vulneraria L.		
		Colutea arborescens L.		
		Galega officinalis L.		
		Genista tinctoria L.		
		Glycyrrhiza glabra L.		
		Laburnum spp. (except those listed in Annex VIII to this Ordinance)		
		Melilotus altissimus Thuill.		
		Ononis spinosa L.		
		Trigonella caerulea (L.) Ser.		
		Trigonella foenum-graecum L.		
	Frankeniaceae	Frankenia pulverulenta L.		
	Fumariaceae	Corydalis bulbosa (L.) DC.		
		Corydalis solida (L.) Swartz		
	Gentianaceae	Gentiana spp. (except those listed in Annex VIII to this Ordinance)		
	Geraniaceae	Geranium macrorrhizum L.		
		Geranium robertianum L.		
	Globulariacee	Globularia alypum L.		
	Iridaceae	Crocus vernus (L.) Hill		
	Lamiaceae	Ballota nigra L.		
		Betonica officinalis L.		
		Calamintha glandulosa (Req.) Benth.		
		Calamintha nepetoides Jord.		
		Galeopsis segetum Neck.		
	<u> </u>	Lamium album L.		
		Lavandula latifolia Medik.		
	 	Leonurus cardiaca L.		
	<u> </u>	Lycopus europaeus L.		
		Marrubium incanum Desr.		
		Marrubium vulgare L.		
	 	Melissa officinalis L.		
	 	Melittis melissophyllum L.		
	 	Mentha aquatica L.		
		Mentha pulegium L.		

GROUP		SPECIE	S REMARK		
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
		Micromeria thymifolia (Scop.) Fritsch			
		Nepeta cataria L.		1	
		Nepeta pannonica L.			
		Origanum heracleoticum L.			
		Phlomis fruticosa L.			
		Salvia aethiopis L.			
		Salvia fruticosa Mill.			
		Salvia peloponnesiaca Boiss. et			
		Heldr.			
		Salvia sclarea L.			
		Satureja subspicata Vis.			
		Stachys recta L.			
		Teucrium chamaedrys L.			
		Teucrium fruticans L.			
		Teucrium montanum L.			
		Teucrium scordioides Schreb.			
		Teucrium scordium L.		1	
		Teucrium scorodonia L.			
		Thymus spp. (except those listed in Annex VIII)			
	Lauraceae	Laurus nobilis L.			
	Lentibulariaceae	Pinguicula spp. (except those listed in Annex VIII to this Ordinance)			
	Liliaceae	Allium victorialis L.			
		Asparagus maritimus (L.) Mill.			
		Asparagus officinalis L.			
		Asparagus tenuifolius Lam.			
		Asphodelus albus Mill.			
		Colchicum spp. (except those listed in Annex VIII to this Ordinance)			
		Convallaria majalis L.			
		Erythronium dens-canis L.			
		Ornithogalum spp. (except those listed in Annex VIII to this Ordinance)			
		Paris quadrifolia L.			
		Polygonatum spp.			
		Ruscus hypoglossum L.			
		Tulipa sylvestris L.			
		Urginea maritima (L.) Baker			
		Veratrum lobelianum Bernh.			
		Veratrum nigrum L.			
	Linaceae	Linum spp.			
	Lythraceae	Lythrum spp. (except those listed in Annex VIII to this Ordinance)			
	Malvaceae	Althaea officinalis L.			
		Malva neglecta Wallr.			
	Nymphaeaceae	Nuphar lutea (L.) Sm., in Sibith. et Sm.			

GROUP	SPECIES	PECIES REMARI		
SCIENTIFIC NAME COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
	Nymphaea alba L.			
Onagraceae (= Oenotheraceae)	Epilobium palustre L.			
Oxalidaceae	Oxalis acetosella L.			
Papaveraceae	Papaver rhoeas L.			
Parnassiaceae	Parnassia palustris L.			
Plantaginaceae	Plantago afra L.			
	Plumbago europaea L.			
Poaceae	Aegilops cylindrica Host			
	Aegilops neglecta Req. ex Bertol.			
	Aegilops uniaristata Vis.			
	Agrostis canina L.			
	Ampelodesmos mauritanica (Poir.) T.Durand et Schinz			
	Avellinia michelii (Savi) Parl.			
	Brachiaria eruciformis (Sibth. et Sm.) Griseb.			
	Briza minor L.			
	Crypsis aculeata (L.) Aiton			
	Crypsis alopecuroides (Piller et Mitterp.) Schrad.			
	Crypsis schoenoides (L.) Lam.			
	Elymus pycnanthus (Godr.) Melderis			
	Festuca trachyphylla (Hack.) Krajina			
	Heteropogon contortus (L.) P.Beauv. ex Roem. et Schult.			
	Hierochloe australis (Schrad.) Roem. et Schult.			
	Leersia oryzoides (L.) Sw.			
	Phalaris canariensis L.			
	Poa palustris L.			
	Polypogon maritimus Willd.			
	Polypogon monspeliensis (L.) Desf.			
	Puccinellia fasciculata (Torr.) E.P.Bicknell			
	Vulpia fasciculata (Forssk.) Samp.			
	Vulpia ligustica (All.) Link			
Polygalaceae	Polygala amara L.			
	Polygala chamaebuxus L.			
Polygonaceae	Polygonum bistorta L.			
	Polygonum hydropiper L.			
	Rheum rhaponticum L.			
	Rumex aquaticus L.			
Primulaceae	Primula auricula L.			
	Primula elatior (L.) L.			
	Primula veris L.			
	Primula veris L. ssp. columnae (Ten.) Lüdi			

GROUP		SPECIE	S REMARK		
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
	Pyrolaceae (incl. Monotropaceae)	Moneses uniflora (L.) A. Gray			
	Ranunculaceae	Aconitum anthora L.			
		Aconitum napellus L.			
		Actaea spicata L.			
		Adonis spp. (except those listed in Annex VIII to this Ordinance)			
		Anemone spp. (except those listed in Annex VIII to this Ordinance)			
		Aquilegia vulgaris L.			
		Caltha palustris L.			
		Clematis recta L.			
		Consolida regalis S. F. Gray			
		Eranthis hiemalis (L.) Salisb.			
		Helleborus spp. (except those listed in Annex VIII to this Ordinance)			
		Hepatica nobilis Schreber			
		Ranunculus spp.			
		Thalictrum spp.			
		Trollius europaeus L.			
	Resedaceae	Reseda lutea L.			
		Reseda luteola L.			
	Rhamnaceae	Rhamnus alpinus L. ssp. fallax (Boiss.) Maire et Petitm.			
		Rhamnus catharticus L.			
	Rosaceae	Agrimonia eupatoria L.			
		Alchemilla glabra Neygenf.			
		Aruncus dioicus (Walter) Fernald			
		Crataegus laevigata (Poir.) DC.			
		Crataegus monogyna Jacq.			
		Filipendula ulmaria (L.) Maxim.			
		Geum urbanum L.			
		Malus sylvestris Mill.			
		Potentilla anserina L.			
		Potentilla erecta (L.) Raeuschel			
		Prunus avium L.			
		Prunus mahaleb L.			
		Pyrus communis L.			
		Pyrus pyraster Burgsd.			
		Rosa spp.			
		Sanguisorba minor Scop.			
		Sarcopoterium spinosum (L.) Spach			
		Sorbus aucuparia L.			
		Sorbus domestica L.			
	Rubiaceae	Galium odoratum (L.) Scop.			
		Galium verum L.			
		Rubia tinctorum L.			
	Rutaceae	Dictamnus albus L.			

GROUP		SPECIE	ES REMAR	
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME	
		Ruta angustifolia Pers.		
		Ruta chalepensis L.		
		Ruta graveolens L.		
	Salicaceae	Populus tremula L.		
	Scrophulariaceae	Digitalis spp. (except those listed in Annex VIII to this Ordinance)		
		Euphrasia rostkoviana Hayne		
		Gratiola officinalis L.		
		Linaria vulgaris Mill.		
		Scrophularia nodosa L.		
		Verbascum spp. (except those listed in Annex VIII to this Ordinance)		
		Veronica agrestis L.		
		Veronica beccabunga L.		
		Veronica officinalis L.		
		Veronica opaca Fr.		
		Veronica verna L.		
	Solanaceae	Atropa bella-donna L.		
		Hyoscyamus albus L.		
		Hyoscyamus niger L.		
		Lycium europaeum L.		
		Physalis alkekengi L.		
		Scopolia carniolica Jacq.		
		Solanum dulcamara L.		
		Solanum nigrum L.		
	Styracaceae	Styrax officinalis L.		
	Thymelaeaceae	Daphne laureola L.		
		Daphne mezereum L.		
		Thymelaea hirsuta (L.) Endl.		
	Trapaceae	Trapa natans L.		
	Typhaceae	Typha angustifolia L.		
		Typha latifolia L.		
	Urticaceae	Urtica urens L.		
	Valerianaceae	Centranthus ruber (L.) DC.		
		Valeriana officinalis L.		
		Valerianella locusta (L.) Laterrade		
	Verbenaceae	Vitex agnus-castus L.		
	Violaceae	Viola arvensis Murray		
		Viola odorata L.		
		Viola tricolor L.		
	Zygophyllaceae	Tribulus terrestris L.		
MUSHROOMS		All species introduced into the Republic of Croatia and which are not listed in Annex VIII		

GROUP		SPE	SPECIES		
SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME		
MAMMALIA	MAMMALS				
CANIVORA	CARNIVORES				
Phocidae	seals				
		Cystophora cristata	hooded seal		
		Phoca groenlandica	harp seal		

	REPUBLINA HRVATSH	A / REPUBLIC C	FCROATIA			Stran	ilca / Page: 1/
1	1. Izvoznik/Ponovni izvoznik / Ex	porter/Re-exporter		DOPUŠTENJE / Permit / Certificate		Br. / No	
				UVOZ / IM IZVOZ / E PONOVN DRUGO /	XPORT ZVOZ	1 -	o: / Last day of validity:
ZVORNIK / ORIGINAL	3. Uvoznik / Importer			C IES	ugroženim v	o međunarodn rstama divlje f on Internationa ecies of Wild Fa	aune i flore al Trade in
IK/O				4. Država (ponovnog	ı) izvoza / Country of (re	e)-export	
IZVORN				5. Država uvoza / Co	untry of import		
1	 Propisana lokacija za žive, iz Pravilnika o prekograničnom p Authorized location for live wild- Ordinance on Transboundary M 	prometu i trgovini zaštio zaken specimens of Anno	cenim vrstama / ex I species of the	U NATU Ru	MINISTARSTVO PRAVA ZA ZAŠTI MINISTRY OF O JRE PROTECTION njaninova 2, HR - 5 1 4866 102, fa	KULTURE ITU PRIRODE CULTURE N DIRECTOR 10000 Zagre	АТЕ b
_	8. Opis primjeraka (uključujući o	znake, spol, datum roć	fenja za žive	9. Neto masa (kg) / N	·	10. Količina / Qu	
	životinje) / Description of speci animals)			11. CITES Dodatak / CITES Appendix	12. Prilog pravilnika / Ordinance Annex	13. Podrijetlo / Source	14. Svrha / Purpose
				15. Država podrijetla	/ Country of origin		
				16. Dozvola br. / Peri			vanja / Date of issue
				18. Država zadnjega 19. Potvrda br. / Cert	(ponovnog) izvoza / C		export vanja / Date of issue
	21. Znanstveno ime vrste / Scien	ific name of species					
	22. Hrvatsko ime vrste / Commor	name of species					
	23. Posebni uvjeti / Special condit Ovo dopuštenje/potvrda valjar životinja, ili ako se radi o zrač permit/cerificate is only valid if liv Animals or, in the case of air trar	no je samo ako se žive : nom prijevozu, propisir e animals are transporte	na o živim životinjam ed in compliance with th	a koje je objavila Međ ne CITES Guidelines fo	u <mark>narodna udruga za zr</mark> r the Transport and Prep	r <mark>ačni prijevoz (IA</mark> paration for Shipm	TA) / The
	24. Dokumentacija o (ponovnon The (re-)export documentation predana je tijelu koje ju	from the country of (re-) je izdalo /	-,	25. Ovime se odobra gore opisanih ro goods above is h	ت bba. / The importation/e:	Izvoz xportation/re-expo	Ponovni izvoz ortation of the
	has been surrendered to mora se predati graničn must be surrendered to the	oj carinskoj službi na r		Potpis i služ	beni pečat: / Signature	and official stamp	o:
				Ime odgovorne os Name of issuing off			
	26. Konosman/zračni teretni list	br. / Bill of Lading/Air Wa	aybill No	Mjesto i datum izd Place and date of is			
	27. Popunjava carinska služba /	For customs use only		Potpis i službeni peč	at: / Signature and offic	cial stamp:	
	Stvarno uvezena količina/neto masa (kg) / Quantity/net mass (kg) actually imported	Broj mrtvih životinja pri dolasku / Number of animals dead on arrival	Vrsta: / Type:	t / Customs document			
			Broj: / Number:				
			Datum: / Date: 15	1			

- 1. Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika. U slučaju dopuštenja za životinje u osobnom vlasništvu, puni naziv i adresa zakonitog vlasnika./ Full name and address of the actual (re-)exporter, not of an agent. In the case of a personal ownership certificate, the full name and address of the legal owner.
- 2. Rok važenja izvoznog dopuštenja ili potvrde o ponovnom izvozu je najdulje 6 mjeseci, a uvoznog dopuštenja 12 mjeseci. Rok važenja dopuštenja za životinje u osobnom vlasništvu je najdulje tri godine. Nakon posljednjeg dana važenja, ovaj dokument smatra se nevažećim, pa vlasnik mora bez nepotrebnog odlaganja vratiti izvornik i sve kopije nadležnom upravnom tijelu koje ih je izdalo. Uvozno dopuštenje nije važeće ako je odgovarajući CITES dokument države (ponovnog) izvoza iskorišten za (ponovni) izvoz nakon posljednjeg isteka roka valjanosti, ili ako je na dan unošenja u Republiku Hrvatsku prošlo više od 6 mjeseci od dana izdavanja./ The period of validity of an export permit or re-export certificate shall not exceed 6 months and of an import permit 12 months. The period of validity of a personal ownership certificate shall not exceed three years. After its last day of validity, this document is void and the original and all copies must be returned by the holder to issuing management authority without undue delay. An import permit is not valid where the corresponding CITES document from the (re-)exporting country was used for (re-)export after its last day of validity or if the date of introduction into Croatia is more than six months from its date of issue
- 3. Puni naziv i adresa stvarnog uvoznika, a ne zastupnika. Ostaviti prazno ili ponoviti adresu vlasnika iz polja 1. u slučaju dopuštenja za životinje u osobnom vlasništvu. / Full name and address of the actual importer, not of an agent. To be left blank or copy the address of the owner form box 1. in the case of a personal ownership certificate.
- 5. Ostaviti prazno u slučaju dopuštenja za životinje u osobnom vlasništvu./ To be left blank in the case of a personal ownership certificate.
- 6. Za žive primjerke vrsta iz Priloga I koji nisu rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi, nadležno upravno tijelo može propisati odredište te pojedinosti o lokaciji unose se u ovo polje. Svako preseljenje, osim u slučaju hitne veterinarske intervencije, uz uvjet da se primjerci vrate na propisano odredište,mora prethodno odobriti nadležno upravno tijelo./ For live specimens of Annex I species other than captive bred or artificially propagated specimens, the issuing authority may prescribe the location at which they are to be kept by including details thereof in this box. Any movement, except for urgent veterinary treatment and provided the specimensare returned directly to the authorized location. then requires prior authorization from the comoetent management authority.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of Ordinance on transboundary movement and trade in protected spacejes
- 9/10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./
 Use the units of quantity and/or net mass in accordance with those contained in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 11. Upisati broj Dodatka Konvencije (I, II ili III) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde./ Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/cortificate
- 12. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I, II, III iII IV) u kojem je vrsta navedena na dan izdavanja dopuštenja/ potvrde./ Enter the number of the Annex to the Ordinance on transboundary movement and trade in protected species (I, II, III or IV) in which the species is listed at the date of issue of the permit/certificate.
- 13. Izabrati jedan od sljedećih kodova za oznaku porijekla:/ Use one of the following codes to indicate the source:
- \boldsymbol{W} Primjerci uzeti iz divljine / Specimens taken from the wild
- R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
- D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species bred in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi ili derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- F Životinje rodene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo)./ Source unknown (must be justified)
- 14. Izabrati jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze/uvoze: / Use one of the following codes to indicate the purpose for which the specimens are to be (re-)exported/ imported:
 - B Uzgoj u zatočeništvu ili umjetno razmnožavanje / breeding in captivity or artificial propagation
 - E Edukativna svrha / educational
 - G Botanički vrtovi / botanical gardens
 - H Lovački trofeji / hunting trophies
 - L Provedba zakonodavstva/pravosuđe/sudska forenzika / law enforcement/judicial/forensic
 - M Medicinsko istraživanje (uključujući i biomedicinsko) / medical (including biomedical research)
 - N Unošenje ili ponovno unošenje u divljinu / introduction or reintroduction into the wild
 - P Osobno vlasništvo / personal
 - Q Cirkusi ili putujuće izložbe / circuses and travelling exhibitions
 - S Znanstvena svrha / scientific
 - T Komercijalna svrha / commercial
 - Z Zoološki vrtovi / zoos
- 15.-17. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. U poljima 16 i 17 moraju biti navedene pojedinosti o odgovarajućem dopuštenju druge zemlje. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated. Where this is country other the Croatia boxes 16 and 17 must contain details of the relevant permit.
- 18.-20. Kada se radi o potvrdi o ponovnom izvozu, država posljednjeg ponovnog izvoza je država iz koje su primjerci bili uvezeni prije nego su ponovo izvezeni iz Republike Hrvatske. Ako se radi o uvoznom dopuštenju, onda je to zemlja ponovnog izvoza iz koje se uzorci uvoze. U poljima 19 i 20 moraju biti navedene pojedinosti o odgovarajućoj potvrdi o ponovnom izvozu./ The country of last re-export is, in the case of a re-export certificate, the re-exporting country from which the specimens were imported before being re-exported from Croatia. In the case of an import permit, it is the re-exporting country from which the specimens are to be imported. Boxes 19 and 20 must contain details of the relevant re-export certificate.
- 21. Znanstveno ime vrste mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 23.-25. Samo za službenu uporabu. / For official use only.
- 26. Uvoznik/(ponovni) izvoznik ili njegov zastupnik mora, gdje je prikladno, navesti broj konosmana ili zračnog teretnog lista. / The importer/(re-)exporter or his agent must, where appropriate, indicate the number of the bill of lading or air way bill.
- 27. Ispunja carinska služba u mjestu unošenja u Republiku Hrvatsku ili mjestu (ponovnog) izvoza. Pri uvozu, izvornik (obrazac 1) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, "preslik za vlasnika" (obrazac 2) uvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. Pri (ponovnom) izvozu, "preslik kojeg carinska služba vraća nadležnom upravnom tijelu" (obrazac 3) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, izvornik (obrazac 1) i "preslik za vlasnika" (obrazac 2) (ponovnom) izvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. / To be completed by the customs office of introduction into Croatia, or that of (re-jexport as appropriate. In the case of introduction, the original (form 1) must be returned to the management authority of Croatia, the copy for the holder (form 2) to the importer and the copy for the customs (form 6) must be kept by the customs officer. In the case of (re-jexport, the copy for return by customs to the issuing authority (form 3) must be returned to the management authority of Croatia, the original (form 1) and the copy for the holder (form 2) to the (re-jexport and the copy for the customs (form 6) must be kept by the customs officer.

				1
2	1. Izvoznik/Ponovni izvoznik / Exporter/R	te-exporter	DOPUŠTENJE / POTVRDA	Br. / No
			Permit / Certificate	
			UVOZ / IMPORT	
			IZVOZ / EXPORT	
7			PONOVNI IZVOZ / RE-EXPOR	RT
/ Copy tor the holder			DRUGO / OTHER	
2				
e O				<u> </u>
₽			Konvencija	o međunarodnoj trgovini
5				rstama divlje faune i flore
-	3. Uvoznik / Importer			n on International Trade in
<u>Ş</u> .			Endangered Sp	ecies of Wild Fauna and Flora
3				
_			4. Država (ponovnog) izvoza / Country of (re	e)-export
Ø				
≝				
S			5. Država uvoza / Country of import	
<u>0</u>				
Presiik za Viasnika				
Ň	6. Propisana lokacija za žive, iz divljine	uzete primierke vrsta iz Priloga I	7. Nadležno upravno tijelo / Issuing Manage	ement Authority
≚	Pravilnika o prekograničnom prometu		7. Nadieżno upravno tijelo / issuing Manage	ement Admonty
รั	Authorized location for live wild-taken sp		MINISTARSTVO	KULTURE
Ĕ	Ordinance on Transboundary Movemen	t and Trade in Protected Species.	UPRAVA ZA ZAŠT	ITU PRIRODE
_			MINISTRY OF (CULTURE
			NATURE PROTECTION	N DIRECTORATE
			Runjaninova 2, HR -	10000 Zagreb
2			tel. +385 1 4866 102, fa	
			· ·	
	 Opis primjeraka (uključujući oznake, životinje) / Description of specimens (ir 		9. Neto masa (kg) / Net mass (kg)	10. Količina / Quantity
	animals)	,	14 CITES Dodotok / 10 Briley provibile /	12 Deduitable / 144 Symbo /
			11. CITES Dodatak / 12. Prilog pravilnika / CITES Appendix Ordinance Annex	13. Podrijetlo / 14. Svrha / Purpose
			STIZE / Appendix Standards / Willex	T dipose
			15. Država podrijetla / Country of origin	
				I
			16. Dozvola br. / Permit No	17. Datum izdavanja / Date of issue
			18. Država zadnjega (ponovnog) izvoza / C	ountry of last (re-)export
			10.7	loo no de la companya
			19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
			19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
	21. Znanstveno ime vrste / Scientific nam	ne of species	19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
			19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
	21. Znanstveno ime vrste / Scientific nam 22. Hrvatsko ime vrste / Common name o		19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
			19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
			19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
	22. Hrvatsko ime vrste / Common name o		19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
	22. Hrvatsko ime vrste / Common name o		19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
	22. Hrvatsko ime vrste / Common name o		19. Potvrda br. / Certificate No	20. Datum izdavanja / Date of issue
	22. Hrvatsko ime vrste / Common name o 23. Posebni uvjeti / Special conditions	of species	19. Potvrda br. / Certificate No	
	22. Hrvatsko ime vrste / Common name o 23. Posebni uvjeti / Special conditions Ovo dopuštenje/potvrda valjano je sa životinja, ili ako se radi o zračnom pri	of species mo ako se žive životinje prevoze u jevozu, propisima o živim životinja	skladu s CITES-ovim uputama za prijevoz i pr na koje je objavila Međunarodna udruga za zr	ipremu pošiljke živih divljih račni prijevoz (IATA) / The
	22. Hrvatsko ime vrste / Common name o 23. Posebni uvjeti / Special conditions Ovo dopuštenje/potvrda valjano je sa životinja, ili ako se radi o zračnom pri permit/cerificate is only valid if live anima	of species mo ako se žive životinje prevoze u jevozu, propisima o živim životinja als are transported in compliance with	skladu s CITES-ovim uputama za prijevoz i pr na koje je objavila Međunarodna udruga za zi the CITES Guidelines for the Transport and Pre	ripremu pošiljke živih divljih račni prijevoz (IATA) / The paration for Shipment of Live Wild
	22. Hrvatsko ime vrste / Common name o 23. Posebni uvjeti / Special conditions Ovo dopuštenje/potvrda valjano je sa životinja, ili ako se radi o zračnom pri permit/cerificate is only valid if live anima Animals or, in the case of air transport, th	of species mo ako se žive životinje prevoze u jevozu, propisima o živim životinja als are transported in compliance with le Live Animals Regulations published	skladu s CITES-ovim uputama za prijevoz i pr na koje je objavila Međunarodna udruga za z the CITES Guidelines for the Transport and Pre by the International Air Transport Associati on (ipremu pošiljke živih divljih račni prijevoz (IATA) / The paration for Shipment of Live Wild IATA)
	22. Hrvatsko ime vrste / Common name o 23. Posebni uvjeti / Special conditions Ovo dopuštenje/potvrda valjano je sa životinja, ili ako se radi o zračnom pri permit/cerificate is only valid if live anima Animals or, in the case of air transport, th 24. Dokumentacija o (ponovnom) izvozi	of species mo ako se žive životinje prevoze u jevozu, propisima o živim životinja als are transported in compliance with the Live Animals Regulations published u iz države (ponovnog) izvoza /	skladu s CITES-ovim uputama za prijevoz i pr na koje je objavila Međunarodna udruga za z the CITES Guidelines for the Transport and Pre by the International Air Transport Associati on (25. Ovime se odobrava Uvoz	ipremu pošiljke živih divljih račni prijevoz (IATA) / The paration for Shipment of Live Wild IATA) Izvoz Ponovni izvoz
	22. Hrvatsko ime vrste / Common name of 23. Posebni uvjeti / Special conditions Ovo dopuštenje/potvrda valjano je sa životinja, ili ako se radi o zračnom pri permit/cerificate is only valid if live anima Animals or, in the case of air transport, the 24. Dokumentacija o (ponovnom) izvozi The (re-)export documentation from the	mo ako se žive životinje prevoze u jevozu, propisima o živim životinja als are transported in compliance with the Live Animals Regulations published u iz države (ponovnog) izvoza / e country of (re-)export	skladu s CITES-ovim uputama za prijevoz i pr na koje je objavila Međunarodna udruga za zi the CITES Guidelines for the Transport and Pre by the International Air Transport Associati on (25. Ovime se odobrava Uvoz gore opisanih roba. / The importation/e	ipremu pošiljke živih divljih račni prijevoz (IATA) / The paration for Shipment of Live Wild IATA) Izvoz Ponovni izvoz
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- 1. Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika. U slučaju dopuštenja za životinje u osobnom vlasništvu, puni naziv i adresa zakonitog vlasnika./ Full name and address of the actual (re-)exporter, not of an agent. In the case of a personal ownership certificate, the full name and address of the legal owner.
- 2. Rok važenja izvoznog dopuštenja ili potvrde o ponovnom izvozu je najdulje 6 mjeseci, a uvoznog dopuštenja 12 mjeseci. Rok važenja dopuštenja za životinje u osobnom vlasništvu je najdulje tri godine. Nakon posljednjeg dana važenja, ovaj dokument smatra se nevažećim, pa vlasnik mora bez nepotrebnog odlaganja vratiti izvornik i sve kopije nadležnom upravnom tijelu koje ih je izdalo. Uvozno dopuštenje nije važeće ako je odgovarajući CITES dokument države (ponovnog) izvoza iskorišten za (ponovni) izvoz nakon posljednjeg isteka roka valjanosti, ili ako je na dan unošenja u Republiku Hrvatsku prošlo više od 6 mjeseci od dana izdavanja./ The period of validity of an export permit or re-export certificate shall not exceed 6 months and of an import permit 12 months. The period of validity of a personal ownership certificate shall not exceed three years. After its last day of validity, this document is void and the original and all copies must be returned by the holder to issuing management authority without undue delay. An import permit is not valid where the corresponding CITES document from the (re-)exporting country was used for (re-)export after its last day of validity or if the date of introduction into Croatia is more than six months from its date of issue
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- 6. Za žive primjerke vrsta iz Priloga I koji nisu rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi, nadležno upravno tijelo može propisati odredište te pojedinosti o lokaciji unose se u ovo polje. Svako preseljenje, osim u slučaju hitne veterinarske intervencije, uz uvjet da se primjerci vrate na propisano odredište,mora prethodno odobriti nadležno upravno tijelo./ For live specimens of Annex I species other than captive bred or artificially propagated specimens, the issuing authority may prescribe the location at which they are to be kept by including details thereof in this box. Any movement, except for urgent veterinary treatment and provided the specimensare returned directly to the authorized location. then requires prior authorization from the comoetent management authority.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of Ordinance on transboundary movement and trade in protected spacies.
- 9/10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./
 Use the units of quantity and/or net mass in accordance with those contained in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 11. Upisati broj Dodatka Konvencije (I, II ili III) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde./ Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/cortificate
- 12. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I, II, III iII IV) u kojem je vrsta navedena na dan izdavanja dopuštenja/ potvrde./ Enter the number of the Annex to the Ordinance on transboundary movement and trade in protected species (I, II, III or IV) in which the species is listed at the date of issue of the permit/certificate.
- 13. Izabrati jedan od sljedećih kodova za oznaku porijekla:/ Use one of the following codes to indicate the source:
- W Primjerci uzeti iz divljine / Specimens taken from the wild
- R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
- D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species bred in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi ili derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- F Životinje rodene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo)./ Source unknown (must be justified)
- 14. Izabrati jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze/uvoze: / Use one of the following codes to indicate the purpose for which the specimens are to be (re-)exported/ imported:
 - B Uzgoj u zatočeništvu ili umjetno razmnožavanje / breeding in captivity or artificial propagation
 - E Edukativna svrha / educational
 - G Botanički vrtovi / botanical gardens
 - H Lovački trofeji / hunting trophies
 - L Provedba zakonodavstva/pravosuđe/sudska forenzika / law enforcement/judicial/forensic
 - M Medicinsko istraživanje (uključujući i biomedicinsko) / medical (including biomedical research)
 - N Unošenje ili ponovno unošenje u divljinu / introduction or reintroduction into the wild
 - P Osobno vlasništvo / personal
 - Q Cirkusi ili putujuće izložbe / circuses and travelling exhibitions
 - S Znanstvena svrha / scientific
 - T Komercijalna svrha / commercial
 - Z Zoološki vrtovi / zoos
- 15.-17. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. U poljima 16 i 17 moraju biti navedene pojedinosti o odgovarajućem dopuštenju druge zemlje. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated. Where this is country other the Croatia boxes 16 and 17 must contain details of the relevant permit.
- 18.-20. Kada se radi o potvrdi o ponovnom izvozu, država posljednjeg ponovnog izvoza je država iz koje su primjerci bili uvezeni prije nego su ponovo izvezeni iz Republike Hrvatske. Ako se radi o uvoznom dopuštenju, onda je to zemlja ponovnog izvoza iz koje se uzorci uvoze. U poljima 19 i 20 moraju biti navedene pojedinosti o odgovarajućoj potvrdi o ponovnom izvozu./ The country of last re-export is, in the case of a re-export certificate, the re-exporting country from which the specimens were imported before being re-exported from Croatia. In the case of an import permit, it is the re-exporting country from which the specimens are to be imported. Boxes 19 and 20 must contain details of the relevant re-export certificate.
- 21. Znanstveno ime vrste mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 23.-25. Samo za službenu uporabu. / For official use only
- 26. Uvoznik/(ponovni) izvoznik ili njegov zastupnik mora, gdje je prikladno, navesti broj konosmana ili zračnog teretnog lista. / The importer/(re-)exporter or his agent must, where appropriate, indicate the number of the bill of lading or air way bill.
- 27. Ispunja carinska služba u mjestu unošenja u Republiku Hrvatsku ili mjestu (ponovnog) izvoza. Pri uvozu, izvornik (obrazac 1) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, "preslik za vlasnika" (obrazac 2) uvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. Pri (ponovnom) izvozu, "preslik kojeg carinska služba vraća nadležnom upravnom tijelu" (obrazac 3) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, izvornik (obrazac 1) i "preslik za vlasnika" (obrazac 2) (ponovnom) izvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. / To be completed by the customs office of introduction into Croatia, or that of (re-jexport as appropriate. In the case of introduction, the original (form 1) must be returned to the management authority of Croatia, the copy for the holder (form 2) to the importer and the copy for the customs (form 6) must be kept by the customs officer. In the case of (re-jexport, the copy for return by customs to the issuing authority (form 3) must be returned to the management authority of Croatia, the original (form 1) and the copy for the holder (form 2) to the (re-jexport and the copy for the customs (form 6) must be kept by the customs officer.

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- 1. Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika. U slučaju dopuštenja za životinje u osobnom vlasništvu, puni naziv i adresa zakonitog vlasnika./ Full name and address of the actual (re-)exporter, not of an agent. In the case of a personal ownership certificate, the full name and address of the legal owner.
- 2. Rok važenja izvoznog dopuštenja ili potvrde o ponovnom izvozu je najdulje 6 mjeseci, a uvoznog dopuštenja 12 mjeseci. Rok važenja dopuštenja za životinje u osobnom vlasništvu je najdulje tri godine. Nakon posljednjeg dana važenja, ovaj dokument smatra se nevažećim, pa vlasnik mora bez nepotrebnog odlaganja vratiti izvornik i sve kopije nadležnom upravnom tijelu koje ih je izdalo. Uvozno dopuštenje nije važeće ako je odgovarajući CITES dokument države (ponovnog) izvoza iskorišten za (ponovni) izvoz nakon posljednjeg isteka roka valjanosti, ili ako je na dan unošenja u Republiku Hrvatsku prošlo više od 6 mjeseci od dana izdavanja./ The period of validity of an export permit or re-export certificate shall not exceed 6 months and of an import permit 12 months. The period of validity of a personal ownership certificate shall not exceed three years. After its last day of validity, this document is void and the original and all copies must be returned by the holder to issuing management authority without undue delay. An import permit is not valid where the corresponding CITES document from the (re-)exporting country was used for (re-)export after its last day of validity or if the date of introduction into Croatia is more than six months from its date of issue
- 3. Puni naziv i adresa stvarnog uvoznika, a ne zastupnika. Ostaviti prazno ili ponoviti adresu vlasnika iz polja 1. u slučaju dopuštenja za životinje u osobnom vlasništvu. / Full name and address of the actual importer, not of an agent. To be left blank or copy the address of the owner form box 1. in the case of a personal ownership certificate.
- 5. Ostaviti prazno u slučaju dopuštenja za životinje u osobnom vlasništvu./ To be left blank in the case of a personal ownership certificate.
- 6. Za žive primjerke vrsta iz Priloga I koji nisu rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi, nadležno upravno tijelo može propisati odredište te pojedinosti o lokaciji unose se u ovo pojle. Svako preseljenje, osim u slučaju hitne veterinarske intervencije, uz uvjet da se primjerci vrate na propisano odredište,mora prethodno odobriti nadležno upravno tijelo./ For live specimens of Annex I species other than captive bred or artificially propagated specimens, the issuing authority may prescribe the location at which they are to be kept by including details thereof in this box. Any movement, except for urgent veterinary treatment and provided the specimensare returned directly to the authorized location. then requires prior authorization from the comoetent management authority.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 9/10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./
 Use the units of quantity and/or net mass in accordance with those contained in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 11. Upisati broj Dodatka Konvencije (I, II ili III) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde./ Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/cortificate
- 12. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I, II, III iII IV) u kojem je vrsta navedena na dan izdavanja dopuštenja/ potvrde./ Enter the number of the Annex to the Ordinance on transboundary movement and trade in protected species (I, II, III or IV) in which the species is listed at the date of issue of the permit/certificate.
- 13. Izabrati jedan od sljedećih kodova za oznaku porijekla:/ Use one of the following codes to indicate the source:
- W Primjerci uzeti iz divljine / Specimens taken from the wild
- R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
- D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species brad in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi ili derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- F Životinje rodene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo)./ Source unknown (must be iustified)
- 14. Izabrati jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze/uvoze: / Use one of the following codes to indicate the purpose for which the specimens are to be (re-)exported/ imported:
 - B Uzgoj u zatočeništvu ili umjetno razmnožavanje / breeding in captivity or artificial propagation
 - E Edukativna svrha / educational
 - G Botanički vrtovi / botanical gardens
 - H Lovački trofeji / hunting trophies
 - L Provedba zakonodavstva/pravosuđe/sudska forenzika / law enforcement/judicial/forensic
 - M Medicinsko istraživanje (uključujući i biomedicinsko) / medical (including biomedical recease)
 - N Unošenje ili ponovno unošenje u divljinu / introduction or reintroduction into the wild
 - P Osobno vlasništvo / personal
 - Q Cirkusi ili putujuće izložbe / circuses and travelling exhibitions
 - S Znanstvena svrha / scientific
 - T Komercijalna svrha / commercial
 - Z Zoološki vrtovi / zoos
- 15.-17. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. U poljima 16 i 17 moraju biti navedene pojedinosti o odgovarajućem dopuštenju druge zemlje. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated. Where this is country other the Croatia boxes 16 and 17 must contain details of the relevant permit.
- 18.-20. Kada se radi o potvrdi o ponovnom izvozu, država posljednjeg ponovnog izvoza je država iz koje su primjerci bili uvezeni prije nego su ponovo izvezeni iz Republike Hrvatske. Ako se radi o uvoznom dopuštenju, onda je to zemlja ponovnog izvoza iz koje se uzorci uvoze. U poljima 19 i 20 moraju biti navedene pojedinosti o odgovarajućoj potvrdi o ponovnom izvozu./ The country of last re-export is, in the case of a re-export certificate, the re-exporting country from which the specimens were imported before being re-exported from Croatia. In the case of an import permit, it is the re-exporting country from which the specimens are to be imported. Boxes 19 and 20 must contain details of the relevant re-export certificate.
- 21. Znanstveno ime vrste mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 23.-25. Samo za službenu uporabu. / For official use only
- 26. Uvoznik/(ponovni) izvoznik ili njegov zastupnik mora, gdje je prikladno, navesti broj konosmana ili zračnog teretnog lista. / The importer/(re-)exporter or his agent must, where appropriate, indicate the number of the bill of lading or air wav hill.
- 27. Ispunja carinska služba u mjestu unošenja u Republiku Hrvatsku ili mjestu (ponovnog) izvoza. Pri uvozu, izvornik (obrazac 1) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, "preslik za vlasnika" (obrazac 2) uvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. Pri (ponovnom) izvozu, "preslik kojeg carinska služba vraća nadležnom upravnom tijelu" (obrazac 3) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, izvornik (obrazac 1) i "preslik za vlasnika" (obrazac 2) (ponovnom) izvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. / To be completed by the customs office of introduction into Croatia, or that of (re-)export as appropriate. In the case of introduction, the original (form 1) must be returned to the management authority of Croatia, the copy for the holder (form 2) to the importer and the copy for the customs (form 6) must be kept by the customs officer. In the case of (re-)export, the copy for return by customs to the issuing authority (form 3) must be returned to the management authority of Croatia, the original (form 1) and the copy for the holder (form 2) to the (re-)exporter and the copy for the customs (form 6) must be kept by the customs officer.

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- 1. Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika. U slučaju dopuštenja za životinje u osobnom vlasništvu, puni naziv i adresa zakonitog vlasnika./ Full name and address of the actual (re-)exporter, not of an agent. In the case of a personal ownership certificate, the full name and address of the legal owner.
- 2. Rok važenja izvoznog dopuštenja ili potvrde o ponovnom izvozu je najdulje 6 mjeseci, a uvoznog dopuštenja 12 mjeseci. Rok važenja dopuštenja za životinje u osobnom vlasništvu je najdulje tri godine. Nakon posljednjeg dana važenja, ovaj dokument smatra se nevažećim, pa vlasnik mora bez nepotrebnog odlaganja vratiti izvornik i sve kopije nadležnom upravnom tijelu koje ih je izdalo. Uvozno dopuštenje nije važeće ako je odgovarajući CITES dokument države (ponovnog) izvoza iskorišten za (ponovni) izvoz nakon posljednjeg isteka roka valjanosti, ili ako je na dan unošenja u Republiku Hrvatsku prošlo više od 6 mjeseci od dana izdavanja./ The period of validity of an export permit or re-export certificate shall not exceed 6 months and of an import permit 12 months. The period of validity of a personal ownership certificate shall not exceed three years. After its last day of validity, this document is void and the original and all copies must be returned by the holder to issuing management authority without undue delay. An import permit is not valid where the corresponding CITES document from the (re-)exporting country was used for (re-)export after its last day of validity or if the date of introduction into Croatia is more than six months from its date of issue.
- 3. Puni naziv i adresa stvarnog uvoznika, a ne zastupnika. Ostaviti prazno ili ponoviti adresu vlasnika iz polja 1. u slučaju dopuštenja za životinje u osobnom vlasništvu. / Full name and address of the actual importer, not of an agent. To be left blank or copy the address of the owner form box 1. in the case of a personal ownership certificate.
- 5. Ostaviti prazno u slučaju dopuštenja za životinje u osobnom vlasništvu./ To be left blank in the case of a personal ownership certificate.
- 6. Za žive primjerke vrsta iz Priloga I koji nisu rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi, nadležno upravno tijelo može propisati odredište te pojedinosti o lokaciji unose se u ovo pojle. Svako preseljenje, osim u slučaju hitne veterinarske intervencije, uz uvjet da se primjerci vrate na propisano odredište,mora prethodno odobriti nadležno upravno tijelo./ For live specimens of Annex I species other than captive bred or artificially propagated specimens, the issuing authority may prescribe the location at which they are to be kept by including details thereof in this box. Any movement, except for urgent veterinary treatment and provided the specimensare returned directly to the authorized location, then requires prior authorization from the competent management authority.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 9/10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./
 Use the units of quantity and/or net mass in accordance with those contained in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 11. Upisati broj Dodatka Konvencije (I, II ili III) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde./ Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/cortificate
- 12. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I, II, III iII IV) u kojem je vrsta navedena na dan izdavanja dopuštenja/ potvrde./ Enter the number of the Annex to the Ordinance on transboundary movement and trade in protected species (I, II, III or IV) in which the species is listed at the date of issue of the permit/certificate.
- 13. Izabrati jedan od sljedećih kodova za oznaku porijekla:/ Use one of the following codes to indicate the source:
- W Primjerci uzeti iz divljine / Specimens taken from the wild
- R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
- D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species brad in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi iII derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- F Životinje rodene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo)./ Source unknown (must be justified)
- 14. Izabrati jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze/uvoze: / Use one of the following codes to indicate the purpose for which the specimens are to be (re-)exported/ imported:
 - B Uzgoj u zatočeništvu ili umjetno razmnožavanje / breeding in captivity or artificial propagation
 - E Edukativna svrha / educational
 - G Botanički vrtovi / botanical gardens
 - H Lovački trofeji / hunting trophies
 - L Provedba zakonodavstva/pravosuđe/sudska forenzika / law enforcement/judicial/forensic
 - M Medicinsko istraživanje (uključujući i biomedicinsko) / medical (including biomedical research)
 - N Unošenje ili ponovno unošenje u divljinu / introduction or reintroduction into the wild
 - P Osobno vlasništvo / personal
 - Q Cirkusi ili putujuće izložbe / circuses and travelling exhibitions
 - S Znanstvena svrha / scientific
 - T Komercijalna svrha / commercial
 - Z Zoološki vrtovi / zoos
- 15.-17. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. U poljima 16 i 17 moraju biti navedene pojedinosti o odgovarajućem dopuštenju druge zemlje. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated. Where this is country other the Croatia boxes 16 and 17 must contain details of the relevant permit.
- 18.-20. Kada se radi o potvrdi o ponovnom izvozu, država posljednjeg ponovnog izvoza je država iz koje su primjerci bili uvezeni prije nego su ponovo izvezeni iz Republike Hrvatske. Ako se radi o uvoznom dopuštenju, onda je to zemlja ponovnog izvoza iz koje se uzorci uvoze. U poljima 19 i 20 moraju biti navedene pojedinosti o odgovarajućoj potvrdi o ponovnom izvozu./ The country of last re-export is, in the case of a re-export certificate, the re-exporting country from which the specimens were imported before being re-exported from Croatia. In the case of an import permit, it is the re-exporting country from which the specimens are to be imported. Boxes 19 and 20 must contain details of the relevant re-export certificate.
- 21. Znanstveno ime vrste mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XVII of Ordinance on transboundary movement and trade in protected
- 23.-25. Samo za službenu uporabu. / For official use only
- 26. Uvoznik/(ponovni) izvoznik ili njegov zastupnik mora, gdje je prikladno, navesti broj konosmana ili zračnog teretnog lista. / The importer/(re-)exporter or his agent must, where appropriate, indicate the number of the bill of lading or air wav hill.
- 27. Ispunja carinska služba u mjestu unošenja u Republiku Hrvatsku ili mjestu (ponovnog) izvoza. Pri uvozu, izvornik (obrazac 1) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, "preslik za vlasnika" (obrazac 2) uvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. Pri (ponovnom) izvozu, "preslik kojeg carinska služba vraća nadležnom upravnom tijelu" (obrazac 3) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, izvornik (obrazac 1) i "preslik za vlasnika" (obrazac 2) (ponovnom) izvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. / To be completed by the customs office of introduction into Croatia, or that of (re-jexport as appropriate. In the case of introduction, the original (form 1) must be returned to the management authority of Croatia, the copy for the holder (form 2) to the importer and the copy for the customs (form 6) must be kept by the customs officer. In the case of (re-jexport, the copy for return by customs to the issuing authority (form 3) must be returned to the management authority of Croatia, the original (form 1) and the copy for the holder (form 2) to the (re-jexport and the copy for the customs (form 6) must be kept by the customs officer.

REPUBLIKA HRVATSKA / REPUBLIC OF CROATIA DOPUŠTENJE / POTVRDA 1. Izvoznik/Ponovni izvoznik / Exporter/Re-exporter 5 Permit / Certificate **UVOZ** /IMPORT **IZVOZ** /EXPORT PONOVNI IZVOZ /RE-EXPORT **DRUGO /OTHER ZAHTJEV / APPLICATION** Konvencija o međunarodnoj trgovini ugroženim vrstama divlje flore i faune 3. Uvoznik / Importer Convention on International Trade in Endangered Species of Wild Fauna and Flora 4. Država (ponovnog) izvoza / Country of (re)-export 5. Država uvoza / Country of import 6. Propisana lokacija za žive, iz divljine uzete primjerke vrsta iz Priloga I 7. Nadležno upravno tijelo / Issuing Management Authority Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama / MINISTARSTVO KULTURE Authorised location for live wild-taken specimens of Annex I species of **UPRAVA ZA ZAŠTITU PRIRODE** Ordinance on transboundary movement and trade of protected species MINISTRY OF CULTURE NATURE PROTECTION DIRECTORATE Runjaninova 2, 10000 Zagreb, Croatia / Hrvatska 5 tel. +385 1 4866 102, fax. +385 1 4866100 8. Opis primjerka (uključujući oznake, spol, datum rođenja za žive životinje) 9. Neto masa (kg) / Net mass (kg) 10. Količina / Quantity / Description of specimens (incl. marks, sex/date of birth for live animals) 11. CITES Dodatak / 12.Prilog Pravilnika 13. Podrijetlo / 14. Svrha / CITES Appendix / Ordinance Annex 'Source Purpose 15. Država podrijetla / Country of origin 17. Datum izdavanja / Date of issue 16. Dopuštenje br. / Permit No 18. Država zadnjeg (ponovnog) izvoza / Country of last re-export 19. Potvrda br. / Certificate No 20. Datum izdavanja / Date of issue 21. Znanstveno ime vrste / Scientific name of species 22. Hrvatsko ime vrste / Common name of species 23. Podnosim zahtjev za izdavanje gore nevedenog dopuštenja / potvrde / I hereby apply for the permit/certificate indicated above. Napomene (npr. svrha unošenja, podaci o smještaju za žive primjerke, itd.) / Remarks (e.g. on purpose of introduction, details of accomodation for live specimens etc. Prilažem potrebnu dokumentaciju i izjavljujem da su svi navedeni podaci, prema mojim saznanjima i uvjerenju, točni. Izjavljujem da zahtjev za dopuštenje / potvrdu za gore navedene primjerke nije bio prethodno odbijen. / I attach the necessary documentary evidence and declare that all the particulars provided are to the best of my knowledge and belief correct. I declare that an application for a permit/certificate for the above specimens was not previously rejected. Žive će se životinje prevoziti u skladu s CITES-ovim uputama za prijevoz i pripremu pošiljke živih divljih životinja, ili ako se radi o Potpis / Signature zračnom prijevozu, u skladu s propisima o živim životinjama koje je objavila Međunarodna udruga za zračni prijevoz (IATA). / Live animals will be transported in compliance with the CITES Guidelines for the Transpor and Preparation for Shipment of Live Wild Animals or, in the case of air Ime podnositelja zahtjeva / Name of applicant transport, the Live Animals Regulations published by the International Air Transport Association (IATA).

Mjesto i datum / Place and date

- 1. Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika. U slučaju dopuštenja za životinje u osobnom vlasništvu, puni naziv i adresa zakonitog vlasnika. / Full name and address of the actual (re-)exporter, not of an agent. In the case of a personal ownership certificate, the full name and address of the legal owner.
- 2. Nije primjenjivo. / Not applicable.
- 3. Puni naziv i adresa stvarnog uvoznika, a ne zastupnika. Ostaviti prazno ili ponoviti adresu vlasnika iz polja 1. u slučaju dopuštenja za životinje u osobnom vlasništvu. / Full name and address of the actual importer, not of an agent. To be left blank or copy the address of the owner form box 1. in the case of a personal ownership certificate.
- 5. Ostaviti prazno u slučaju dopuštenja za životinje u osobnom vlasništvu. / To be left blank in the case of a personal ownership certificate.
- 6. . Ispunja se samo ako se odnosi na žive primjerke vrsta navedenih na Prilogu I koji nisu uzgojeni u zatočeništvu ili umjetno razmnoženi. / To be completed only on the application form in the case of live specimens of Annex I species other than captive bred or artificially propagated specimens.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 9/10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Use the units of quantity and/or net mass in accordance with those contained in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 11. Upisati broj Dodatka Konvencije (I, II ili III) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde. / Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/cortificate.
- 12. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I, II, III iII IV) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde. / Enter the number of the Annex to the Ordinance on transboundary movement and trade in protected species (I, II, III or IV) in which the species is listed at the date of issue of the permit/cerficate.
- 13. Izabrati jedan od sljedećih kodova za oznaku porijekla: / Use one of the following codes to indicate the source:
- W Primjerci uzeti iz divljine / Specimens taken from the wild
- R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
- D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species bred in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant specimes artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- C Životinje iz Priloga II uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi ili derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- F Životinje rodene u zatočeništvu, ali za koje kriteriji iz članka 28.

 Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo). / Source unknown (must be iustified)
- 14. Izabrati jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze/uvoze: / Use one of the following codes to indicate the purpose for which the specimens are to be (re-)exported/ imported:
 - B Uzgoj u zatočeništvu ili umjetno razmnožavanje / breeding in captivity or artificial propagation
 - E Edukativna svrha / educational
 - G Botanički vrtovi / botanical gardens
 - H Lovački trofeji / hunting trophies
 - L Provedba zakonodavstva/pravosuđe/sudska forenzika / law enforcement/judicial/forensic
 - M Medicinsko istraživanje (uključujući i biomedicinsko) / medical (including biomedical research)
 - N Unošenje ili ponovno unošenje u divljinu / introduction or reintroduction into the wild
 - P Osobno vlasništvo / personal
 - Q Cirkusi ili putujuće izložbe / circuses and travelling exhibitions
 - S Znanstvena svrha / scientific
 - T Komercijalna svrha / commercial
 - Z Zoološki vrtovi / zoos
- 15.-17. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. U poljima 16 i 17 moraju biti navedene pojedinosti o odgovarajućem dopuštenju druge zemlje. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated. Where this is country other the Croatia boxes 16 and 17 must contain details of the relevant permit.
- 18.-20. Kada se radi o potvrdi o ponovnom izvozu, država posljednjeg ponovnog izvoza je država iz koje su primjerci bili uvezeni prije nego su ponovo izvezeni iz Republike Hrvatske. Ako se radi o uvoznom dopuštenju, onda je to zemlja ponovnog izvoza iz koje se uzorci uvoze. U poljima 19 i 20 moraju biti navedene pojedinosti o odgovarajućoj potvrdi o ponovnom izvozu. / The country of last re-export is, in the case of a re-export certificate, the re-exporting country from which the specimens were imported before being re-exported from Croatia. In the case of an import permit, it is the re-exporting country from which the specimens are to be imported. Boxes 19 and 20 must contain details of the relevant re-export certificate.
- 21. Znanstveno ime vrste mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XIX of Ordinance on transboundary movement and trade in protected species.
- 23. Navesti što više pojedinosti i opravdati izostavljanje traženih podataka. / Provide as many details as possible and justify any omission to the information required above.

Datum: / Date: 161

- 1. Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika. U slučaju dopuštenja za životinje u osobnom vlasništvu, puni naziv i adresa zakonitog vlasnika./ Full name and address of the actual (re-)exporter, not of an agent. In the case of a personal ownership certificate, the full name and address of the legal owner.
- 2. Rok važenja izvoznog dopuštenja ili potvrde o ponovnom izvozu je najdulje 6 mjeseci, a uvoznog dopuštenja 12 mjeseci. Rok važenja dopuštenja za životinje u osobnom vlasništvu je najdulje tri godine. Nakon posljednjeg dana važenja, ovaj dokument smatra se nevažećim, pa vlasnik mora bez nepotrebnog odlaganja vratiti izvornik i sve kopije nadležnom upravnom tijelu koje ih je izdalo. Uvozno dopuštenje nije važeće ako je odgovarajući CITES dokument države (ponovnog) izvoza iskorišten za (ponovni) izvoz nakon posljednjeg isteka roka valjanosti, ili ako je na dan unošenja u Republiku Hrvatsku prošlo više od 6 mjeseci od dana izdavanja./ The period of validity of an export permit or re-export certificate shall not exceed 6 months and of an import permit 12 months. The period of validity of a personal ownership certificate shall not exceed three years. After its last day of validity, this document is void and the original and all copies must be returned by the holder to issuing management authority without undue delay. An import permit is not valid where the corresponding CITES document from the (re-)exporting country was used for (re-)export after its last day of validity or if the date of introduction into Croatia is more than six months from its date of issue
- 3. Puni naziv i adresa stvarnog uvoznika, a ne zastupnika. Ostaviti prazno ili ponoviti adresu vlasnika iz polja 1. u slučaju dopuštenja za životinje u osobnom vlasništvu. / Full name and address of the actual importer, not of an agent. To be left blank or copy the address of the owner form box 1. in the case of a personal ownership certificate.
- 5. Ostaviti prazno u slučaju dopuštenja za životinje u osobnom vlasništvu./ To be left blank in the case of a personal ownership certificate.
- 6. Za žive primjerke vrsta iz Priloga I koji nisu rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi, nadležno upravno tijelo može propisati odredište te pojedinosti o lokaciji unose se u ovo pojle. Svako preseljenje, osim u slučaju hitne veterinarske intervencije, uz uvjet da se primjerci vrate na propisano odredište,mora prethodno odobriti nadležno upravno tijelo./ For live specimens of Annex I species other than captive bred or artificially propagated specimens, the issuing authority may prescribe the location at which they are to be kept by including details thereof in this box. Any movement, except for urgent veterinary treatment and provided the specimensare returned directly to the authorized location. then requires prior authorization from the comoetent management authority.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 9/10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./
 Use the units of quantity and/or net mass in accordance with those contained in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 11. Upisati broj Dodatka Konvencije (I, II ili III) u kojem je vrsta navedena na dan izdavanja dopuštenja/potvrde./ Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/cortificate
- 12. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I, II, III iII IV) u kojem je vrsta navedena na dan izdavanja dopuštenja/ potvrde./ Enter the number of the Annex to the Ordinance on transboundary movement and trade in protected species (I, II, III or IV) in which the species is listed at the date of issue of the permit/certificate.
- 13. Izabrati jedan od sljedećih kodova za oznaku porijekla:/ Use one of the following codes to indicate the source:
- W Primjerci uzeti iz divljine / Specimens taken from the wild
- R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
- D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species brad in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi ili derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- F Životinje rodene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom porijekla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo)./ Source unknown (must be iustified)
- 14. Izabrati jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze/uvoze: / Use one of the following codes to indicate the purpose for which the specimens are to be (re-)exported/ imported:
 - B Uzgoj u zatočeništvu ili umjetno razmnožavanje / breeding in captivity or artificial propagation
 - E Edukativna svrha / educational
 - G Botanički vrtovi / botanical gardens
 - H Lovački trofeji / hunting trophies
 - L Provedba zakonodavstva/pravosuđe/sudska forenzika / law enforcement/judicial/forensic
 - M Medicinsko istraživanje (uključujući i biomedicinsko) / medical (including biomedical research)
 - N Unošenje ili ponovno unošenje u divljinu / introduction or reintroduction into the wild
 - P Osobno vlasništvo / personal
 - Q Cirkusi ili putujuće izložbe / circuses and travelling exhibitions
 - S Znanstvena svrha / scientific
 - T Komercijalna svrha / commercial
 - Z Zoološki vrtovi / zoos
- 15.-17. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. U poljima 16 i 17 moraju biti navedene pojedinosti o odgovarajućem dopuštenju druge zemlje. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated. Where this is country other the Croatia boxes 16 and 17 must contain details of the relevant permit.
- 18.-20. Kada se radi o potvrdi o ponovnom izvozu, država posljednjeg ponovnog izvoza je država iz koje su primjerci bili uvezeni prije nego su ponovo izvezeni iz Republike Hrvatske. Ako se radi o uvoznom dopuštenju, onda je to zemlja ponovnog izvoza iz koje se uzorci uvoze. U poljima 19 i 20 moraju biti navedene pojedinosti o odgovarajućoj potvrdi o ponovnom izvozu./ The country of last re-export is, in the case of a re-export certificate, the re-exporting country from which the specimens were imported before being re-exported from Croatia. In the case of an import permit, it is the re-exporting country from which the specimens are to be imported. Boxes 19 and 20 must contain details of the relevant re-export certificate.
- 21. Znanstveno ime vrste mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XVII of Ordinance on transboundary movement and trade in protected species.
- 23.-25. Samo za službenu uporabu. / For official use only
- 26. Uvoznik/(ponovni) izvoznik ili njegov zastupnik mora, gdje je prikladno, navesti broj konosmana ili zračnog teretnog lista. / The importer/(re-)exporter or his agent must, where appropriate, indicate the number of the bill of lading or air wav hill.
- 27. Ispunja carinska služba u mjestu unošenja u Republiku Hrvatsku ili mjestu (ponovnog) izvoza. Pri uvozu, izvornik (obrazac 1) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, "preslik za vlasnika" (obrazac 2) uvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. Pri (ponovnom) izvozu, "preslik kojeg carinska služba vraća nadležnom upravnom tijelu" (obrazac 3) se mora vratiti nadležnom upravnom tijelu Republike Hrvatske, izvornik (obrazac 1) i "preslik za vlasnika" (obrazac 2) (ponovnom) izvozniku, a "preslik za carinsku službu" (obrazac 6) zadržava carinska služba za svoju evidenciju. / To be completed by the customs office of introduction into Croatia, or that of (re-)export as appropriate. In the case of introduction, the original (form 1) must be returned to the management authority of Croatia, the copy for the holder (form 2) to the importer and the copy for the customs (form 6) must be kept by the customs officer. In the case of (re-)export, the copy for return by customs to the issuing authority (form 3) must be returned to the management authority of Croatia, the original (form 1) and the copy for the holder (form 2) to the (re-)exporter and the copy for the customs (form 6) must be kept by the customs officer.

7. Rukovanje s obrascima iz Priloga XI

1. UVOZNA DOPUŠTENJA

<u>ZAHTJEV</u> Točka 1.1.

- Podnositelj zahtjeva ispunja polja 1, 3 6 i 8 23 na zahtjevu (obrascu 5). Zasebni obrazac zahtjeva ispunja se za svaku vrstu
- Pravilno popunien/i obrazac/obrasci podnose se Ministarsvu, te moraju sadržavati podatke i biti popraćeni dokumentima koje Ministarstvo smatra potrebnima za izdavanje uvozne dozvole iz članka 3. i 4. Pravilnika.
- Izostavljanje podataka iz zahtjeva mora biti obrazloženo.
- Ako se podnosi zahtjev za dopuštenje za primjerke za koje je prethodni zahtjev bio odbijen, podnositelj zahtjeva dužan je obavijestiti Ministarstvo o prethodnoj odbijenici.
- Za uvozne dozvole koje se odnose na primjerke iz članka 33. stavka 1. točaka 1. do 7., podnositelj mora Ministarstvu dokazati da su ispunjeni uvjeti za označavanje propisani člankom 35. Pravilnika.

Točka 1.2

- Ako se radi o uvoznim dopuštenjima izdanim za primjerke vrsta s Dodatka I Konvencije i Priloga I Pravilnika, preslik za državu izvoza ili državu ponovnog izvoza može biti vraćen podnositelju zahtjeva kako bi je predočio upravnom tijelu države izvoza ili ponovnog izvoza. Izvornik se zadržava dok ponositelj zahtjeva ne predoči odgovarajuće izvozno dopuštenje ili potvrdu o ponovnom izvozu.
- Ako se preslik za državu izvoza ili ponovnog izvoza ne vrati podnositelju zahtjeva, daje mu se pismena izjava da će uvozno dopuštenje biti izdano i pod kojim uvjetima.

POSTUPANJE S DOPUŠTENJIMA

Uvoznik ili njegov ovlašteni zastupnik predaje izvornik (obrazac 1), preslik za vlasnika (obrazac 2), preslik koji carinska služba vraća nadležnom upravnom tijelu (obrazac 3), preslik za carinsku službu (obrazac 5) te, ako je to predviđeno uvoznim dopuštenjem svu dokumentaciju države izvoza ili ponovnog izvoza, graničnoj carinskoj službi na mjestu unošenja u Republiku Hrvatsku. U polju 26 navodi se broj konosmana ili zračnog teretnog lista.

Točka 1.4.

- Carinska služba ispunja polje 27 na izvorniku (obrazac 1), presliku za vlasnika (obrazac 2), presliku koji carinska služba vraća nadležnom upravnom tijelu (obrazac 3) i presliku za carinsku službu (obrazac 6). Carinska služba vraća preslik za vlasnika (obrazac 2) uvozniku
- ili njegovom ovlaštenom zastupniku. Izvornik (obrazac 1), preslik koji carinska služba vraća nadležnom upravnom tijelu (obrazac 3) i svu dokumentaciju države izvoza ili ponovnog izvoza carinska služba prosljeđuje Ministarstvu.
 Preslik za carinsku službu (obrazac 6) zadržava carinska služba
- za vlastitu evidenciju-

2. IZVOZNA DOPUŠTENJA I POTVRDE O PONOVNOM IZVOZU

ZAHTJEV Točka 2.1.

- Podnositelj zahtjeva ispunja polja 1, 3, 4, 5 i 8 do 23 na obrascu za zahtjev. Zasebni obrazac zahtjeva ispunja se za svaku vrstu na zahtievu.
- Pravilno popunjen/i obrazac/obrasci podnose se Ministarstvu. Zahtjev mora sadržavati sve podatke i biti popraćeni dokumentima koje Ministarstvo smatra potrebnima za izdavanje izvozne dozvole i potvrde o ponovnom izvozu iz članaka 8. i 9.
- 3. Izostavljanje podataka iz zahtjeva mora biti obrazloženo
- Ako se podnosi zahtjev za primjerke za koje je prethodni zahtjev bio odbijen, podnositelj zahtjeva dužan je obavijestiti Ministarsvo o prethodnoj odbijenici
- Za izvozne dozvole koje se odnose na primjerke iz članka 34., podnositelj mora Ministarstvu dokazati da su ispunjeni uvjeti za označavanje propisani člankom 35. Pravilnika.
- Ako se kao prilog zahtjevu za ishođenje potvrde o ponovnom izvozu preda preslik za vlasnika uvoznog dopuštenja, preslik za uvoznika obavijesti o uvozu ili potvrda za trgovinu izdana na temeljem istih, navedeni se dokumenti vraćaju podnositelju zahtjeva tek nakon što Ministarstvo sukladno članku 46. stavku 4. izmijeni na obrascu broj primjeraka za koji predmetni dokument i dalje vrijedi. Kada se potvrda o ponovnom izvozu izdaje za ukupni broj primjeraka naveden u preslici za vlasnika uvoznog dopuštenja, preslici za uvoznika obavijesti o uvozu ili potvrdi za trgovinu, Ministarstvo zadržava navedene dokumente skladno članku 46. stavku 5. Pravilnika.
- Ministarstvo će utvrditi valjanost priloženih dokumenata, po potrebi nakon savjetovanja s upravnim tijelom druge države.

- Odredbe stavaka 6. i 7. ove točke primjenjuju se i ukoliko se u prilog zahtjevu za ishođenje izvoznog dopuštenja preda potvrda za trgovinu.
- Ako su primjerci pojedinačno označeni pod nadzorom Ministarstva, kako bi se omogućilo lakše pozivanje na dokumente navedene stavku 6. i 8. ove točke, ti se dokumenti ne moraju fizički predavati zajedno sa zahtjevom, pod uvjetom 9. da je njihov broj naveden u zahtjevu.
- Ako ne postoji dokumentacija iz stavka 6. i 9. ove točke, Ministarstvo utvrđuje, prema potrebi u dogovoru s nadležnim upravnim tijelom druge države, jesu li primjerci koji će se ponovo izvesti zakonito uneseni u Republiku Hrvatsku odnosno zakonito nabavljeni unutar nje.

POSTUPANJE S DOPUŠTENJIMA

Točka 2.2

(Ponovni) izvoznik ili njegov ovlašteni zastupnik predaje izvornik (obrazac 1), preslik za vlasnika (obrazac 2), preslik koju carinska služba vraća nadležnom upravnom tijelu (obrazac 3) i preslik za carinsku službu (obrazac 6) nadležnoj carinskoj službi. Po potrebi, u polju 26 navodi se broj konosmana ili zračnog teretnog lista.

Točka 2.3.

- Carinska služba ispunja polje 27 na izvorniku (obrazac 1), presliku za vlasnika (obrazac 2), presliku koji carinska služba vraća nadležnom upravnom tijelu (obrazac 3) i presliku za
- carinsku službu (obrazac 6). Carinska služba vraća izvornik (obrazac 1) i preslik za vlasnika (obrazac 2) (ponovnom) izvozniku ili njegovom ovlaštenom zastupniku.
- 3 Preslik koji carinska služba vraća nadležnom upravnom tijelu (obrazac 3)carinska služba prosljeđuje Minsitarstvu.
- Preslik za carinsku službu (obrazac 6), carinska služba zadržava za vlastitu evidenciju.

3. DOPUŠTENJA ZA ŽIVOTINJE U OSOBNOM VLASNIŠTVU

Točka 3.1. ZAHTJEV

- Podnositelj zahtjeva ispunja polja 1, 4 i 6 do 23 na zahtjevu (obrascu 5)
- Pravilno popunjen/i obrazac/obrasci podnose se Ministarstvu, a moraju sadržavati sve podatke i biti popraćeni dokumentima koje Ministarstvo smatra potrebnima za izdavanje dopuštenja za životinje u osobnom vlasništvu iz članka 19. Pravilnika.
- Izostavljanje podataka iz zahtjeva mora biti obrazloženo
- Ako se podnosi zahtjev za dopuštenje za koje je za prethodni zahtjev bio odbijen, podnositelj zahtjeva dužan je obavijestiti Ministarstvo o prethodnoj odbijenici.

Točka 3.2. POSTUPANJE S DOPUŠTENJIMA

Točka 3.2.1. Dopuštenja za životinje u osobnom vlasništvu iz Republike Hrvatske

- Kada se radi o dopuštenju iz članka 20. stavka 1. vlasnik dopuštenja predaje izvornik (obrazac 1) i popratne obrasce, te dvije fotokopije izvornika i popratnih obrazaca carinskoj službi
- Carinska služba ovjerava popratne obrasce i njihove fotokopije na za to predviđenom mjestu.
- Carinska služba vraća popratne obrasce i izvornik dopuštenja 3. nositelju dopuštenja.
- Carinska služba proslijeđuje fotokopiju izvornika i ovjerenu fotokopiju popratnog obrasca Ministarstvu u skladu s točkom 4.1., a jednu fotokopiju zadržava za vlastitu evidenciju.

Točka 3.2.2. Dopuštenja za životinje u osobnom vlasništvu iz drugih država

- Kada se radi o dopuštenju koje se izdaje sukladno članku 20. stavku 2., vlasnik dopuštenja postupa prema odredbama iz točke 3.2.1. stavka 1. te dodatno predaje carinskog službi izvornik dozvole za životinje u osobnom vlasništvu i popratne obrasce druge države.
- Nakon što ovjeri popratne obrasce obje dozvole, carinska služba vraća izvornike vlasniku, a s ovjerenim fotokopijama popratnih obrazaca i dopuštenja; postupa na način kako je propisano u. točki 3.2.1. stavcima 2. do 4. ovoga Priloga.

4. VRAĆANJE DOKUMENATA NADLEŽNOJ UPRAVI

Točka 4.1.

- Carinska služba bez odlaganja prosljeđuje Ministarstvu sve dokumente koji su joj bili predočeni.
- Iznimno od odredbe prethodnog stavka ove točke, carinska služba može elektroničkim putem potvrditi primitak dokumenata koje je izdalo nadležno upravno tijelo.

ANNEX XII

REPUBLIKA HRVATSKA / REPUBLIC OF CROATIA

	Uvoznik / Importer	OBAVIJEST O UVOZU / IMPORT NOTIFICATION			
		Pravilnik o prekograničnom prometu i trgovini zaštićenim vrstama Ordinance on transboundary movement and trade			
	Prince was a 10 control of instant	of protected species			
	Država uvoza / Country of import	3. Datum uvoza / Date of import			
4.	Država porijekla / Country of origin	5. Država (ponovnog) izvoza / Country of (re	e-) export		
	6. Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity		
A	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix		
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex		
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity		
В	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix		
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex		
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity		
С	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix		
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex		
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity		
D	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix		
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex		
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity		
E	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix		
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex		
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity		
F	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix		
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex		
13	Za gore navedene primjerke koji pripadaju vrstama navedenim u Dodatku III Konvencije, prilažem potrebne dokumente iz države (ponovnog) izvoza. / For specimens above which are of species listed in Appendix III to CITES, I attach the necessary documents from the (re-) exporting country.	14. Službeni pečat granične carinske služb customs office:	e / Official stamp of border		
1					

Upute i objašnjenja / Instructions and explanations

- 1. Navedite puni naziv i adresu uvoznika ili ovlaštenog zastupnika. / Full name and address of importer or authorised representative.
- 4. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity or artificially propagated.
- 5. Ispunjava se samo ako država iz koje se primjerci uvoze nije država podrijetla. / Only applies where the country from which the specimens are imported is not the country of origin.
- 6. Opis mora biti što precizniji. / Description must be as precise as possible.
- 9. Znanstveno ime vrste mora biti znanstveno ime upotrijebljeno u Prilogu III ili IV Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ The scientific name must be the name used in Annex III or IV to the Ordinance on transboundary movement and trade in protected species.
- 10. Upišite III za vrste navedene u Dodatku III Konvencije. / Enter III for species listed in Appendix III to CITES.
- 12. Upišite broj (III ili IV) Priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, u kojem je vrsta navedena. / Enter the number (III or IV) of the Annex to the Ordinance on transboundary movement and trade in protected species, in which the species is listed.
- 13. Uvoznik mora predati carinskoj službi na mjestu unošenja u Republiku Hrvatsku potpisani "izvornik" (obrazac 1), "preslik za uvoznika" (obrazac 2) i preslik za carinsku službu (obrazac 3) po potrebi zajedno s izvoznim dokumentima za vrste iz Dodatka III Konvencije koje je izdala država (ponovnog) izvoza. / The importer has to submit the signed original (form 1), "copy for the importer" (form 2), and "copy for the customs" where appropriate together with CITES Appendix III documents from the (re-)exporting country to the customs office of introduction into Croatia.
- 14. Carinska služba šalje ovjereni "izvornik" (obrazac 1) nadležnom upravnom tijelu, ovjereni "preslik za uvoznika" (obrazac 2) vraća uvozniku ili njegovom ovlaštenom zastupniku, a ovjereni "preslik za carinsku službu" zadržava za vlastitu evidenciju. / The customs office shall send the stamped "original" (form 1) to the management authority, return the stamped "copy for the importer" (form 2) to the importer or his authorized representative and keep "copy for customs" (form 3) to itself.

1. l	PUBLIKA HRVATSKA / REPUBLIC OF CROATIA Jvoznik / Importer		
		OBAVIJEST O UVOZU / IMPO	ORT NOTIFICATION
		Pravilnik o prekograničnom p zaštićenim vrsta	
		Ordinance on transboundary more of protected spe	
2 . [⊃ržava uvoza / Country of import	3. Datum uvoza / Date of import	
4. [Oržava porijekla / Country of origin	5. Država (ponovnog) izvoza / Country of (re	-) export
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
A	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
Γ	6. Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
В	specimens (including (re-) export document number for CITES Appendix III species)	9. Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
С	III species)	9. Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
D	III species)	er for CITES Appendix	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
	6. Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
E	specimens (including (re-) export document number for CITES Appendix III species)	9. Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
Г	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of popingos (ipoludina (ro.) expert document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
F	specimens (including (re-) export document number for CITES Appendix III species)	9. Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
13.	Za gore navedene primjerke koji pripadaju vrstama navedenim u Dodatku III Konvencije, prilažem potrebne dokumente iz države (ponovnog) izvoza. / For specimens above which are of species listed in Appendix III to CITES, I attach the necessary documents from the (re-) exporting country.	14. Službeni pečat granične carinske služb customs office:	e / Official stamp of border
	Potpis uvoznika ili njegova ovlaštenog zastupnika / Signature of importer or his authorised representative		

Upute i objašnjenja / Instructions and explanations

- 1. Navedite puni naziv i adresu uvoznika ili ovlaštenog zastupnika. / Full name and address of importer or authorised representative.
- 4. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity or artificially propagated.
- 5. Ispunjava se samo ako država iz koje se primjerci uvoze nije država podrijetla. / Only applies where the country from which the specimens are imported is not the country of origin.
- 6. Opis mora biti što precizniji. / Description must be as precise as possible.
- 9. Znanstveno ime vrste mora biti znanstveno ime upotrijebljeno u Prilogu III ili IV Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ The scientific name must be the name used in Annex III or IV to the Ordinance on transboundary movement and trade in protected species.
- 10. Upišite III za vrste navedene u Dodatku III Konvencije. / Enter III for species listed in Appendix III to CITES.
- 12. Upišite broj (III ili IV) Priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, u kojem je vrsta navedena. / Enter the number (III or IV) of the Annex to the Ordinance on transboundary movement and trade in protected species, in which the species is listed.
- 13. Uvoznik mora predati carinskoj službi na mjestu unošenja u Republiku Hrvatsku potpisani "izvornik" (obrazac 1), "preslik za uvoznika" (obrazac 2) i preslik za carinsku službu (obrazac 3) po potrebi zajedno s izvoznim dokumentima za vrste iz Dodatka III Konvencije koje je izdala država (ponovnog) izvoza. / The importer has to submit the signed original (form 1), "copy for the importer" (form 2), and "copy for the customs" where appropriate together with CITES Appendix III documents from the (re-)exporting country to the customs office of introduction into Croatia.
- 14. Carinska služba šalje ovjereni "izvornik" (obrazac 1) nadležnom upravnom tijelu, ovjereni "preslik za uvoznika" (obrazac 2) vraća uvozniku ili njegovom ovlaštenom zastupniku, a ovjereni "preslik za carinsku službu" zadržava za vlastitu evidenciju. / The customs office shall send the stamped "original" (form 1) to the management authority, return the stamped "copy for the importer" (form 2) to the importer or his authorized representative and keep "copy for customs" (form 3) to itself.

	PUBLIKA HRVATSKA / REPUBLIC OF CROATIA	T	
1. (Jvoznik / Importer	OBAVIJEST O UVOZU / IMPO	ORT NOTIFICATION
		Pravilnik o prekograničnom p zaštićenim vrsta	
		Ordinance on transboundary m of protected spe	
2. [Država uvoza / Country of import	3. Datum uvoza / Date of import	
4. [Oržava porijekla / Country of origin	5. Država (ponovnog) izvoza / Country of (re	-) export
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
A	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
В	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
Г	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
С	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
D	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
Г	6. Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
E	specimens (including (re-) export document number for CITES Appendix III species)	9. Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
	Opis primjeraka (uključujući i broj dokumenta o (ponovnom) izvozu za vrste iz Dodatka III Konvencije) / Description of specimens (including (re-) export document number for CITES Appendix	7. Neto masa (kg) / Net mass (kg)	8. Količina / Quantity
F	III species)	Znanstveno ime vrste / Scientific name of species	10. Dodatak Konvencije CITES Appendix
		11. Hrvatsko ime vrste / Common name of species	12. Prilog Pravilnika / Ordinance Annex
13.	Za gore navedene primjerke koji pripadaju vrstama navedenim u Dodatku III Konvencije, prilažem potrebne dokumente iz države (ponovnog) izvoza. / For specimens above which are of species listed in Appendix III to CITES, I attach the necessary documents from the (re-) exporting country.	14. Službeni pečat granične carinske služb customs office:	e / Official stamp of border
	Potpis uvoznika ili njegova ovlaštenog zastupnika / Signature of importer or his authorised representative		

Upute i objašnjenja / Instructions and explanations

- 1. Navedite puni naziv i adresu uvoznika ili ovlaštenog zastupnika. / Full name and address of importer or authorised representative.
- 4. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity or artificially propagated.
- 5. Ispunjava se samo ako država iz koje se primjerci uvoze nije država podrijetla. / Only applies where the country from which the specimens are imported is not the country of origin.
- 6. Opis mora biti što precizniji. / Description must be as precise as possible.
- 9. Znanstveno ime vrste mora biti znanstveno ime upotrijebljeno u Prilogu III ili IV Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ The scientific name must be the name used in Annex III or IV to the Ordinance on transboundary movement and trade in protected species.
- 10. Upišite III za vrste navedene u Dodatku III Konvencije. / Enter III for species listed in Appendix III to CITES.
- 12. Upišite broj (III ili IV) Priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, u kojem je vrsta navedena. / Enter the number (III or IV) of the Annex to the Ordinance on transboundary movement and trade in protected species, in which the species is listed.
- 13. Uvoznik mora predati carinskoj službi na mjestu unošenja u Republiku Hrvatsku potpisani "izvornik" (obrazac 1), "preslik za uvoznika" (obrazac 2) i preslik za carinsku službu (obrazac 3) po potrebi zajedno s izvoznim dokumentima za vrste iz Dodatka III Konvencije koje je izdala država (ponovnog) izvoza. / The importer has to submit the signed original (form 1), "copy for the importer" (form 2), and "copy for the customs" where appropriate together with CITES Appendix III documents from the (re-)exporting country to the customs office of introduction into Croatia.
- 14. Carinska služba šalje ovjereni "izvornik" (obrazac 1) nadležnom upravnom tijelu, ovjereni "preslik za uvoznika" (obrazac 2) vraća uvozniku ili njegovom ovlaštenom zastupniku, a ovjereni "preslik za carinsku službu" zadržava za vlastitu evidenciju. / The customs office shall send the stamped "original" (form 1) to the management authority, return the stamped "copy for the importer" (form 2) to the importer or his authorized representative and keep "copy for customs" (form 3) to itself.

ANNEX XIII

1	1. Vlasnik / Holder	POTVRI		Br . / N	lo
•		CERTIFIC	ATE		
		Ne koristi se izvan R	-		
		Hrvatske / Not for use	outside Croatia		
					u i trgovini zaštićenim
		vrstama / Ordina			Movement and Trade in
			Protect	ed Specie	es
ZVORNIK / ORIGINAL	2. Propisana lokacija za žive primjerke vrsta iz Priloga I i VIII / Authorized	3. Nadležno upravno tije	elo / Issuing man	agement au	thority
3	location for live specimens of Annex I and VIII species		MINISTARS	τνο κυι	LTURE
RIC		U	PRAVA ZA Z	AŠTITU I	PRIRODE
0			MINISTRY	OF CUL	TURE
Y			_		RECTORATE
Z					Hrvatska / Croatia
OR		tel: +38	5 1 4866 102	, tax: +:	385 1 4866 100
Š	4. Opis primjerka (uključujući oznake, spol, datum rođenja za žive	5. Neto masa (kg) / Net r	nass (kg)	6. Količina	/ Quantity
Z	životinje) / Description of specimen (incl. marks, sex, date of birth for live animals)				
	a.i.i.a.o,	7. CITES Dodatak /	8. Prilog Pravil	nika /	9. Podrijetlo / Source
		CITES Appendix	Ordinance Ar	nnex	
		10. Država podrijetla / C	ountry of origin		
		11. Dopuštenje br. / Per	mit No	12 Datum i	izdavanja / Date of issue
1		Tr. Dopusterije br. / T cir	1111110	12. Dataiii i	zaavanja / Date or 1330e
	16. Znanstveno ime vrste / Scientific name of species	l .	13. Država uvo	za / Country	of import
	17. Hrvatsko ime vrste / Common name of species	14. Dopuštenje br. / Per	mit No	15. Datum i	zdavanja / Date of issue
	18. Ovim se potvrđuje da su gore opisani primjerci / It is hereby certified tha	t the specimens described	above:		
	uzeti iz divljine u skladu s propisima iz područja zaštite prirode	/ were taken from the wild	in accordance w	ith the legisl	ation in force
	napušteni ili odbjegli primjerci vraćeni u skladu s propisima / a	re abandoned or escaped s	specimens that w	ere recovere	ed in accordance with legislation
	uzgojeni u zatočeništvu ili umjetno razmnoženi primjerci / are o	aptive born and bread or a	rtificially propaga	ted specime	ens
	nabavljeni ili uneseni u Republiku Hrvatsku sukladno odredbar	na Pravilnika/ were acquir	ed or introduced	into the Rep	oublic of Croatia in compliance with
	the provisions of the Ordinance				
	nabavljeni ili uneseni u Republiku Hrvatsku prije 3. travnja 200i into the Republic of Croatia before 3 April 2006 in accordance with	•	isima iz područj	ja zaštite pr	rirode/ were acquired or introduced
	<u> </u>	· ·			
	nabavljeni ili uneseni u Republiku Hrvatsku prije stupanja na si Republic of Croatia before CITES entered into force on 1 June 2000		. lipnja 2000. go	dine/ were a	acquired or introduced into the
	namijenjeni za napredak znanosti / uzgoj ili razmnožavanje / ist	raživanie i obrazovanie t	e druge svrhe ko	oie nisu šte	tne za opstanak vrsta/ are to be
	used for advancement of science / breeding or propagation / resear		-	-	
	19. Ovaj dokument izdaje se u svrhu / This document is issued for the purpos	e of:			
	potvrde da je primjerak koji se namjerava (ponovo) izvesti naba specimen to be (re-)exported has been acquired in accordance with			-	
	izuzeća primjeraka vrsta iz Priloga I i VIII od zabrana koje se od exempting Annex I and VIII specimens from the prohibitions relating	-			
				0 ,	
	odobrenja premještaja živih primjeraka vrsta iz Priloga I i VIII ur potvrdi / authorizing the movement within the Republic of Croatia o		-		
	certificate	i live Allilex I aliu VIII spec	iniens nom me ic	Cation muic	ated in the import permit or in any
	20. Posebni uvjeti / Special conditions				
	Potvrda vrijedi samo za vlasnika navedenog u polju 1/ Certificate	valid only for the holder na	med in box 1		
	Lucada a constant (No. 10 to 1	5 1	5	¥1	
	Ime odgovorne osobe / Name of issuing official Mjesto i datum /	Place and date of issue	Potpis i sli	užbeni peča	at / Signature and official stamp

- Puni naziv i adresa vlasnika potvrde, a ne zastupnika. / Full name and address of the holder of the certificate, not of an agent.
- 2. Ispunjava se samo ako je na uvoznom dopuštenju za navedene primjerke propisano odredište, ili ako primjerci uzeti iz divljine moraju biti čuvani na propisanoj adresi. Svako preseljenje, osim radi hitne veterinarske intervencije i uz uvjet da primjerci budu vraćeni izravno na propisanu lokaciju, mora prethodno odobriti nadležno upravno tijelo (vidi polje 19). / Only to be completed in case the import permit for the specimens concerned prescribes the location at which they are to be kept, or where specimens that were taken from the wild in Croatia shall be required to be kept at an authorised address. Any movement, except for urgent veterinary treatment and provided the specimens are returned directly to their authorized location, from the location indicated shall then be subject to prior authorization from the competent management authority (see box 19).
- 4. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of the Ordinance on transboundary movement and trade in protected species.
- 5/6. Koristiti jedinice za količinu i/ili neto masu u skladu s onima iz Priloga XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Use the units of quantity and/or net mass in accordance with those contained in Annex XVII to Ordinance on transboundary movement and trade in protected species.
- 7. Upisati Dodatak Konvencije CITES (I, II ili III) u kojem je vrsta navedena na dan izdavanja potvrde. / Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/certificate.
- 8. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I ili VIII) u kojem je vrsta navedena na dan izdavanja potvrde. / Enter the number of the Annex to Ordinance on transboundary movement and trade in protected species (I or VIII), in which the species is listed at the date of issue of the certificate.
- Izabrati jedan od sljedećih kodova za oznaku podrijetla: / Use one of the following codes to indicate the source:
 - W Primierci uzeti iz divliine / Specimens taken from the wild
 - R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
 - D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravlinika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species bred in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade of protected species
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi III derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species
- F Životinje rođene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom podrijetla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom podrijetla) /
 Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo) / Source unknown (must be justified)
- 10 -12. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočenštvu ili umjetno razmnoženi. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated.
- 13. 15. Država uvoza je država koja je izdala uvozno dopuštenje za navedene primjerke. / The State of import is the State having issued the import permit for the specimens concerned.
- 16. Znanstveno ime mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XIX to Ordinance on transboundary movement and trade in protected species.

2	1. Vlasnik / Holder	POTVRI		Br. / N	0	
		CERTIFIC				
		Ne koristi se izvar Hrvatske / Not for use	·=			
			-	-	u i trgovini zaštićenim	
_		vrstama / Ordinai		boundary ed Specie	Movement and Trade in	
Preslik za nadležno upravno tijelo / Copy for the issuing authority			FIOLECT	eu Specie	#S	
រ nadležno upravno tij for the issuing authority	Propisana lokacija za žive primjerke vrsta iz Priloga I i VIII / Authorized location for live specimens of Annex I and VIII species	3. Nadležno upravno tije	elo / Issuing mana	agement aut	thority	
t i	location for live specimens of Affilex Fand VIII species		MINISTARS	STVO KU	ILTURE	
ipre Ig a		U	IPRAVA ZA Z	ZAŠTITU	PRIRODE	
Suir			MINISTRY	-	-	
leži e is				_	IRECTORATE	
nad or th		_		_	Hrvatska / Croatia	
za i oy fo		ter: +30	00 1 4000 102	2, lax: 1	+385 1 4866 100	
slik za Copy	 Opis primjerka (uključujući oznake, spol, datum rođenja za žive životinje) / Description of specimen (incl. marks, sex, date of birth for live 	5. Neto masa (kg) / Net mass (kg) 6.		6. Količina	. Količina / Quantity	
Pre	animals)					
		7. CITES Dodatak /	8. Prilog Pravil		9. Podrijetlo / Source	
		CITES Appendix	Ordinance Ar	nnex		
		40. Drževe podrijetle / C	ountry of origin			
		10. Država podrijetla / C	ouritry or origin			
┪		11. Dopuštenje br. / Perr	nit No	12. Datum i	zdavanja / Date of issue	
2						
	16. Znanstveno ime vrste / Scientific name of species		13. Država uvo	za / Country	of import	
	17. Hrvatsko ime vrste / Common name of species	14. Dopuštenje br. / Perr	nit No.	15 Datum i	zdavanja / Date of issue	
	The value of the visit of common hame of species	14. Dopadionje Si., i on	111111111111111111111111111111111111111	ro. Datam i	zaavanja, balo or loodo	
	18. Ovim se potvrđuje da su gore opisani primjerci / It is hereby certified that	the specimens described	above:			
	uzeti iz divljine u skladu s propisima iz područja zaštite prirode	/ were taken from the wild	in accordance wi	ith the legisl:	ation in force	
		, note taken nem the mile	accordance in	iai aio iogioi	u	
	napušteni ili odbjegli primjerci vraćeni u skladu s propisima/ ar	re abandoned or escaped s	specimens that w	ere recovere	ed in accordance with legislation	
	uzgojeni u zatočeništvu ili umjetno razmnoženi primjerci / are ca	aptive born and bread or a	tificially propaga	ted specime	ens	
	nabavljeni ili uneseni u Republiku Hrvatsku sukladno odredban	na Bravilnika/ woro ocquir	ad ar introduced	into the Bor	oublic of Croatic in compliance with	
	the provisions of the Ordinance	iia i raviiiika/ were acquii	ca or introduced	into the res	oublic of Groatia in compliance with	
	nabavljeni ili uneseni u Republiku Hrvatsku prije 3. travnja 2006	6. godine u skladu s prop	isima iz područi	a zaštite pr	rirode/ were acquired or introduced	
	into the Republic of Croatia before 3 April 2006 in accordance with the			•		
	nabavljeni ili uneseni u Republiku Hrvatsku prije stupanja na sr	•	lipnja 2000. god	dine/ were a	acquired or introduced into the	
	Republic of Croatia before CITES entered into force on 1 June 2000)				
	namijenjeni za napredak znanosti / uzgoj ili razmnožavanje / ist		-	-	tne za opstanak vrsta/ are to be	
	used for advancement of science / breeding or propagation / research	ch or education or other no	n-detrimentai pui	rposes		
	19. Ovaj dokument izdaje se u svrhu / This document is issued for the purpose	e of:				
	potvrde da je primjerak koji se namjerava (ponovo) izvesti naba	vlion u skladu s važoćim	nronisima iz no	dručia zači	tite prirode/ confirming that a	
	specimen to be (re-)exported has been acquired in accordance with	•		-		
	izuzeća primjeraka vrsta iz Priloga I i VIII od zabrana koje se od	nose na komercijalne akt	ivnosti naveden	ne u članku	24. stavku 1. Pravilnika/	
	exempting Annex I and VIII specimens from the prohibitions relating	-				
	odobrenja premještaja živih primjeraka vrsta iz Priloga I i VIII ur	autar Banublika Urvataka	a lakacija navo	dono ii iivo	znom donučtoniu ili drugoj	
	potvrdi / authorizing the movement within the Republic of Croatia of					
	certificate					
	20. Posebni uvjeti / Special conditions					
	Potvrda vrijedi samo za vlasnika navedenog u polju 1/ Certificate v	valid only for the holder nar	med in box 1			
	Ime odgovorne osobe / Name of issuing official Mjesto i datum /	Place and date of issue	Potpis i slu	užbeni peča	at / Signature and official stamp	
	· · · · · ·		•	•		

- Puni naziv i adresa vlasnika potvrde, a ne zastupnika. / Full name and address of the holder of the certificate. not of an agent.
- 2. Ispunjava se samo ako je na uvoznom dopuštenju za navedene primjerke propisano odredište, ili ako primjerci uzeti iz divljine moraju biti čuvani na propisanoj adresi. Svako preseljenje, osim radi hitne veterinarske intervencije i uz uvjet da primjerci budu vraćeni izravno na propisanu lokaciju, mora prethodno odobriti nadležno upravno tijelo (vidi polje 19). / Only to be completed in case the import permit for the specimens concerned prescribes the location at which they are to be kept, or where specimens that were taken from the wild in Croatia shall be required to be kept at an authorised address. Any movement, except for urgent veterinary treatment and provided the specimens are returned directly to their authorized location, from the location indicated shall then be subject to prior authorization from the competent management authority (see box 19).
- 4. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of the Ordinance on transboundary movement and trade in protected species.
- 5/6. Koristiti jedinice za količinu i/ili neto masu u skladu s onima iz Priloga XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Use the units of quantity and/or net mass in accordance with those contained in Annex XVII to Ordinance on transboundary movement and trade in protected species.
- 7. Upisati Dodatak Konvencije CITES (I, II ili III) u kojem je vrsta navedena na dan izdavanja potvrde. / Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/certificate.
- 8. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I ili VIII) u kojem je vrsta navedena na dan izdavanja potvrde. / Enter the number of the Annex to Ordinance on transboundary movement and trade in protected species (I or VIII), in which the species is listed at the date of issue of the certificate.
- Izabrati jedan od sljedećih kodova za oznaku podrijetla: / Use one of the following codes to indicate the source:
 - W Primierci uzeti iz divliine / Specimens taken from the wild
 - R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
 - D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravlinika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species bred in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof

- A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade of protected species
- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi III derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species
- F Životinje rođene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom podrijetla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom podrijetla) /
 Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo) / Source unknown (must be justified)
- 10 -12. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočenštvu ili umjetno razmnoženi. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated.
- 13. 15. Država uvoza je država koja je izdala uvozno dopuštenje za navedene primjerke. / The State of import is the State having issued the import permit for the specimens concerned.
- 16. Znanstveno ime mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XIX to Ordinance on transboundary movement and trade in protected species.

3	1. Podnositelj zahtjeva / Applicant		OT\/DD 4	/ OF DE	ICIOATE
			OTVRDA koristi se izv	_	-
		Ne koristi se izvan Republike Hrvatske Not for use outside the Republic of Croatia			
		Pravilnik o pre	kogranično	m promet	tu i trgovini zaštićenim
		vrstama / Ordina		sboundary	y Movement and Trade in
O	Books and the state of the stat				
۸T	2. Propisana lokacija za žive primjerke vrsta iz Priloga I i VIII / Authorized location for live specimens of Annex I and VIII species	3. Nadležno upravno tijelo / Issuing management authority			
2		l u	MINISTAR PRAVA ZA		
PPI			MINISTR	Y OF CUL	TURE
/ A			_		IRECTORATE Hrvatska / Croatia
EV		-		_	-385 1 4866 100
ZAHTJEV / APPLICATION	4. Opis primjerka (uključujući oznake, spol, datum rođenja za žive	5. Neto masa (kg) / Net mass (kg) 6. Količina / Quantity			/ Quantity
ZĄ	životinje) / Description of specimen (incl. marks, sex, date of birth for live animals)				
' '	a.iiida)	7. CITES Dodatak /	8. Prilog Prav		9. Podrijetlo / Source
		CITES Appendix	Ordinance i	Annex	
		10. Država podrijetla / C	ountry of origin		
		AA Day Yanis by / Day		las para	to de la contraction de la con
3		11. Dopuštenje br. / Per	TIIT INO	12. Datum	izdavanja / Date of issue
	16. Znanstveno ime vrste / Scientific name of species	•	13. Država uv	oza / Countr	ry of import
	17. Hrvatsko ime vrste / Common name of species	14. Dopuštenje br. / Per	mit No	15. Datum	izdavanja / Date of issue
	<u> </u>	, ,			
	18. Ovim potvrđujem da su gore opisani primjerci / I hereby certify that the	specimens described abov	e:		
	uzeti iz divljine u skladu s propisima iz područja zaštite prirode	e / were taken from the wild	in accordance	with the legis	slation in force
	napušteni ili odbjegli primjerci vraćeni u skladu s propisima / a	re abandoned or escaped	specimens that	were recover	red in accordance with legislation
					_
	uzgojeni u zatočeništvu ili umjetno razmnoženi primjerci / are d	captive born and bread or a	rtificially propag	ated specim	ens
	nabavljeni ili uneseni u Republiku Hrvatsku sukladno odredbal the provisions of the Ordinance	ma Pravilnika/ were acqui	red or introduce	d into the Re	epublic of Croatia in compliance with
		C godine v ekledy e pres	iaima i= nadru	žio –ožtito n	wirede/wore convired or introduced
	nabavljeni ili uneseni u Republiku Hrvatsku prije 3. travnja 200 into the Republic of Croatia before 3 April 2006 in accordance with		isiiia iz pouru	cja zastite p	miloue, were acquired or introduced
	nabavljeni ili uneseni u Republiku Hrvatsku prije stupanja na s		. lipnja 2000. g	odine/ were	acquired or introduced into the
	Republic of Croatia before CITES entered into force on 1 June 200				
	namijenjeni za napredak znanosti / uzgoj ili razmnožavanje / is used for advancement of science / breeding or propagation / resear	•	-	-	etne za opstanak vrsta/ are to be
	19. Ovaj dokument tražim u svrhu / I request this document is issued for the	ourpose of:			
		•			
	potvrde da je primjerak koji se namjerava (ponovo) izvesti nab specimen to be (re-)exported has been acquired in accordance with				
	izuzeća primjeraka vrsta iz Priloga I i VIII od zabrana koje se od	inose na komercijalne ak	tivnosti navede	ene u članku	ı 24. stavku 1. Pravilnika/
	exempting Annex I and VIII specimens from the prohibitions relating	-			
	odobrenja premještaja živih primjeraka vrsta iz Priloga I i VIII u	nutar Republike Hrvatske	s lokacije nav	edene u uvo	oznom dopuštenju ili drugoj
	potvrdi / authorizing the movement within the Republic of Croatia of certificate	of live Annex I and VIII spec	imens from the	location indi	cated in the import permit or in any
	20. Napomene / Remarks	Prilažem potrebnu dol	umentaciju s do	kazima i izjavl	ljujem, da su svi
		navedeni podaci, pren da zahtjev za dopušte			
		prethodno odbijen. /			
		declare that all the part			
		belief correct. I declare specimens was not prev		or a permit/C	S. aJako Tor tilo above
	Ime podnositelja zahtjeva / Name of applicant Vlastoručn	i potpis / Signature		Datum i mj	iesto / Date and place

Upute i objašnjenja / Instructions and explanations

- Puni naziv i adresa vlasnika potvrde, a ne zastupnika. / Full name and address of the holder of the certificate. not of an agent.
- Ispunja se samo ako se odnosi na žive primjerke vrsta navedenih na Prilogu I koje nisu
 uzgojene u zatočeništvu ili umjetno razmnožene. / To be completed only on the application form
 in the case of live specimens of Annex I species other than captive bred or artificially propagated
 soecimens.
- 4. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s Prilogom XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Description must be as precise as possible and include a three-letter code in accordance with Annex XVII of the Ordinance on transboundary movement and trade in protected species.
- 5/6. Koristiti jedinice za količinu i/ili neto masu u skladu s onima iz Priloga XVII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Use the units of quantity and/or net mass in accordance with those contained in Annex XVII to Ordinance on transboundary movement and trade in protected species.
- Upisati Dodatak Konvencije CITES (I, II ili III) u kojem je vrsta navedena na dan izdavanja potvrde. / Enter the number of the CITES Appendix (I, II or III) in which the species is listed at the date of issue of the permit/certificate.
- 8. Upisati broj priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama (I ili VIII) u kojem je vrsta navedena na dan izdavanja potvrde. / Enter the number of the Annex to Ordinance on transboundary movement and trade in protected species (I or VIII), in which the species is listed at the date of issue of the certificate.
- Izabrati jedan od sljedećih kodova za oznaku podrijetla: / Use one of the following codes to indicate the source:
 - W Primjerci uzeti iz divljine / Specimens taken from the wild
 - R Primjerci iz farmskog uzgoja / Specimens originating from a ranching operation
 - D Životinje iz Priloga I uzgojene u zatočeništvu za komercijalne svrhe i biljke iz Priloga I umjetno razmnožene za komercijalne svrhe u skladu sa člancima 28. i 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi i derivati / Specimens of Annex I animal species bred in captivity for commercial purposes and specimens of Annex I plant species artificially propagated for commercial purposes in accordance with Articles 28 and 30 of Ordinance on transboundary movement and trade in protected species, as well as parts and derivates thereof
 - A Primjerci biljnih vrsta iz Priloga I umjetno razmnoženi za nekomercijalne svrhe i primjerci biljnih vrsta iz Priloga II i III umjetno razmnoženi, u skladu sa člankom 30. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama te njihovi dijelovi i derivati. / Specimens of Annex I plant species artificially propagated for non-commercial purposes and specimens of Annexes II and III plant species artificially propagated in accordance with Article 30 of Ordinance on transboundary movement and trade of protected species.

- C Životinje iz Priloga I uzgojene u zatočeništvu za nekomercijalne svrhe i životinje iz Priloga II i III uzgojene u zatočeništvu u skladu s člankom 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, te njihovi dijelovi III derivati / Specimens of Annex I animal species bred in captivity for non-commercial purposes and specimens of Annexes II and III animal species bred in captivity in accordance with Article 28 of Ordinance on transboundary movement and trade in protected species
- F Životinje rođene u zatočeništvu, ali za koje kriteriji iz članka 28. Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama nisu zadovoljeni, te njihovi dijelovi ili derivati / Specimens of animal species born in captivity but for which the criteria of Article 28 of Ordinance on transboundary movement and trade of protected species are not met, as well as parts and derivates thereof
- I Zaplijenjeni ili oduzeti primjerci (koristi se zajedno s nekim drugim kodom podrijetla) / Confiscated or seized specimens (to be used only in conjunction with another source code)
- O Pretkonvencijski primjerci (koristi se zajedno s nekim drugim kodom podrijetla) / Pre-Convention specimens (to be used only in conjunction with another source code)
- U Porijeklo nepoznato (mora biti obrazloženo) / Source unknown (must be justified)
- 10 -12. Država podrijetla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočenštvu ili umjetno razmnoženi. / The country of origin is the country where the specimens were taken from the wild, born and bred in captivity, or artificially propagated.
- 13. 15. Država uvoza je država koja je izdala uvozno dopuštenje za navedene primjerke. / The State of import is the State having issued the import permit for the specimens concerned
- 16. Znanstveno ime mora biti u skladu sa standardnim izvorima za nomenklaturu iz Priloga XIX Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / The scientific name must be in accordance with the standard references for nomenclature referred to in Annex XIX to Ordinance on transboundary movement and trade in protected species.
- 18. Navesti što više pojedinosti i opravdati izostavljanje traženih podataka. / Provide as many details as possible and justify any omission to the information required above.

4. Rukovanje s obrascima iz Priloga XIII

POTVRDE

Točka 1.1.

- Podnositelj zahtjeva ispunja polja 1 i 2 te 4 19 na zahtjevu (obrazac 3) .
 Izostavljanje podataka u zahtjevu mora biti obrazloženo.
- Ako se podnosi zahtjev za potvrdu za primjerke za koje je prethodni zahtjev bio odbijen, podnositelj zahtjeva je dužan obavijestiti upravno tijelo o prethodnoj odbijenici.

Točka 1.2.

- 1. Ako se pošiljka za koju je izdana potvrda razdvoji na više dijelova ili iz nekih drugih razloga podaci u takvom dokumentu ne odražavaju stvarno stanje, Ministarstvo će izmijeniti postojeću potvrdu ili će izdati jednu ili više novih potvrda sukladno članku 46. stavku 4., nakon što utvrdi valjanost dokumenta koji treba zamijeniti.
- Ako se izdaje potvrda za ukupni broj primjeraka navedenom na prethodno izdanoj potvrdi, Ministarstvo zadržava prethodno izdanu potvrdu skladno članku 46. stavku 5. Pravilnika.

ANNEX XIV

Convention on International Trade in Endangered Species of Wild Fauna and Flora



Konvencija o međunarodnoj trgovini ugroženim vrstama divlje faune i flore *Članak VII (6) / Article VII (6)*

ZNANSTVENI MATERIJAL / SCIENTIFIC MA	ATERIAI
1. Sadržaj: / Content:	TEITAL
2. Pošiljatelj (puno ime i adresa): / From (full name and address):	
2. Conjuto, j (pano mo radiocaj).	
3. Registarski broj: / Registration No:	
4. Primatelj (puno ime i adresa): / To (full name and address):	
5. Registarski broj: / Registration No:	
Etiketa broj: / Label No:	
se dio vraća nadležnom upravnom tijelu odmah nakon uporabe / part to be returned to the Management Authority immediately after use	
Registarski broj pošiljatelja: / Registration No of sender:	
Registarski broj primatelja: / Registration No of recipient:	
1. Sadržaj: / Content:	
1. Sadržaj: / Content:	
1. Sadržaj: / Content:	
1. Sadržaj: / Content:	

ANNEX XV

CODES TO BE INCLUDED IN THE DESCRIPTION OF SPECIMENS AND UNITS OF MEASURE TO BE USED IN PERMITS AND CERTIFICATES PURSUANT TO ARTICLE 38 OF THE ORDINANCE ON TRANSBOUNDARY MOVEMENT AND TRADE IN PROTECTED SPECIES

Description	Code	Preferred units	Alternative units	Explanation
Bark	BAR	kg		Tree bark (raw, dried or powdered; unprocessed)
Body	BOD	no.	kg	Substantially whole dead animals, including fresh or processed fish, stuffed turtles, preserved butterflies, reptiles in alcohol, whole stuffed hunting trophies, etc.
Bone	BON	kg	no.	Bones, including jaws
Calipee	CAL	kg		Calipee or calipash (turtle cartilage for soup)
Carapace	CAP	no.	kg	Raw or unworked whole shells of <i>Testudinata</i> species
Carving	CAR	kg	m ³	Carvings (including wood and finished wood products such as furniture, musical instruments and handicrafts). Remark: there are some species from which more than one type of product may be carved (e.g. horn and bone), where necessary, the description should therefore indicate the type of product (e.g. horn carving)
Caviar	EGG	kg		Caviar
Chip	CHP	kg		Wood chips, especially of the species Aquilaria malaccensis and Pterocarpus santalinus
Claw	CLA	no.	kg	Claws – e.g. of <i>Felidae, Ursidae</i> or <i>Crocodylia</i> <u>Remark</u> : 'turtle claws' are normally scales, not real claws
Cloth	CLO	m ²	kg	Cloth – if the cloth is not made entirely from the hair of the species listed in Appendices to the Convention, the weight of hair of the species concerned should instead, if possible, be recorded under 'HAI'
Coral (raw)	COR	kg	no.	Dead coral and coral rock <u>Remark</u> : trade should be indicated by the number of pieces only if the coral specimens are transported in water
Culture	CUL	no. of flasks, etc.		Cultures of artificially propagated plants
Derivatives	DER	kg/l		Derivatives (those which are not included elsewhere in the table)
Dried Plant	DPL	no.		Dried plants – e.g. herbarium specimens
Ear	EAR	no.		Ears – usually elephant
Egg	EGG	no.	kg	Whole dead or blown eggs (see also 'caviar')
Egg (live)	EGL	no.	kg	Live eggs – usually birds and reptiles, but includes fish and invertebrates

		Preferred units					
units		Alternative units	Explanation				
Extract	EXT	kg	I	Extract – usually plant extracts			
Feather	FEA	kg / wings no.	no.	Feathers – in case of objects (e.g. pictures) made of feathers record the number of objects			
Fibre	FIB	kg	m	Fibres, e.g. plant fibre but includes strings of tennis rackets			
Flower	FLO	kg		Flowers			
Flower pot	FPT	no.		Flower pots, e.g. made of tree fern fibres Remark: live plants which are traded in a 'community pots' should be marked as 'live plants', and not as a flower pot			
Frog's legs	LEG	kg		Frog's legs			
Fruit	FRU	kg		Fruit			
Foot	FOO	no.		Feet – e.g. of elephant, rhinoceros, hippopotamus, lion, crocodile, etc.			
Gall	GAL	kg		Gall			
Gall bladder	GAB	no.	kg	Gall bladder			
Garment	GAR	no.		Garments – including gloves and hats and accessories, but not shoes			
Genitals	GEN	kg	no.	Castrated and dried penises			
Graft rootstock	GRS	no.		Graft rootstocks (without graft)			
Hair	HAI	kg	g	Hair – includes all animal hair, e.g. of elephant, yak, vicuña, guanaco			
Horn	HOR	no.	kg	Horns, including antlers			
Leather products (small)	LPS	no.		Small manufactured products of leather, e.g. belts, braces, bicycle saddles, cheque book or credit card holders, earrings, handbags, key fobs, notebooks, purses, shoes, tobacco pouches, wallets, watch-straps			
Leather products (large)	LPL	no.		Large manufactured products of leather - e.g. briefcases, furniture, travel bags, travel trunks			
Live	LIV	no.		Live animals and plants. The specimens of live corals transported in water should be recorded only by the number.			
Leaf	LVS	no.	kg	Leaves			
Log	LOG	m³		All wood in the rough, whether or not stripped of bark or sapwood, or roughly squared, for processing notably into sawn wood, pulpwood or veneer sheets. Remark: trade in logs of special purpose timbers traded by weight (e.g. Guaiacum spp.) should be recorded in kg			

Description								
·	Code Preferred units Alternative units			Explanation				
Meat	MEA	kg		Meat, including flesh of fish if not whole (see 'body')				
Medicine	MED	kg/l		Medicine				
Musk	MUS	g		Musk				
Oil	OIL	kg	l	Oil – e.g. from turtles, seals, whales, fish, various plants				
Piece - bone	BOP	kg		pieces of bone, not manufactured				
Piece - horn	HOP	kg		Pieces of horn, not manufactured – including scrap				
Piece - ivory	IVP	ka		Ivory pieces, not manufactured – including scrap				
Plate	PLA	kg m²		Plates of fur skins – including rugs if made of several skins				
Powder	POW	kg		Powder				
Root	ROO	no.	kg	Roots, bulbs, corms or tubers				
Sawn wood	SAW	m ³		Wood simply sawn lengthwise or produced by a profile-chipping process; normally exceeds 6 mm in thickness. Remark: trade in sawn wood of special purpose timbers traded by weight (e.g. <i>Guaiacum</i> spp.) should be recorded in kg				
Scale	SCA	kg		Scale – e.g. of turtle, other reptiles, fish, pangolins				
Seed	SEE	kg		Seeds				
Shell	SHE	no.	kg	Raw or unworked shell of molluscs				
Side	SID	no.		Sides or flanks of skins; does not include crocodilian 'Tinga frames' (see under 'skin')				
Skeleton	SKE	no.		Substantially whole skeletons				
Skin	SKI	no.		Substantially whole skins, raw or tanned, including crocodilian 'Tinga frames'				
Skin piece	SKP	no.		Skin pieces – includes scraps, raw or tanned skulls				
Skull	SKU	no.		Skulls				
Souop	SOU	kg	I	Soup – e.g. of turtle				
Specimen (scientific)	SPE	kg/l/ml		Scientific specimens, including blood, tissue (e.g. kidney, spleen, etc.), histological preparations, etc.				
Stem	STE	no.	kg	Plant stems				
Tail	TAI	no.	kg	Tails – e.g. of caiman (for leather) or fox (for garment trimming, collars, boas, etc.)				

Description	Code	Preferred units	Alternative units	Explanation
Tooth	TEE	no.	kg	Teeth – e.g. of whale, lion, hippopotamus, crocodile, etc.
Timber	TIM	m ³	kg	Raw timber except saw-logs and sawn wood
Trophy	TRO	no.		Trophy – all the trophy parts of one small animal if they are exported together: e.g. horns (2), skull, cape, backskin, tail and feet (i.e. 10 specimens) constitute one trophy. The items should be recorded separately, except in case where, for example, the skull and horns are the only specimens of an animal that are exported, then these items should be recorded as one trophy. A whole stuffed body is recorded under 'BOD'. A skin alone is recorded under 'SKI'
Tusk	TUS	no.	kg	Substantially whole tusks, whether or not worked, including tusks of elephant, hippopotamus, walrus, narwhal, but not other teeth.
Veneer -rotary veneer -slices veneer	VEN	m³, m²	kg	Thin layers or sheets of wood of uniform thickness, usually 6 mm or less in thickness, usually peeled (rotary veneer) or sliced (sliced veneer), for use in making plywood, for veneering furniture, veneer containers, etc.
Wax	WAX	kg		wax, including ambergris

Key to units (equivalent non-metric measurements may be used)

g = grams kg = kilograms I = litres cm³ = cubic centimetres

ml = millimetres

m = metres

m² = square metres m³ = cubic metres no. = number of specimens

ANNEX XVI

1. Application for permit or certificate issue

REPUBLIKA HRVATSKA/ THE REPUBLIC OF CROATIA

	1. Izvoznik/Ponovni izvoznik / Exporter/Re-exporter	DOPUŠTENJE/POTVRDA	Br./ No.
		Permit/Certificate	
		☐ UVOZ/ Import	0 M P. L. (1
		☐ IZVOZ/ Export	2. Vrijedi do:/ Last day of validity:
ZAHTJEV / APPLICATION		PONOVNI IZVOZ/Re-export	
CAT	3. Uvoznik/ Importer	4. Država (ponovnog) izvoza/ Country of (re-)export	
эРП			
/ AF			
ЭEV			
Ŧ		5. Država uvoza / Country of import	
7		3. Dizava uvoza/ country of import	
	6. Propisana lokacija za žive, iz divljine uzete primjerke	7. Nadležno upravno tijelo/ Issuing Management Authority	
	vrsta iz Priloga VIII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama/ Authorized		
	location for live wild - taken specimens of Annex VIII species of Ministerial ordinance on transboundary movement and trade in		
	protected species.		
	 Opis primjerka (uključujući oznake, spol, datum rođenja za žive životinje)/ Description of specimens (Incl. marks, sex, date of birth of live animals) 	9. Neto masa (kg)/ Net mass (kg)	
	·	10. Količina/ Quantity	
		11. Prilog Pravilnika / Ministerial Ordinance Annex	
		Tr. Priog Pravillika/ Willisterial Granialee Allinex	
		12. Porijeklo/ Source	
		13. Svrha/ Purpose	
		14. Država porijekla / Country of origin	
	15. Znanstveno ime vrste / Scientific name of species		
	16. Hrvatsko ime vrste / Common name		
	17. Podnosim zahtjev za izdavanje gore navedenog dopušten	· · · · · · · · · · · · · · · · · · ·	
	Primjedbe (npr. svrha unošenja, pojedinosti o smještaju z specimens, etc.)	ra žive primjerke itd.)/ Remarks (e.g. on purpose of introducti	ion, details of accommodation for live
		Prilažem potrebnu dokumentaciju s dokazima i izja	avliujem da su svi navedeni podaci, prema
		mojim saznanjima i uvjerenju, točni. Izjavljujem o navedene primjerke nije ranije bio odbijen./ at	da zahtjev za dopuštenje/potvrdu za gore
		declare that all the particulars provided are to the best of an application for a permit/certificate for the above specim	my knowledge and belief correct. I declare that
	Žive će se životinje prevoziti u skladu s CITES-ovim uputam	a	
	za prijevoz i pripremu pošiljke živih divljih životinja, ili ako s radi o zračnom prijevozu, u skladu s propisima o živir	e Potpis/ Signa	ture
	životinjama koje je objavila Međunarodna udruga za zračr prijevoz (IATA)/ Live animals will be transported in compliance wit	ni	/ Name of applicant
	the CITES Guidelines for the Transport and Preparation for Shipmer of Live Wild Animals or, in the case of air transport, the Live Animal	nt	· · · ·
	Regulations published by the International Air Transport Associatio (IATA)		ce and date

Upute i objašnjenja

- Puni naziv i adresa stvarnog (ponovnog) izvoznika, a ne zastupnika./ Full name and address of actual (re-)
 exporter, not of an agent.
- 2. Ne koristi se./ Not aplicable
- **3. Puni naziv i adresa stvarnog uvoznika, a ne zastupnika**./ Full name and address of the actual importer, not of an agent
- 6. Ispunjava se samo na zahtjevu za žive, iz divljine uzete primjerke vrsta iz Priloga VIII Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ To be completed only on the application form in acase of live, wild-taken specimens of Annex VIII species to the Ministerial ordinance on transboundary movement and trade in protected species.
- 8. Opis mora biti što precizniji i uključivati kod od tri slova, u skladu s prilogom XV Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama. / Description must be as precise as possible and include a three-letter code in accordance with Annex XIV to Ministerial ordinance on transboundary movement and trade in protected species.
- 9./10. Koristite jedinice za količinu i/ili neto masu u skladu s onima u Prilogu XIV Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama./ Use the units of quantity and / or net mass in accordance with those contained in Annex XIV of Ministerial ordinance on transboundary movement and trade in protected species.
- 11. Upišite broj Priloga Pravilnika o prekograničnom prometu i trgovini zaštićenim vrstama, u kojem je vrsta navedena na dan izdavanja dopuštenja/ potvrde. Ako vrsta nije navedena niti u jednom Prilogu, to je potrebno naznačiti./ Enter the number of the Annex to the Ministerial ordinance on transboundary movement and trade in protected species, in which the species is listed at the date of issue of the permit/certificate. Must be indicated if the species is not listed in any Annex.
- **12. Izaberite jedan od sljedećih kodova za oznaku porijekla:/** Use one of the following codes to indicate the source:
 - W primjerci uzeti iz divljine/Specimens taken from the wild
 - R primjerci iz farmskog uzgoja/Specimensoriginating from a ranching operation
 - C primjerci životinjskih vrsta uzgojeni u zatočeništvu u nekomercijalne svrhe/Specimens of animal species bred in captivity for non-comercial purposes
 - A primjerci biljnih vrsta umjetno razmnoženi za nekomercijalne svrhe/Artificially propagated specimens of plant species.
 - I zaplijenjeni ili oduzeti primjerci/Confiscated or seized specimens
 - U porijeklo nepoznato (mora biti obrazloženo)/Source unknown (must be justified)
- 13. Izaberite jedan od sljedećih kodova za oznaku svrhe zbog koje se primjerci (ponovo) izvoze / uvoze: /Use one of the following codes to indicate the purpose for which the specimens are to be (re-) exported / imported:
 - B uzgoj u zatočeništvu ili umjetno razmnožavanje/breeding in captivity or artificial propagation
 - E obrazovne svrhe/educational
 - G botanički vrtovi/botanical gardens
 - H lovački trofeji/hunting trophies
 - L provedba zakonskih propisa/enforcement
 - M biomedicinsko istraživanje/bio-medical research
 - N vraćanje ili prvo puštanje u divljinu/reintroduction or introduction into the wild
 - P osobno vlasništvo/personal
 - Q cirkusi ili putujuće izložbe/circuses and travelling exibitions
 - S znanstvene svrhe/ scientific
 - T komercijalne svrhe/commercial
 - Z zoološki vrtovi/zoos
- 14. Država porijekla je država u kojoj su primjerci uzeti iz divljine, rođeni i uzgojeni u zatočeništvu ili umjetno razmnoženi./ The country of origin is the country where these specimens were taken from the wild, born and bred in captivity, or artificially propagated.
- **25. Znanstveno ime vrste koja se uvozi, izvozi ili ponovno izvozi./** The scientific name of the species to be imported, exported or (re-) exported.
- **16. Hrvatsko ime vrste koja se uvozi, izvozi ili ponovno izvozi./** Common name of the species to be imported, exported or (re-) exported.
- 17. Navesti što više informacija te navesti razloge zbog kojih neka od gore traženih informacija nije navedena./ Provide as many detailes as possible and justyfy omission to the informations required above.

ANNEX XVII

- (a) Mammal Species of the World: A Taxonomic and Geographic Reference, 2nd Edition, (edited by D. E. Wilson and D. M.Reeder, 1993, Smithsonian Institute Press) - for mammalian nomenclature; except for the genus *Balaenoptera* in Rice, D.W., 1998: Marine Mammals of the World. Systematics and Distribution. Special Publication Number 4: et al., 1-231; The Society for Marine Mammals.
- (b) A Reference List of the Birds of the World (J. J. Morony, W. J. Bock and J. Farrand Jr, 1975, American Museum of Natural History) for order and family level names for birds.
- (c) Distribution and Taxonomy of Birds of the World (C. G. Sibley and B. L. Monroe Jr, 1990, Yale University Press) and A supplement to: Distribution and Taxonomy of Birds of the World (Sibley and Monroe, 1993; Yale University Press) for the genus and species names of birds.
- (d) Schildkröte, Krokodile, Bröckenechsen (Wermuth, H. and R. Mertens, 1996 (reprint), et al., 1-506, Gustav Fischer Verlag, Jena, ISBN 3-437-35048-X) for the names of crocodiles, turtles, tortoises and tuataras; A Revised Checklist with Distribution Maps of the Turtles of the World (Iverson, J.B., 1992: et al., 1-363, Privately printed, J.B.Iverson, Dept of Biology, Earlham College, Richmond, Indiana 47374, United States of America, ISBN0-9617431-0-5) for the distribution of turtles and tortoises.
- (e) Herpetology (Pough, F.H., R.M. Andrews, J.E. Cadle, M.L. Crump, A.H. Savitzky and K.D. Wells, 1998, et al., 1-577) for the delimitation of families within the *Sauria*.
- (f) Chamaeleonidae (C.J.J. Klaver and W. Böhme, 1997. Das Tierreich 112: et al., 1-85; Walter de Gruyter, Berlin, New York, ISBN 3-11-015187-1) for the species names of all chameleons.
- (g) Reptiles del noroeste, nordeste y este de la Argentina ó Herpetofauna de las selvas subtropicales, puna y pampa. 1993 (Cei, José M. In Monografie XIV, Museo Regionale di Scienze Naturali), Lizards of Brazilian Amazonia (Avila Pires, T.C.S.,1995, Zool. Verh. 299: 1-706, Nationaal Natuurhistorisch Museum, Leiden, ISBN 90-73239-40-0); A new species of Tupinambis (Squamata: *Teiidae*) from Central Brazil, with an analysis of morphological and genetic variation in the genus [Colli, G.R., A.K. Péres and H.J. da Cunha, 1998, Herpetologica 54 (4): 477-492]; and A new species of Tupinambis Daudin, 1802 (Squamata, Teiidae) from Central Brazil (Manzani, P.R. and A.S. Abe, 1997, Boletim do Museu Nacional.Nov. Ser. Zool. 382: 1-10)] for the species names of the genus *Tupinambis*.
- (h) Snake Species of the World: A Taxonomic and Geographic Reference: Volume 1 (Campbell, McDiamid and Touré, 1997), published under the auspices of the Herpetologists' League for the nomenclature of snakes, except for the following cases: the following names for Malagasy boid snakes should continue to be used: Acrantophis dumerilii Jan, 1860, Acrantophis madagascariensis (Duméril & Bibron, 1844) and Sanzinia madagascariensis (Duméril & Bibron, 1844); in the genera Calabaria, Charina and Lichanura, the following names shall continue to be used: Calabaria reinhardtii (Schlegel, 1848), Charina bottae (Blainville, 1935) and Lichanura trivirgata (Cope, 1861); and in the case of subspecies Python molurus, two subspecies are recognized, namely P. m. molurus (Linnaeus, 1758) and P. m. bivittatus Kuhl,1820.
- (i) Amphibian Species of the World: A Taxonomic and Geographic Reference (D. R. Frost, 1985, Allen Press and The Association of Systematics Collections) and Amphibian Species of the World: Additions and corrections (W. E. Duellman, 1993, University of Kansas) for amphibian nomenclature; A Review of the Genus Mantella (Anura, Ranidae, Mantellinae): Taxonomy, Distribution and Conservation of Malagasy Poison Frogs, (Vences, M., F. Glaw and W. Böhme, 1999; Alytes17(1-2): 3-72) for the genus *Mantella*.
- (j) Catalog of Fishes. (Eschmeier, W. N., 1998, Vol. 1. Introductory materials. Species of Fishes A-L: 1-958. Vol. 2. Species of Fishes M-Z: 959-1820. Vol. 3. Genera of Fishes. Species and Genera in a Classification. Literature cited. Appendices: 1821-2905. California Academy of Sciences, ISBN 0-940228-47-5) - for the taxonomy and the names of all fishes.
- (k) In the genus Brachypelma the following nomenclature should be used:

Brachypelma albopilosum Valerio, 1980;

Brachypelma angustum Valerio, 1980;

Brachypelma auratum Schmidt, 1992;

Brachypelma aureoceps (Chamberlin, 1917);

Brachypelma baumgarteni Smith, 1993;

Brachypelma boehmei Schmidt & Klaas, 1994;

Brachypelma embrithes (Chamberlin & Ivie, 1936);

Brachypelma emilia (White, 1856);

Brachypelma epicureanum (Chamberlin, 1925);

Brachypelma fossorium Valerio, 1980;

Brachypelma mesomelas (Pickard-Cambridge, 1892);

Brachypelma sabulosum (Pickard-Cambridge, 1897);

Brachypelma smithi (Pickard-Cambridge, 1897) (included the synonyms Brachypelma annitha and Brachypelma harmorii);

Brachypelma vagans (Ausserer, 1875).

- (I) The Plant Book, reprinted Edition, (D. J. Mabberley, 1990, Cambridge University Press) for the generic names of all plants listed in Appendices to CITES, unless they are superseded by standard checklists adopted by the Conference of the Parties as referenced in paragraphs (n) to (r).
- (m) A Dictionary of Flowering Plants and Ferns, 8th edition (J. C. Willis, revised by H. K. Airy Shaw, 1973, Cambridge University Press) for generic synonyms not mentioned in The Plant Book, unless they are superseded by standard checklists adopted by the Conference of the Parties as referenced in paragraphs (m) to (q).
- (n) A World List of Cycads (D. W. Stevenson, R. Osborne and K.D. Hill, 1995; In: P. Vorster (Ed.), Proceedings of the Third International Conference on Cycad Biology, pp. 55-64, Cycad Society of South Africa, Stellenbosch) and its updates accepted by the Nomenclature Committee, as a guideline when making reference to names of species of Cycadaceae, Stangeriaceae and Zamiaceae.
- (o) The Bulb Checklist (1997, Compiled by the Royal Botanic Gardens, Kew, United Kingdom) and its updates accepted by the Nomenclature Committee, as a guideline when making reference to the names of species of *Cyclamen (Primulaceae)*, *Galanthus* and *Sternbergia (Liliaceae)*.
- (p) The CITES Checklist of Succulent Euphorbia Taxa (*Euphorbiaceae*) (1997, Published by the German Federal Agency for Nature Conservation) and its updates accepted by the Nomenclature Committee, as a guideline when making reference to the names of species of succulent euphorbias.
- (q) CITES *Cactaceae* checklist, Second Edition (1999, compiled by D. Hunt, Royal Botanic Gardens, Kew, United Kingdom) and its updates accepted by the Nomenclature Committee, as a guideline when making reference to the names of species of *Cactaceae*.
- (r) CITES Orchid Checklist, (compiled by the Royal Botanic Gardens, Kew, United Kingdom) and its updates accepted by the Nomenclature Committee, as a guideline when making reference to the names of species of *Cattleya*, *Cypripedium*, *Laelia*, *Paphiopedilum*, *Phalaenopsis*, *Phragmipedium*, *Pleione* and *Sophronitis* (Volume I, 1995) and *Cymbidium*, *Dendrobium*, *Disa*, *Dracula* and *Encyclia* (Volume, 1997).

ANNEX XVIII

1. CHAPTER

- **B** Breeding in captivity or artificial propagation
- **E** Educational
- **G** Botanical gardens
- **H** Hunting trophies
- L Legal enforcement
- M Biomedical research
- N Introduction or reintroduction into the wild
- P Personal
- Q Circuses or travelling exhibitions
- S Scientific
- T Commercial/trade purposes
- **Z** Zoos

2. CHAPTER

- W Specimens taken from the wild
- R Specimens originating from a farm operation
- Annex I animals bred in captivity for commercial purposes and Annex I plants artificially propagated for commercial purposes in accordance with Articles 25 and 27 of the Ordinance on transboundary movement and trade in protected species, as well as parts and derivatives thereof
- Annex I plants artificially propagated for non-commercial purposes and Annexes II and III plants artificially propagated in accordance with Article 27 of the Ordinance on transboundary movement and trade in protected species, as well as parts and derivatives thereof
- Annex I animals bred in captivity for non-commercial purposes and Annexes II and III animals bred in captivity in accordance with Article 25 of the Ordinance on transboundary movement and trade in protected species, as well as parts and derivatives thereof
- **F** Animals born in captivity, but for which the criteria of Article 25 of the Ordinance on transboundary movement and trade in protected species are not met, as well as parts and derivatives thereof
- Confiscated and seized specimens; to be used in conjunction with another source code
- O Pre-Convention specimens; to be used in conjunction with another source code
- U Source unknown (must be justified).

ANNEX XIX

Notes on interpretation of Annexes I - IV

- 1. Species included in Annexes I, II, III and IV are referred to:
- a) by the name of the species; or
- b) as being all of the species included in a higher taxon or designated part thereof.
- 2. The abbreviation "spp." is used to denote all species of a higher taxon.
- 3. Other references to taxa higher than species are for the purposes of information or classification only.
- 4. The following abbreviations are used for plant taxa below the level of species:
- a) "ssp" is used to denote subspecies;
- b) "var(s)" is used to denote variety (varieties); and
- c) "fa" is used to denote a forma.
- 5. The symbols "(I) ", "(II) " and "(III) " placed against the name of a species or a higher taxon refer to the Appendices to the **Convention on International Trade in Endangered Species of Wild Fauna and Flora** (hereinafter referred to as: the Convention) in which the species concerned are listed, as indicated in notes 6, 7 and 8. When none of these annotations appears, the species concerned are not listed in the Appendices to the Convention.
- 6. (I) against the name of a species or higher taxon indicates that the species or higher taxon concerned is included in Appendix I to the Convention.
- 7. (II) against the name of a species or higher taxon indicates that the species or higher taxon concerned is included in Appendix II to the Convention.
- 8. (III) against the name of a species or higher taxon indicates that it is included in Appendix III to the Convention. In this case the country with respect to which the species or higher taxon is included in Appendix III is also indicated.
- 9. The symbol "#" followed by a number placed against the name of a species or higher taxon included in Annexes III or IV designates parts or derivatives which are specified in relation thereto for the purpose of this Ordinance, as follows:

#1 designates all parts and derivatives, except:

- a) seeds, spores and pollen (including pollinia);
- b) seedling or tissue cultures obtained *in vitro*, in solid or liquid media, transported in sterile containers, and
- c) cut flowers or artificially propagated plants;

#2 designates all parts and derivations, except:

- a) seeds and pollen:
- b) seedling or tissue cultures obtained *in vitro*, in solid or liquid media, transported in sterile containers:
- c) cut flowers or artificially propagated plants, and
- d) chemical derivatives and finished pharmaceutical products;

#3 designates whole and sliced roots and parts of roots, excluding manufactured parts or derivatives such as powders, pills, extracts, tonics, teas and confectionary;

#4 designates all parts and derivatives, except:

- a) seeds, except those from Mexican cacti originating in Mexico, and pollen;
- b) seedling or tissue cultures, in solid or liquid media, obtained *in vitro*, transported in sterile containers;
- c) cut flowers or artificially propagated plants;
- d) fruits and parts and derivatives thereof of naturalised or artificially propagated plants; and
- e) separate stem joints (pads) and parts and derivatives thereof of naturalised or artificially propagated plants of the genus *Opuntia*;

#5 designates logs, sawn wood and veneer sheets;

#6 designates logs, sawn wood, veneer sheets and plywood;

#7 designates logs, wood-chips and unprocessed broken material;

#8 designates all parts and derivatives, except:

- a) seeds, spores and pollen (including pollinia);
- b) seedling or tissue cultures, in solid or liquid media, obtained *in vitro*, transported in sterile containers:
- c) cut flowers or artificially propagated plants and
- d) fruits and parts and derivatives thereof of artificially propagated plants of the genus Vanilla.

#9 designates all parts and derivatives, except:

those bearing the label "Produced from the species *Hoodia* spp. material obtained through controlled harvesting and production in collaboration with the CITES Management Authorities of Botswana/Namibia/South Africa under agreement no. BW/NA/ZA xxxxx".

#10 designates all parts and derivatives, except:

- a) seeds and pollen,
- b) finished pharmaceutical products.
- 10. In case there is no specific indication against the name of a species or higher taxon included in Annex II and III, all recognizable parts and derivatives thereof are also included.
- 11. As none of the species or higher taxa of FLORA included in Annex I is annotated to the effect that its hybrids shall be treated in accordance with this Ordinance, this means that artificially propagated hybrids produced from one or more of these species or taxa may be traded with a certificate of artificial propagation, and that seeds and pollen (including pollinia), cut flowers, seedling or tissue cultures obtained *in vitro*, in solid or liquid media, transported in sterile containers of these hybrids are not subject to the provisions of this Ordinance.
- 12. Urine, feces and ambergris which are waste products and gained without the manipulation of the animals listed in Annexes I, II, III and IV are not subject to the provisions of this Ordinance.
- 13. In respect of fauna species listed in Annex IV, the provisions of this Ordinance shall apply only to live specimens and whole, or substantially whole, dead specimens except for taxa which are annotated as follows, to show that other parts and derivatives are also covered:
 - § 1 any whole, or substantially whole, skins, raw or tanned;
 - § 2 any feathers or any skin or other part with feathers on it.
- 14. In respect of flora species listed in Annex IV, the provisions of this Ordinance shall apply only to live specimens except for taxa which are annotated as follows to show that other parts and derivatives are also covered:
 - § 3 Dried and fresh plants, including, where appropriate, leaves, roots/rootstock, stems, seeds/spores, bark and fruits.

- 15. Numerical symbols in brackets () designate the following:
- (1) All species are listed in Appendix II to the Convention except Lipotes vexillifer, Platanista spp., Berardius spp., Hyperoodon spp., Orcaella brevirostris, Physeter catodon (includes synonym Physeter macrocephalus), Sotalia spp., Sousa spp., Neophocaena phocaenoides, Phocoena sinus, Eschrichtius robustus (includes synonym Eschrichtius glaucus), Balaenoptera spp. (except population of West Greenland of the species Balaenoptera acutorostrata), Megaptera novaeangliae, Balaena mysticetus, Eubalaena spp. (formerly included in genus Balaena) and Caperea marginata, which are listed in Appendix I. Specimens of the species listed in Appendix II to the Convention, including products and derivatives other than meat products for commercial purposes, taken by the people of Greenland under licence granted by the competent authority concerned, shall be treated as belonging to Annex II to this Ordinance. A zero annual export quota is established for live specimens from the Black Sea population of the species Tursiops truncatus removed from the wild and traded for primarily commercial purposes.

(2) Populations of Botswana, Namibia and South Africa (listed in Annex II to this Ordinance):

For the exclusive purpose of allowing:

- 1) trade in hunting trophies for non-commercial purposes:
- 2) trade in live animals for in situ conservation programmes;
- 3) trade in hides:
- 4) trade in leather goods for non-commercial purposes, for Botswana; trade in leather products for commercial and non-commercial purposes for Namibia and South Africa;
 - 5) trade in hair for commercial and non-commercial purposes for Namibia;
- 6) trade in individually marked and certified ekipas incorporated in finished jewellery for non-commercial purposes for Namibia;
- 7) trade in registered raw ivory (for Botswana and Namibia, while tusks and pieces; for South Africa, whole tusks and cut pieces of ivory that are both 20 cm or more in length and 1 kg or more in weight) subject to the following:
 - i) only registered government-owned stocks, originating in the State (excluding seized ivory and ivory of unknown origin) and, in the case of South Africa, only ivory originating from the Kruger National Park;
 - ii) only to trading partners that have been verified by the Secretariat, in consultation with the Standing Committee, to have appropriate national legislation and domestic trade controls to ensure that the imported ivory will not be re-exported and will be managed in accordance with all requirements of Resolution Conf. 10.10. (rev. CoP12) concerning domestic manufacturing and trade;
 - iii) not before the Secretariat has verified the prospective importing countries, and the Monitoring of Illegal Killing of Elephants programme (MIKE) has reported to the Secretariat on the baseline information (e.g. elephant population numbers, incidence of illegal killing);
 - iv) a maximum of 20,000 kg (Botswana), 10,000 kg (Namibia) and 30,000 kg (South Africa) of ivory may be traded and despatched in a single shipment under strict supervision of the Secretariat:
 - v) the proceeds of the trade are used exclusively for elephant conservation and community conservation and development programmes within or adjacent to the elephant range; and
 - vi) only after the Standing Committee has agreed that the above conditions have been met. On a proposal from the Secretariat, the Standing Committee can decide to cause this trade to cease partially or completely in the event of non-compliance by exporting or importing countries, or in the case of proven detrimental impacts of the trade on other elephant populations. All other specimens shall be deemed to be specimens of species included in Annex I to this Ordinance and the trade in them shall be regulated accordingly.

(3) Population of Zimbabwe (listed in Annex II to this Ordinance):

For the exclusive purpose of allowing:

- 1) export of hunting trophies for non-commercial purposes;
- 2) export of live animals to appropriate and acceptable destinations:
- 3) export of hides;
- 4) export of leather goods and ivory carvings for non-commercial purposes. All other specimens shall be deemed to be specimens of species included in Annex I to this Ordinance, and the trade in them shall be regulated accordingly. To ensure that where a) destinations for

live animals are to be "appropriate and acceptable" and/or the purpose of the import is to be "non-commercial", export permits and re-export certificates may be issued only after the issuing management authority has received, from the management authority of the state of import, a certification to the effect that: in case a), in analogy to Article 4, paragraph 1, item (c) of the Convention, the holding facility has been reviewed by the competent scientific authority, and the proposed recipient has been found to be suitably equipped to house and care for the animals; and/or in case b), in analogy to Article 4, paragraph 1, item (d), the management authority is satisfied that the specimens will not be used for primarily commercial purposes.

⁽⁴⁾ Population in Argentina (listed in Annex II to this Ordinance):

For the exclusive purpose of allowing international trade in wool sheared from live *vicuñas* of the populations included in Annex II to this Ordinance, in cloth and in derived manufactured products and other handicraft artefacts. The reverse side of the cloth must bear the logotype adopted by the range states of the species, which are signatories to the Convenio para la Conservación y Manejo de la Vicuña, and the selvages the words "VICUÑA-ARGENTINA". Other products must bear a label including the logotype and the designation "VICUÑA-ARGENTINA-ARTESANIA". All other specimens shall be deemed to be specimens of species included in Annex I to this Ordinance and the trade in them shall be regulated accordingly.

(5) Population of Bolivia (listed in Annex II to this Ordinance):

For the exclusive purpose of allowing international trade in products made from wool sheared from live animals. The wool must bear the logotype adopted by the range states of the species, which are signatories to the Convenio para la Conservación y Manejo de la Vicuña, and the selvages the words "VICUÑA-BOLIVIA". Other products must bear a label including the logotype and the designation "VICUÑA-BOLIVIA-ARTESANIA". All other specimens shall be deemed to be specimens of species included in Annex I to this Ordinance and the trade in them shall be regulated accordingly.

(6) Population of Chile (listed in Annex II to this Ordinance):

For the exclusive purpose of allowing international trade in products made from wool sheared from live *vicuñas* of the populations included in Annex II to this Ordinance, and in cloth and items made thereof, including luxury handicrafts and knitted articles. The reverse side of the cloth must bear the logotype adopted by the range states of the species, which are signatories to the Convenio para la Conservación y Manejo de la Vicuña, and the selvages the words "VICUÑA-CHILE". Other products must bear a label including the logotype and the designation "VICUÑA-CHILE-ARTESANIA". All other specimens shall be deemed to be specimens of species included in Annex I to this Ordinance and the trade in them shall be regulated accordingly.

Population in Peru (listed in Annex II to this Ordinance):

For the exclusive purpose of allowing international trade in wool sheared from live *vicuñas* and in the stock existent at the time of the ninth meeting of the Conference of the Parties (November 1994) of 3,249 kg of wool, and in cloth and items made thereof, including luxury handicrafts and knitted articles. The reverse side of the cloth must bear the logotype adopted by the range states of the species, which are signatories to the Convenio para la Conservación y Manejo de la Vicuña, and the selvages the words "VICUÑA-PERU". Other products must bear a label including the logotype and the designation "VICUÑA-PERU-ARTESANIA". All other specimens shall be deemed to be specimens of species included in Annex I to this Ordinance and trade in them shall be regulated accordingly.

- (8) Provisions of this Ordinance do not apply to:
 - Fossils
 - Coral sand, which is the material consisting entirely or in part of finely crushed fragments of dead coral no larger than 2 mm in diameter and which may also contain, amongst other things, the remains of *Foramnifera*, mollusc and crustacean shell, and coralline algae
 - Coral fragments (including gravel and rubble), which are unconsolidated fragments of broken finger-like dead coral and other material between 2 and 30 mm in diameter.
- ⁽⁹⁾ Artificially propagated specimens of the following hybrids and/or cultivars are not subject to the provision of this Ordinance:
 - Hatiora x graeseri

- Schlumbergera x buckleyi
- Schlumbergera russelliana x Schlumbergera truncata
- Schlumbergera orssichiana x Schlumbergera truncata
- Schlumbergera opuntioides x Schlumbergera truncata
- Schlumbergera truncata (cultivars)
- Cactaceae spp. colour mutants lacking chlorophyll, grafted on the following grafting stocks: Harrisia "Jusbertii", Hylocereus trigonus or Hylocereus undatus
- Opuntia microdasys (cultivars)
- ⁽¹⁰⁾ Artificially propagated specimens of *Cymbidium, Dendrobium, Phalaenopsis* and *Vanda* hybrids are not subject to the provisions of this Ordinance in the following cases:
- a) specimens are traded in shipments consisting of individual containers (i.e. cartons, boxes or crates) containing 20 or more plants of the same hybrid,
- b) plants within a container can be readily recognised as artificially propagated specimens by exhibiting a high degree of uniformity and good health, and
- c) shipments are accompanied by documentation, such as an invoice, which clearly states the number of plants.

Artificially propagated specimens of the following hybrids:

Cymbidium: interspecific hybrids within the genus and intergeneric hybrids

Dendrobium: interspecific hybrids within the genus known in horticulture as "nobile - types" and

"phalaenopsis – types"

Phalaenopsis: interspecific hybrids within the genus and intergeneric hybrids Vanda: interspecific hybrids within the genus and intergeneric hybrids

are not subject to the provisions of this Ordinance when:

- a) they are traded in flowering state, i.e. with at least one open flower per specimen, with reflexed petals,
- b) they are professionally processed for commercial retail sale, i.e. labelled with printed labels and packaged with printed packages,
- c) they can be easily recognized as artificially propagated specimens by exhibiting a high degree of cleanliness, undamaged inflorescences, intact root systems and a general absence of damage or injury that could be attributable to plants originating in the wild,
- d) the plants do not exhibit characteristics of wild origin, such as damage by insects or other animals, fungi or algae adhering to leaves, or mechanical damage to inflorescences, roots, leaves or other parts resulting from collection; and
- e) the labels and packages indicate the trade name of the specimen, the country of artificial propagation or, in the case of international trade during the production process, the country where the specimen was labelled and packaged; and the labels or packages show a photograph of the flower, or demonstrate by other means the appropriate use of labels and packages in an easily verifiable way.

Plants not clearly qualifying for the exemption must be accompanied by appropriate documents of the Convention.

- ⁽¹¹⁾ Artificially propagated specimens of cultivars of *Cyclamen persicum* are not subject to the provisions of this Ordinance. However, the exemption does not apply to such specimens traded as dormant tubers.
- ⁽¹²⁾ Whole artificially propagated plants in pots or other small containers are not subject to the provisions of this Ordinance if the shipment is accompanied by the label or documentation containing the name of the taxon and the text "artificially propagated".
- 16. The symbol "L" against the name of the Annex I species designates the species listed also in the Hunting Act list of wild game (Official Gazette 140/05) and the breeding and trade in terms of Articles 106 and 107 of the Nature Protection Act are within the authority of the central state administration body competent for hunting.

ANNEX XX

Notes on interpretation of Annexes VIII and IX

- 1. Species listed in Annexes VIII and IX are referenced:
- a) by the name of a species; or
- b) as being all of the species included in a higher taxon or designated part thereof.
- 2. The abbreviation "spp." is used to denote all species of a higher taxon.
- 3. Other references to taxa higher than species are for the purposes of information or classification only.
- 4. The following abbreviations are used for plant taxa below the level of species:
- a) "ssp." is used to denote subspecies;
- b) "var." is used to denote variety; and
- c) "fa." is used to denote forma.
- 5. The symbol "=" followed by a number placed against the name of a species, subspecies or higher taxon denotes that the name of the species concerned shall be interpreted as follows:

=P801	also referenced as Iberolacerta horvathi
=P802	also referenced as Iberolacerta mosorensis
=P803	also referenced as Ophisaurus apodus
=P804	also referenced as Hierophis caspius
=P805	also referenced as Hierophis gemonensis
=P806	also referenced as Platyceps najadum
=P807	also referenced as Hierophis viridiflavus
=P808	also referenced as Zamenis longissima
=P809	also referenced as Zamenis situla
=P810	also referenced as Hippocampus ramulosus
=P811	also referenced as Hamatocaulis vernicosus

6. The symbol "-" followed by a number placed against the name of a species or higher taxon denotes that designated geographically separate populations, species, or taxa are excluded from the Annex concerned:

-P901	populations of the island of Cres and the Pannonian plain
-P902	population in the Littoral region
-P903	population in the Mrežnica River

7. The symbol "+" followed by a number placed against the name of a species, subspecies or higher taxon denotes that only designated geographically separate populations of that species, subspecies or taxon are included in the appendix concerned, as follows:

+P801	population north from the Sava River
+P802	population in the Dundo Wood in the island of Rab
+P803	populations of the island of Cres and the Pannonian plain
+P804	population in the Littoral region
+P805	population in the Mrežnica River
+P806	population on Cres
+P901	population in the Drava River

D3 DETAILS ON VIOLATIONS AND ADMINISTRATIVE MEASURES IMPOSED

By the Act on Amendments (Official Gazette 139/2008) to the Nature Protection Act (Official Gazette 70/2005) additional violations and administrative measures have been proscribed in the following articles (some are applicable for CITES violations):

NOTE: Nature Protection Act (OG 70/2005) and Decision on amending the Nature Protection Act is enclosed to this document

XIII MISDEMEANOUR PROVISIONS

Article 193

- (1) A fine in the amount of HRK 500,000.00 to 1,000,000.00 for a misdemeanour shall be imposed on a legal person who:
- undertakes any project or action which may result in destruction or some other major or permanent damage to an ecologically important area (Article 59),
- undertakes any project or action which may result in destruction or some other major or permanent damage to an international ecologically important area (Article 60, paragraph 4),
- exterminates an indigenous wild taxon (Article 85, paragraph 3).
- (2) A fine in the amount of HRK 20,000.00 to 70,000.00 for the misdemeanour referred to in paragraph 1 of this Article shall be imposed on a natural and responsible person within a legal person.

Article 194

- (1) A fine in the amount of HRK 100,000.00 to 500,000.00 for a misdemeanour shall be imposed on a legal person who:
- carries out a project for which nature impact assessment has not been carried out, or which is contrary to the assessment (Article 36),
- proceeds contrary to the measures for protection, conservation, improvement and use of protected areas and other protected natural assets laid down in the Ordinance on internal order (Article 71),
- introduces an alien wild taxon in nature on the territory of the Republic of Croatia (Article 91),
- reintroduces into the natural environment on the territory of the Republic of Croatia vanished wild taxa without approval from the Ministry (Article 93).
- (2) A fine in the amount of HRK 15,000.00 to 50,000.00 for the misdemeanour referred to in paragraph 1 of this Article shall be imposed on a natural and responsible person within a legal person.

Article 195

- (1) A fine in the amount of HRK 25,000.00 to 200,000.00 for a misdemeanour shall be imposed on a legal person who:
- performs unauthorized actions in a strict nature reserve (Article 10),
- makes unauthorised economic use of natural resources or other unauthorised activity in the national park (Article 11),
- undertakes unauthorized interventions and actions that may impair the characteristics owing to which the designation of a special nature reserve was awarded (Article 12, paragraph 3),

- pursues activities endangering essential characteristics and role of a nature park, or carries out business activities and uses natural resources without having obtained the nature protection requirements (Article 13),
- pursues the activity that significantly endangers the meaning and role of a regional park or carries out business activities and uses natural assets without having obtained the nature protection requirements (Article 14, paragraph 2),
- in the nature monument or in its immediate vicinity undertakes the actions that endanger its characteristics and values (Article 15, paragraph 3),
- performs the actions and activities degrading the characteristics owing to which the designation of important landscape was awarded (Article 16, paragraph 2),
- carries out the actions and activities not aimed at maintenance or improving the forest park (Article 17, paragraph 2),
- undertakes the interventions and actions which modify or degrade the values owing to which the park architecture monument was awarded protection (Article 18, paragraph 2),
- with no valid reason destroys minerals, speleothems or fossils (Article 20, paragraph 4),
- does not protect indigenous domesticated taxa in the prescribed manner (Article 28),
- organises rides on motor vehicles outside communities, any kind of roads, field roads, improved paths and driving polygons with no approval from the Ministry (Article 32),
- places on the market and applies plant protection agents and mineral fertilizers in an unauthorized manner (Article 34),
- does not restore or bring the state of the natural environment in the impact area of the intervention close to that which prevailed prior to the intervention (Article 37g, paragraph 2)
- does not implement the mitigation measures in the prescribed manner (Article 37b, paragraph 2)
- does not implement the compensation terms in the prescribed manner (Article 37c, paragraphs 3 and 6)
- as a contractor carrying out the intervention or as a user of natural resources without delay does not eliminate harmful consequences (Article 40),
- uses and manages forests contrary to principles of sustainable development and principles of forest certification (Article 42, paragraph 2 and 3),
- performs forestation wherever that is not justified and in a manner endangering the endangered non-forest and rare habitat type (Article 43),
- uses chemical agents for protection of plants in forests with no authorization (Article 44),
- does not safeguard constant percentage of mature, old and dry trees pursuant to nature protection requirements (Article 45, paragraph 1),
- does not leave unhewed areas defined in forest management plans or nature protection requirements (Article 45, paragraph 3),
- does not manage in such a manner so as to conserve to the maximum extent the forest clearances and forest edges (Article 45, paragraph 4),
- does not manage in such a manner as to provide prolongation of hewable maturity for indigenous species of trees (Article 45, paragraph 5),
- damages, destroys or takes away speleothems and underground live nature from the speleological object (Article 48, paragraph 1),
- modifies habitat conditions in a speleological object by disposal of garbage or biological waste, by burning fire or otherwise (Article 48, paragraph 1),
- performs activities or actions in a speleological object without prior approval of the Ministry (Article 48, paragraph 2),
- endangers or degrades a speleological object or otherwise impedes its use (Article 49, paragraph 1),

- constructs barriers on watercourses, reclaims, buries springs, ponds, etc, and thereby endangers natural assets and biological diversity (Article 51, paragraph 1),
- manages grasslands in an unauthorized manner (Article 54),
- does not conserve peripheral parts of agricultural land as habitats (Article 55, paragraph 1),
- does not implement prescribed measures for conservation of habitat types in a favourable state (Article 56, paragraph 1),
- pursues research without the permission of the competent body and/or does not forward the results of research to the competent body (Article 67, paragraph 1 and/or 3),
- disturbs, captures, injures wild animals, reduces population of a wild taxon, destroys or degrades its habitat without just cause (Article 85, paragraph 2),
- does not apply measures, methods and technical means that least disturb wild taxa or habitats of populations thereof (Article 86, paragraph 1),
- does not apply prescribed protective measures and does not maintain crossings for wild animals (Article 87, paragraph 3),
- constructs towers and technical components of medium-voltage transmission lines in an unauthorised manner (Article 88),
- collects plants, fungi and parts thereof and captures and kills animals for the purpose of processing, trade and other business without obtaining authorisation from the Ministry and without other prescribed requirements (Article 89),
- uses protected wild taxa contrary to prescribed requirements (Article 94),
- uses the devices for capturing and killing protected animals as well as the agents that may induce local vanishing or severe disturbance of populations of the species (Article 95),
- trades in wild growing strictly protected plants and fungi (Article 97, paragraph 2),
- intentionally captures, holds and kills strictly protected animals, damages or destroys their evolution forms, nests or broods, as well as the breeding and resting sites, disturbs these during the time of breeding, rearing young and hibernation, and intentionally destroys or takes eggs from natural environment or keeps empty eggs (Article 97, paragraph 3, subparagraph 1, 2, 3, 4, 5 and 6),
- hides, keeps, breeds, trades in, imports, exports, transports, alienates or in any other manner way acquires, and stuffs strictly protected animals (Article 97, paragraph 3, subparagraph 7)
- proceeds contrary to the law with regard to wild growing plants, fungi and animals found in a strict nature reserve, national park and special nature reserve, as well as to underground animals (Article 97, paragraph 4),
- keeps in captivity, breeds, markets and purchases wild taxa contrary to statutory requirements (Article 99),
- exports or imports strictly protected plants, fungi and animals with no authorisation from the Ministry (Article 99, paragraph 2),
- carries out introduction, taking out, export, re-export, import, introduction from the sea of wild taxa that are protected under this Act or international treaties the Republic of Croatia is a party to, parts and derivatives thereof contrary to the requirements laid down in the Act and implementing regulations (Article 101),
- carries out introduction, taking out, export, re-export, import, introduction from the sea of wild taxa that are protected under this Act or international treaties the Republic of Croatia is a party to, parts and derivatives thereof without an appropriate permit or certificate issued by the Ministry or an act issued by the competent body of the exporting or re-exporting country, or with a false, falsified or invalid permit or certificate, or with a permit or certificate that was changed without approval from the Ministry or the competent body of the exporting or re-exporting country (Article 101, paragraph 1),
- uses a permit, certificate or other act issued under this Act for the purpose of transboundary movement and trade in protected wild taxa for any other specimen of a wild taxon that is not the one for which the permit, certificate or other act was issued (Article 101, paragraph 7 and/or

Article 107, paragraph 5),

- in his/her request for issuance of permits for introduction, taking out, export or import and introduction from the sea, re-export certificate, trade permit or certificate, uses a false statement or knowingly provides false information for the purpose of obtaining a permit or certificate (Article 101, paragraphs 1 and 4, Article 107, paragraphs 1 and 4),
- submits a false, falsified or invalid permit or certificate, or a permit or certificate that was changed without approval of the issuing competent body in his/her request for issuance of permits for introduction, taking out, export or import and introduction from the sea, re-export certificate, trade permit or certificate or any other purpose relating to this Act and implementing regulations adopted on the basis thereof (Article 101, paragraphs 1 and 4, Article 107, paragraphs 1 and 4),
- carries out transit of wild taxa protected under this Act, parts and derivatives thereof without a valid export permit or re-export certificate issued by the competent body of the exporting or re-exporting country (Article 101. paragraph 8.),
- performs trade in indigenous or alien wild taxa protected under this Act or international treaties the Republic of Croatia is a party to, contrary to the requirements laid down in the Act and implementing regulations adopted on the basis thereof (Article 107).
- falsifies or changes a permit or certificate for trading in indigenous or alien wild taxa protected under this Act (Article 107, paragraphs 1 and 4),
- does not comply with the provisions and conditions listed in the permit or certificate for trading in indigenous or alien wild taxa protected under this Act (Article 107, paragraphs 1 and 4),
- if the Ministry is not immediately notified of any changes and new circumstances that affect or may affect the validity of the permit or certificate for the purpose of transboundary movement and trade in protected wild taxa issued under this Act and implementing regulations adopted on the basis thereof (Article 108a, paragraph 2),
- does not submit the offer for sale of real estate on the pre-emption right basis in the manner prescribed by this Act (Article 112, paragraph 1 and 2),
- sells the real estate located in a protected natural asset to another person at a price that is lower than the price quoted in the offer to the persons entitled to pre-emption (Article 112, paragraph 4),
- utilizes natural resources in an unauthorized manner and with damaging consequences (Article 122).
- implements the natural resources management plan without approval of the Ministry (Article 122),
- undertakes the actions and interventions on a protected natural asset without permission or contrary to specified nature protection requirements (Article 127),
- does not apply nature protection requirements established by decision on the selection of the preferred bidder and concession contract (Article 137, paragraph 1, subparagraph 3 and Article 138, paragraph 1),
- does not undertake all the measures and actions to impede the modifications and damages incurred (Article 143, paragraph 1),
- exercises the activity in a protected area with no concession approval (Article 146, paragraph 1),
- places on the market minerals, speleothems and fossils without permission (Article 148, paragraph 3),
- exports minerals, speleothems or fossils that are designated as protected natural assets (Article 150, paragraph 2)."
- (2) A fine in the amount of HRK 7,000.00 to 30,000.00 shall be imposed on a natural and responsible person within a legal person for a misdemeanour referred to in paragraph 1 of this Article.

Article 196

- (1) A fine in the amount of HRK 15,000.00 to 25,000.00 for a misdemeanour shall be imposed on a legal person who:
- does not apply protective measures prescribed by this Act while a natural asset is under preventive protection (Article 26),
- does not allow inspection and examination of natural components (Article 31),
- does not notify the discovery of speleological site or part thereof within a prescribed period (Article 47, paragraph 3),
- pursues exploration without approval from the Ministry (Article 67),
- does not proceed in compliance with the governance plan for a protected area (Article 80, paragraph 4 and Article 81),
- captures, injures or kills wild animals without justified reason (Article 85, paragraph 2),
- eliminates wild taxa (plants or animals) from their habitats, reduces their populations or destroys them without justified reason (Article 85, paragraph 2),
- picks, collects, destroys, cuts or uproots wild growing strictly protected plants or fungi (Article 97, paragraph 1),
- holds strictly protected plants or fungi (Article 97, paragraph 2),
- carries out exploration on strictly protected taxa without authorisation from the Ministry (Article 100, paragraph 1),
- keeps in captivity in inappropriate conditions or without adequate care, or contrary to prescribed requirements, animals of wild taxa (Article 104, paragraph 1),
- "- displays in zoos, aquaria, terrariums or similar spaces the animals of indigenous or alien wild taxa protected under this Act without authorisation from the Ministry (Article 105, paragraph 1),"
- breeds indigenous or alien wild taxa without authorisation or approval from the Ministry (Article 106, paragraph 1 and 2),
- does not mark bred animals of wild taxa in the prescribed manner (Article 106, paragraph 3),
- does not provide precautions for a bred animal not to escape into natural environment and inflict damage (Article 196, paragraph 4),
- exercises any activity at a discovery site that may result in destruction or degradation of a discovery site of minerals, speleothems or fossils (Article 111, paragraph 3),
- explores a discovery site of minerals, speleothems or fossils without authorisation (Article 111, paragraph 5),
- organises visiting and touring of a protected natural asset contrary to prohibition or restrictions (Article 128),
- does not authorise access to a protected natural asset pursuant to prescribed requirements (Article 129, paragraph 1),
- cares for or protects a natural asset in a protected area without contract or contrary to terms of contract (Article 131 and 132),
- in taking minerals, speleothems or fossils makes use of machinery or other unauthorised devices (Article 149, paragraph 1),
- does not provide for participation of the public in the course of drafting legislation or acts on designating protected natural assets, physical plans, governance plans and plans of utilisation of protected areas and natural resources (Article 166).
- (2) A fine in the amount of HRK 5,000.00 to 20,000.00 for a misdemeanour referred to in paragraph 1 of this Article shall be imposed on a natural and responsible person within a legal person.

- (1) A fine in the amount of HRK 7,000.00 to 15,000.00 for a misdemeanour shall be imposed on a legal person who:
- explores or visits a strict nature reserve without authorisation from the Ministry (Article 10, paragraph 2),
- collects plants, fungi or parts thereof or captures or kills animals with the purpose of processing, marketing or other trade without the approval of the owners or right-holders (Article 89, paragraph 2),
- takes out from the Republic of Croatia wild taxa and parts thereof that are not a protected natural asset for scientific purposes without authorisation from the Ministry (Article 67, paragraph 4)
- does not notify the Ministry and veterinary service of dead, ill or injured strictly protected wild taxa (Article 99, paragraph 3), ,
- does not forward to the Ministry and Institute the data within the prescribed period on the results of exploration (Article 100, paragraph 2),
- does not declare import or export of animals, fungi or plants to a competent customs service (Article 102),
- does not notify the Ministry within the prescribed period of acquiring ownership on protected animals (Article 104, paragraph 2),
- does not issue to a new owner the certificate of origin of the animal and the invoice (Article 107, paragraph 3),
- does not protect or preserve minerals, speleothems and fossils in the prescribed manner (Article 198, paragraph 2 and 3),
- does not notify the Ministry within the prescribed period of the discovery of minerals, speleothems and fossils or does not undertake due protective measures against destruction, damage or theft (Article 111, paragraph 1),
- does not provide for the exploration of the discovery site of minerals, speleothems and fossils pursuant to the decision of the Ministry (Article 111, paragraph 4),
- takes from the natural environment minerals, speleothems or fossils for purposes that are not laid down in this Act (Article 148, paragraph 2),
- takes minerals, speleothems or fossils from the natural environment with the purpose of marketing them without authorisation from the Ministry (Article 148, paragraph 3),
- does not possess evidence proving the origin of minerals, speleothems and fossils or the authorisation for taking those from nature (Article 148, paragraph 4),
- does not keep records of placing on the market minerals, speleothems and fossils in the prescribed manner (Article 148, paragraph 5),
- exports minerals, speleothems or fossils without authorisation from the Ministry (Article 150, paragraph 1),
- uses the nature protection label contrary to the prescribed manner (Article 168, paragraph 2),
- (2) A fine in the amount of HRK 3,000.00 to 7,000.00 for any misdemeanour referred to in paragraph 1 of this Article shall be imposed on a natural and responsible person within a legal person.

Article 198

- "A misdemeanour fine in the amount of HRK 1,000.00 shall be imposed on a natural person who in national parks, nature parks, regional parks, forest parks and park architecture monuments:
- performs underwater activities without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 1),
- anchors and/or berths vessels outside locations designated by the spatial plan (Article 70a, paragraph 1, subparagraph 2),
- performs recreational fishing without a licence or contrary to the conditions laid down in the issued

licence (Article 70a, paragraph 1, subparagraph 3),

- damages and/or destroys signs and/or information boards (Article 70a, paragraph 1, subparagraph 4),
- makes a fire outside of the settlements and/or locations specially designated for that purpose (Article 70a, paragraph 1, subparagraph 5),
- films or photographs for commercial purposes without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 6),
- flies hang gliders or paragliding wings without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 7),
- posts information boards, advertising and/or other signs without authorisation from the Ministry or administrative body (Article 70a, paragraph 1, subparagraph 8)."

Article 198a

A misdemeanour fine in the amount of HRK 200.00 shall be imposed on a natural person who:

- visits and/or tours a national park, nature park, regional park, forest park and a park architecture monument without a ticket (Article 70a, paragraph 1, subparagraph 9),
- deposits waste outside the designated and marked area (Article 70a, paragraph 1, subparagraph 10),
- swims outside the location designated by the public entity (Article 70a, paragraph 1, subparagraph 11)."

Table 1. CONFISCATIONS 2007 CROATIA

No	Date	SPECIES	SPECIME	ENTS (No)	OFFEND	ER	PENALTY (AMOUNT)
		SCIENTIFIC NAME	DEAD	LIVE	foreign	local	GIVEN BY COURT
1.	19.01.07.	Accipiter nisus		1		1	2.000 kn
2.	05.02.07.	Falco peregrinus		2	1		Ongoing
		Geochelone radiata		10			
3.	02.04.07.	Calumma globifer		35		1	112.228,00 kn
		Calumma parsonii		140			
4	26.04.07.	Testudo hermanni		24		1	Ongoing
5	15.05.07.	Lithophaga litophaga	178			1	Ongoing
6	21.07.07.	Platycerus eximius			1		7.000 kn
7	31.08.07.	Testudo hermanni		2	1		1.400 kn
8	10.10.07.	Scientific samples	150		1		3.000 kn
		Mygale atra	2				
9	14.10.07.	Python sebae	1		1		14.000 kn
3	14.10.07.	Crocodilus niloticus	13		'		14.000 KII
		Papilionidae spp.	60				
10	15.10.07.	Lithophaga litophaga	18617			1	Ongoing
		TOTAL	19021	214	5	5	139.628 kn

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ZAGREB 2007

Table 2. CONFISCATIONS 2008 CROATIA

		SPECIES	SPECIMENTS (No)			offender		PENALTY	PENALTY (AMOUNT)		
no	date	SCIENTIFIC NAME	dead	ı	live	foreign	local	(AMOUNT) GIVEN BY COURT	FOR KILLING STRICLY PROTECTED SPECIES	PROSECUTED	
1	04.01.'08.	Python spp Derivates (6 bags and 10 wallets)	16				1	Ongoing	0,00 kn	Offence	
	04.01.00.	Naja naja Derivates (2 bags and 10 belts)	12				'	Origonig	0,00 KH	Official	
2	27.02.'08.	Canis lupus	1				1	Ongoing	0,00 kn	Offence	
3	23.01.'08	Lithophaga lithophaga	1253				1	16.300,00 kn	0,00 kn	Offence	
4	24.01.'08	Lithophaga lithophaga	368				1	10.000,00 kn	19.300,00 kn	Offence	
5	29.03.'08.	Lithophaga lithophaga	2851			1		0,00 kn	5.000,00 kn	Offence (denied)	
6	14.04.'08	Lithophaga lithophaga	1736				1	0,00 kn	0,00 kn	Offence	
7	06.07.'08.	Lithophaga lithophaga	146			2		17.000,00 kn	7.300,00 kn	Misdemeanor	
8	25.05.'08.	Lithophaga lithophaga	2674				2	25.000,00 kn	133.700,00 kn	Misdemeanor	
9	28.04.'08	Lithophaga lithophaga	84				1	Ongoing	0,00 kn	Offence	
10	14.04.08.	Canis lupus		1			1	0,00 kn	0,00 kn	Offence	
11	April '08.	Testudo hermanni		5	released into nature		2	0,00 kn	0,00 kn	Offence	

		SPECIES	SPECIMENTS (No)			offender		PENALTY	PENALTY (AMOUNT)	
no	date	SCIENTIFIC NAME	dead	dead live		foreign	local	(AMOUNT) GIVEN BY COURT	FOR KILLING STRICLY PROTECTED SPECIES	PROSECUTED
12	09.06.'08.	Testudo hermanni		7	placed in rescue centre	1		2.400,00 kn		Offence
13	09.06.'08.	Python spp. Derivat (1 bag)	1				1	Ongoing	0,00 kn	Misdemeanor
14	25.06.'08.	Testudo hermanni		4	placed in rescue centre	1		0,00 kn	0,00 kn	Misdemeanor (no charge)
15	07.07.'08.	Testudo hermanni		3	placed in rescue centre	1		0,00 kn	0,00 kn	Offence
16	25.08.'08.	Streptopelia turtur	103		0	1		7.000,00 kn	0,00 kn	Misdemeanor
17	03.09.'08.	Testudo hermanni		2	released into nature	1		0,00 kn	0,00 kn	Misdemeanor
18	05.09.'08.	Testudo hermanni		4	released into nature	1		2.400,00 kn	0,00 kn	Offence
19	03.09.'08.	Testudo hermanni		2		1		0,00 kn	0,00 kn	Misdemeanor
20	28.09.'08.	Aprosmictus erythropterus		2			1	0,00 kn	0,00 kn	Offence -appeal submitted
21	30.09.'08	Lithophaga lithophaga	118				1	17.000,00 kn	5.900,00 kn	Offence
22	27.10.'08.	Chlorocebus aethiops		1	placed in rescue centre	1		0,00 kn	0,00 kn	Misdemeanor

TOTAL:	9363	31	11	14	97.100,00 kn	171.200,00 kn
--------	------	----	----	----	--------------	---------------

Radiated tortoises and chameleons confiscated in Croatia returned to Madagascar

On the 1st April 2007, at Zagreb Airport in Croatia, Custom officers stopped a Croatian citizen coming back from Bangkok, Thailand, via Budapest, Hungary caring in his luggage 10 tortoises and 175 chameleons. The animals were confiscated and placed in the quarantine. The species have been identified as: Radiated Tortoises *Geochelone radiate* (CITES I species); Flat-casqued Chameleon *Calumma globifer* and Parson's Giant Chameleon *Calumma parsonii* (CITES II species). The value of this shipment on the international market is 150.000 Euro. Because of inadequate transport conditions in cargo space seven chameleons died on the way, and due to the fact they are very submissive to stress we had continuous mortality of chameleons. They are extremely sensitive animals that are hard to be kept in captivity, so Croatia had to ensure their permanent placement as soon as possible. It was determined that there is no registered breeding of these species in captivity and that they are native only to Madagascar. Madagascan government agreed to take the animals back, so after almost two months the radiated tortoises and the chameleons returned to Madagascar and are currently placed in a rescue centre. Altogether 77 chameleons and 10 radiated tortoises returned home safely.

Because the perpetrator did not declare the goods and had no veterinary and CITES documents, in the court procedure he was fined 112.250,00 kuna (15 250 €).

Ministry of Culture, Nature Protection Directorate, Croatia





















DIVLJE ŽIVOTINJE PRIPADAJU PRIRODI, A NE NAŠIM DOMOVIMA!

Koje su životinje najugroženije uzimanjem iz prirode?

- velike zvijeri (vuk, medvjed)
- ptice (grabljivice, pjevice, sove)
- gmazovi (kornjače, zmije, gušteri)
- vodozemci (žabe, daždevnjaci, vodenjaci)

Zašto ne uzimati divlje životinje iz prirode?

Uzimanjem divljih životinja iz prirode:

- narušavamo prirodnu ravnotežu
- smanjujemo broj životinja u prirodi ugrožavamo prirodne populacije
- životinje doživotno zatvaramo u neprirodan okoliš s neprikladnim uvjetima
- one postaju prevelik teret i potencijalna opasnost za ljude
- kršimo zakonske propise

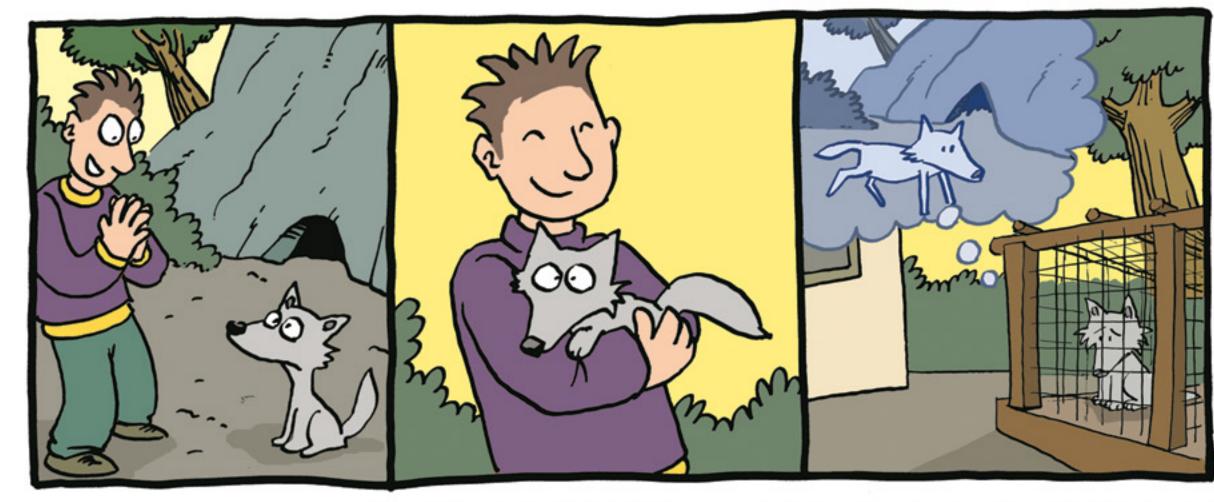
Životinja jednom uzeta iz prirode, u doticaju s čovjekom, osuđena je na život u zatočeništvu i za prirodu izgubljena - više nije prirodno bogatstvo.

ULOGE:



Vuk

(Canis lupus) - strogo zaštićena zavičajna vrsta koju ugrožavaju krivolov, stradavanje na prometnicama, nedostatak prirodnog plijena i trovanje, smanjivanje prirodnih staništa, a u posljednje vrijeme i uzimanje iz prirode - mali vuk izgleda kao štene i simpatični kućni ljubimac, no on nije pas, već divlja životinja kojoj je mjesto u prirodi, a ne u našim domovima.



Češljugar

(Carduelis carduelis) - strogo zaštićena zavičajna pjevica ugrožena krivolovom. U nekim krajevima tradicionalno love češljugare radi lijepog pjeva, obično uz pomoć vabilica ili ljepila. Osuđeni su na život u malim, skučenim krletkama.



CONTRACTOR OF THE PARTY OF THE

Kopnena kornjača

(Testudo hermanii) - strogo zaštićena zavičajna vrsta ugrožena uzimanjem iz prirode. Često ih drže kao kućne ljubimce, a neke završe i kao okviri naočala, kopče i češljevi za kosu...

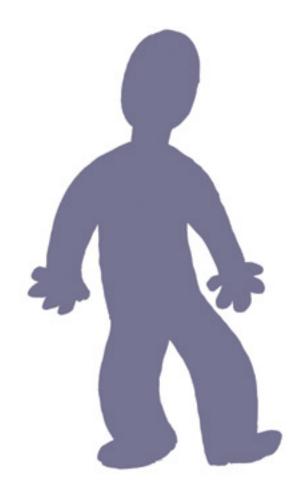




Eleonorin sokol

(Falco eleonorae) - strogo zaštićena zavičajna vrsta, kao i sve ostale ptice grabljivice. Ugrožena krivolovom, turizmom i rekreativnim aktivnostima (ekstremni sportovi). Ljudima su litice na kojima sokoli borave sve dostupnije, a grabljivice na crnom tržištu dostižu visoke cijene...





Čovjek

(Homo sapiens) - iz neznanja uzima životinje iz prirode misleći da im pomaže ili ih namjerno lovi radi prodaje i zarade. U oba slučaja ugrožava prirodu!

STRIP: Robert Solanović













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Ne kupujte životinje nepoznatog porijekla!

Zbog ilegalne trgovine životinjama mnoge vrste su ugrožene i brojnost im se svakodnevno drastično smanjuje.



Provjerite!

Vaš je novi kućni ljubimac možda zaštićena vrsta. Potražite ga u Pravilniku o proglašavanju divljih svojti zaštićenim i strogo zaštićenim ("Narodne novine" 7/06).

Posjedovanje zaštićene vrste obavezno prijavite nadležnoj Upravi za zaštitu prirode.

Ministarstvo kulture
Uprava za zaštitu prirode
Runjaninova 2, Zagreb
tel: 01/48 66 102
e-mail: zastita.prirode@min-kulture.hr
www.min-kulture.hr

Budite svjesni rizika za vlastito zdravlje!

Držatelji egzotičnih kućnih ljubimaca moraju biti svjesni da postoji mogućnost prijenosa bolesti te da treba poduzeti preventivne mjere kako bi zaštitili sebe i svoju okolinu.

Odgovorno držanje egzotičnih kućnih ljubimaca dobrobit je i za vas i za vašeg ljubimca.





Državni zavod za zaštitu prirode Trg Mažuranića 5, Zagreb tel: 01/ 55 02 901 e-mail: info@dzzp.hr www.dzzp.hr



Ministarstvo kulture Uprava za zaštitu prirode Runjaninova 2, Zagreb tel: 01/ 48 66 102 e-mail: zastita.prirode@min-kulture.hr www.min-kulture.hr



Zoološki vrt grada Zagreba Maksimirski perivoj bb, Zagreb tel: 01/23 02 198 www.zoo.hr



Veterinarski fakultet Sveučilišta u Zagrebu Heinzelova 55, Zagreb tel: 01/23 90 141 www.vef.hr



Zelena akcija/FoE Croatia Frankopanska 1, p.p. 952, Zagreb tel: 01/48 13 096 www.zelena-akcija.hr



Veleposlanstvo Kraljevine Nizozemske u Hrvatskoj www.croatia.nlembassy.org

Nakladnik: Državni zavod za zaštitu prirode uz financijsku potporu Veleposlanstva Kraljevine Nizozemske u Hrvatskoj

Autori: Davorka Maljković, Andrea Bračko, Zrinka Domazetović, Ana Kobašlić, Andrea Štefan, Petra Đurić Foto: Arhiva Zoološkog vrta grada Zagreba, Mirna Mazija Oblikovanie i tisak: SVE5. Zagreb





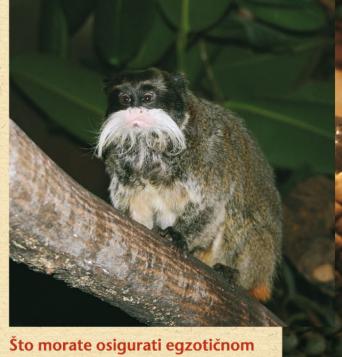
Ne kupujte nepromišljeno! Teško odolijevate simpatičnim životinjama koje vire iz izloga trgovina kućnim ljubimcima? OPREZ, razmislite! Odabranu životinju morate uklopiti u Vaš način života i u Vašem joj domu osigurati zadovoljavajući životni prostor (prikladna veličina, temperatura, vlaga, svjetlo), skrb i prehranu. Važno!!! Kupujte pametno!

Životinja koju kupujete može biti uzeta iz prirode ili uzgojena u zatočeništvu. Uzimanjem životinja iz prirode narušava se ravnoteža prirodnih ekosustava. Stoga, ako ste se već odlučili, kupujte samo životinje uzgojene u zatočeništvu; otpornije su na stres, pa zato i zdravije, lakše prihvaćaju ljude i rjeđe prenose bolesti. Životinje se iz prirode često uzimaju ilegalno, mnoge ugibaju tijekom hvatanja i transporta, a ako je riječ o zaštićenim životinjama, novi vlasnik nabavom životinja bez potrebnih dozvola krši zakon. Ne pridonosite izumiranju vrsta na Zemlji!

- egzotične kućne ljubimce možete pronaći u trgovinama kućnih ljubimaca, kod uzgajivača ili u utočištima za napuštene i/ili zaplijenjene divlje životinje
- utvrdite latinski naziv životinje kako biste pouzdano znali o kojoj je vrsti riječ i koje su njezine životne potrebe
- saznajte ima li na hrvatskom tržištu za nju prikladne hrane
- odaberite zdravu životinju raspitajte se kako izgleda zdrava jedinka (pogledajte način držanja, dlaku / perje / ljuske / kožu, ima li znakova proljeva ili iscjetka iz nosa/očiju...)
- ne zaboravite da kućni ljubimci rastu jedan od najvećih problema je iznalaženje dovoljno velikog životnog prostora, zadovoljenje potrebnih uvjeta držanja i osiguranje dovoljne količine hrane

Pronadite veterinara koji će se moći brinuti o egzotičnom kućnom ljubimcu!

Ako je vaš ljubimac bolestan ili ozlijeđen, morat ćete zatražiti pomoć veterinara. Nema mnogo veterinara koji su voljni preuzeti brigu o egzotičnim kućnim ljubimcima. Zato pronađite takvu osobu prije potrebe za intervencijom, a najbolje prije nabave egzotičnog kućnog ljubimca.



kućnom ljubimcu?

- 1. Nastambu funkcionalno prilagođenu vrsti koju držite, a koja omogućava obavljanje osnovnih bioloških potreba
- 2. Skladištenje, pripremanje i davanje hrane u skladu sa zahtjevima vrste
- 3. Onemogućavanje bijega životinje
- 4. Kontrolu zdravstvenog stanja i liječenje
- 5. Redovito čišćenje prostora sredstvima koja ne ugrožavaju zdravlje životinja i ljudi



NIKADA NE PUŠTAJTE EGZOTIČNOG KUĆNOG LJUBIMCA **U PRIRODU!**

Ako se više ne možete brinuti o svom kućnom ljubimcu, ne puštajte ga u prirodu! Pokušajte mu pronaci novi dom ili ga dajte u utočište.

Egzotične životinje puštene u prirodu najčešće ugibaju, a one koje uspješno prežive predstavljaju opasnost za ljude ili postaju invazivne te ugrožavaju opstanak naših vrsta.





















njihovoj mladunčadi, a pogotovo ih ne

 ako naidete na mladunče divlje životinje, brzo se udaljite od mjesta susreta; majka

mladunče ostane bez majke još može

• naiđete li na ptića ispalog iz gnijezda, sklonite ga pod najbliže drvo ili ga ostavite

ako se divlja životinja približi naselju

nalazak ozlijeđene strogo zaštićene

otjerajte je povicima, pljeskanjem ili

životinje hitno prijavite Inspekciji zaštite

prirode, a ako je riječ o velikoj zvijeri,

Ne uzimajte divlje životinje iz prirode!

članovima Interventnih timova za

je najčešće u blizini, a i onda kada u prirodi

pokušavajte hraniti ili dirati

preživjeti

gdje ste ga našli

drugom bukom

medvjeda, vuka i risa





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Nakladnik: Državni zavod za zaštitu prirode uz financijsku potporu Veleposlanstva Kraljevine Nizozemske u Hrvatskoj Autori: Ana Štrbenac, Jasna Jeremić, Magda Sindičić, Đuro Huber, Maja Ćuže

Foto: Arhiva Uprave za zaštitu prirode, Arhiva Državnog zavoda za zaštitu prirode, Boris Krstinić, Mirna Mazija, Josip Kusak Oblikovanje i tisak: SVE5, Zagreb



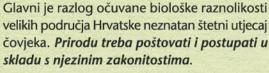






Hrvatska je po biološkoj raznolikosti jedna od najbogatijih zemalja Europe. Prostrane planinske šume bukve i jele staništa su velikih zvijeri, a močvarni kompleksi s poplavnim šumama važna su područja za gniježđenje, zimovanje i migraciju ptica. Iznimna je biološka raznolikost mora, što s velikom raznolikošću otoka i hridi, na kojima nalazimo mnogo endema, hrvatsko obalno područje čini međunarodno značajnim.







Koje su životinje uzimanjem iz prirode najugroženije?

- velike zvijeri (vuk, medvjed)
- ptice (grabljivice, pjevice, sove)
- gmazovi (kornjače, zmije, gušteri)
- vodozemci (žabe, daždevnjaci, vodenjaci)

Većina tih životinja strogo je zaštićena temeljem Zakona o zaštiti prirode, a medvjed je zaštićen i na popisu je divljači prema Zakonu o lovstvu.



Zašto ne uzimati divlje životinje iz prirode?

Uzimanjem divljih životinja iz prirode:

- narušavamo prirodnu ravnotežu
- smanjujemo broj životinja u prirodi ugrožavamo prirodne populacije
- doživotno ih zatvaramo u neprirodan okoliš s neprikladnim uvjetima
- preuzimamo prevelik teret i potencijalnu opasnost za ljude
- kršimo zakonske propise.

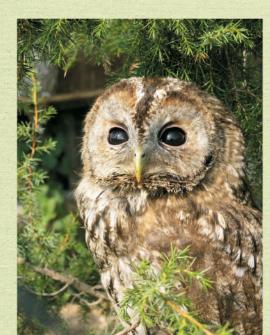
Životinja jednom uzeta iz prirode, u doticaju s čovjekom, osuđena je na život u zatočeništvu i za prirodu izgubljena - više nije prirodno bogatstvo.

U zatočeništvu je nemoguće zadovoljiti specifične potrebe divljih životinja za prostorom, kretanjem, hranom; onemogućena im je interakcija s ostalim životinjama, a veoma je teško njegovati divlje životinje i brinuti se za njihovo zdravlje.



Zaštićene životinje zabranjeno je uzimati iz prirode!

Uzete iz prirode smještaju se u ovlaštena utočišta ili registrirane zoološke vrtove, ako im mogu osigurati prikladan smještaj i skrb. No u Hrvatskoj ih nema dovoljno i već su sada prenapučeni. Ako su kapaciteti popunjeni i nema prikladna smještaja, životinje su osuđene na eutanaziju. Nisu li priroda i prirodna selekcija bolji odabir?



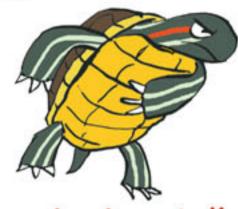
EGZOTIČNI KUĆNI LJUBIMCI - DA ili NE?

Razmislite na vrijeme!

NIKADA NE PUŠTAJTE EGZOTIČNOG KUĆNOG LJUBIMCA U PRIRODU!

Ako se više ne možete brinuti o svom kućnom ljubimcu, ne puštajte ga u prirodu! Pokušajte mu pronaći novi dom ili ga dajte u utočište. Egzotične životinje puštene u prirodu najčešće ugibaju, a one koje prežive predstavljaju opasnost za ljude ili postaju invazivne te ugrožavaju opstanak naših vrsta.

ULOGE:



Crvenouha kornjača

(Trachemys scripta elegans) - Strana vrsta iz Sjeverne Amerike. Omiljen kućni ljubimac, može se po pristupačnim cijenama nabaviti u svakoj prodavaonici kućnih ljubimaca. Naraste do 30 cm, a živi i do 40 godina. Invazivna! Proširila se po našim rijekama i jezerima jer ih neodgovorni vlasnici puštaju u prirodu kad postanu prevelike i kad više ne žele o njima brinuti. Prava su opasnost za barsku kornjaču (Emys orbicularis) kojoj zauzimaju životni prostor i iscrpljuju izvore hrane.



(Emys orbicularis) - Zavičajna vrsta, živi u našim stajaćim i sporo tekućim vodama. Ugrožena je uzimanjem iz prirode, nestankom staništa te širenjem veće i dominantnije crvenouhe kornjače. Zbog toga su strogo zaštićene i ne smiju se uzimati iz prirode.



Kupac / vlasnik

- voli životinje, ali ih baš ne poznaje. Čini mu se zgodnim imati malu kornjaču kao kućnog ljubimca...



- svakodnevno liječi pse, mačke, kanarince i domaće životinje, ali kako sve više ljudi donosi bolesne egzotične kućne ljubimce, mora se brinuti i o takvim, vrlo zahtjevnim životinjama...













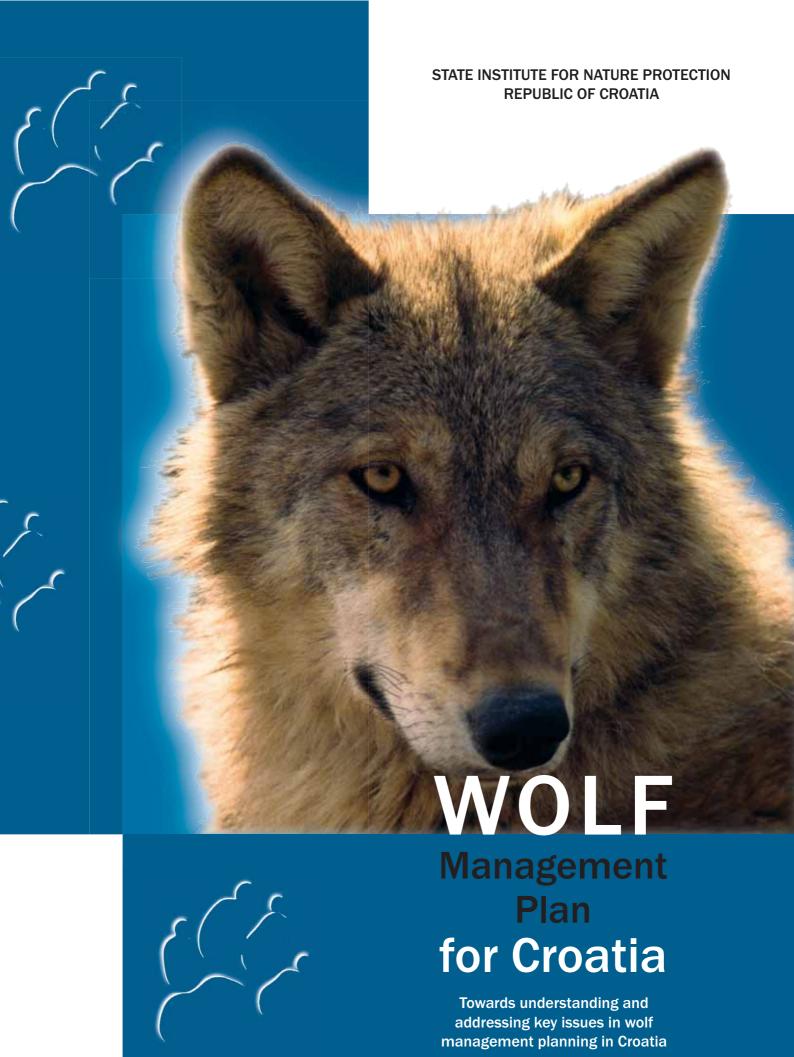








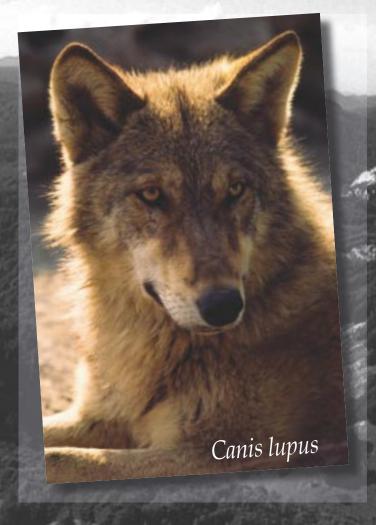
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Management Plan for Croatia

Towards understanding and addressing key issues in wolf management planning in Croatia





Zagreb 2005



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Croatian Forests

Croatian Hunters Association

Croatian Livestock Selection Centre

Department for Economic Development, County of Primorje-Gorski kotar

Faculty of Forestry, University in Zagreb

Faculty of Science, University in Zagreb

Faculty of Veterinary Medicine, University in Zagreb

Green Action

Krka National Park

Livestock Breeders Association

Ministry of Agriculture, Forestry and Water Management, Division of Forestry and Hunting,

Division for Veterinary Science

Ministry of Culture, Division for Nature Protection

Ministry of Environmental Protection, Physical Planning and Construction

Northern Velebit National Park

Oikon d.o.o

Paklenica National Park

Plitvice Lakes National Park

Risnjak National Park

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Velebit Nature Park

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The Wolf Management Plan is a result of many years of work on the gathering and processing of all known scientific, ecological, social and economic factors affecting wolf conservation in Croatia. There were three main starting points in the development of this Plan: ensuring long-term survival of the wolf population in Croatia; understanding and minimizing problems between wolves and humans; and coordination of planned activities with those in neighbouring countries with which wolf populations are shared - Slovenia and Bosnia and Herzegovina.

The Plan starting points clearly show that numerous activities have been carried out in the last decade which have enabled better management planning for this species. Many years of scientific research and monitoring have enabled better knowledge of the wolf population. Sociological research has been carried out as well, demonstrating human attitudes to wolves. Donation of guarding dogs and electric fences, as protective measures against wolf attacks on livestock, is one of the activities, which could encourage development of livestock guarding culture as one of the preconditions for modern livestock breeding. One of the surely greatest achievements is the establishment of communication channels among all interest groups as a basis for future cooperation. This plan is the result of many different interests with strong views about wolves, who were willing to listen to different viewpoints and work together to explore possible solutions. In the protection of nature, as in all economic sectors, it is crucial to plan activities jointly, through collaboration among all sectors and social groupings actively engaged in the issues. Narrow sectoral approaches yield no practical results. Successful implementation of management plans lies in effectively working with all interest groups and involving the public in the decision-making process.

Croatia is a country which can still take pride in its preserved nature. It is a value often minimised and neglected, failing to use it to our development advantage, especially in the form of environmentally sustainable tourism.

This management plan proposes a number of activities that include research and monitoring of populations, changes in the management methods for game and livestock, some management of the wolf population, public education, information and participation in decision-making, tourist development and cross-border cooperation.

Development of the Plan involved representatives of all interest groups. Through joint workshops and awillingness by the government too let a diverse group of interests strive for a common solution, increased communication between groups occured. The result was better decision-making and good quality management of wolves in Croatia. Significant contribution was given by representatives of scientific institutions from Slovenia. Despite of regular invitations to the representatives of Bosnia and Herzegovina, they have not participated in the workshop.







It should be noted that the Wolf Management Plan was prepared in the framework of the project "Conservation and Management of Wolves in Croatia", implemented with financial support of the LIFE - Third Countries program of the European Commission. This funding has enabled covering of costs of the workshops, in order to ensure multi-interest group participation in many possible ways.

The Plan was officially adopted by the Decision of the minister of culture on 7 December 2004.

The Plan has been designed as an active document which will be revised at least every two years, and it will bring about amendments to the valid laws and regulations governing the areas of hunting, nature protection, veterinary science and other activities.

The revision procedure will be carried out again through a multi-interest group approach in the same way in which it was first developed, i.e. through facilitated workshops.



Wolf Management Plan is an active document that represents guidelines for the activities that will ensure a long-term conservation of wolves in Croatia and their co-existence with humans.

The Plan consists of two main parts: Background and Operative Management Plan. The first part includes analyses of all available data that are important for wolf population. They represent a basis for the Operative Management Plan.

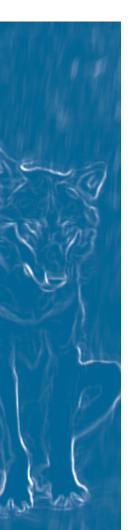
The Plan includes the following themes:

- 1. Research and monitoring
- 2. Habitat preservation
- 3. Hunting
- 4. Livestock breeding
- 5. Interventions into the wolf population
- 6. Education and information
- 7. Public participation in decision-making
- 8. Tourism
- 9. Cooperation with neighbouring countries
- 10. Implementation of the Plan
- 11. Revision of the Plan
- 12. Financing implementation of the Plan

One of the basic activities regarding research and monitoring is the establishment of a national system for monitoring wolf population, that includes collection of data on wolves (telemetric research, genetic analysis, mortality analysis, monitoring based on wolf tracks in snow) and monitoring of prey population.

This Plan also proposes the measures for maintaining habitat integrity and quality. These measures include, among all, building "green bridges"; maintaining the existing spatial proportions among forests, meadows and arable plots; monitoring quality of habitats physical planning that takes into account the presence of wolves, selective forest management and prevention of introduction of alochthonous animal species.

The Plan also proposes certain measures for harmonisation of hunting management with the conservation measures for wolf and other predators. Thus, when calculating the game increment cofficient and game fund, the presence of wolf must be considered. A system of game monitoring must be established and game population increased. Scientifically justified objective assessment of the impact of wolves and other predator on game populations must be implemented. A special emphasis is given on the prevention of illegal kills both of wolves and game. It is agreed that the stricter sanctions should be introduced.







Livestock breeding should include proper management that stimulate larger herds. Certain measures for livestock protection must be implemented as well. Continuation of the dog and fences donation programme is strongly recommended. Livestock registration process of Croatia must be finalised. The existing system of damage compensation should be improved as well. The Plan also proposes the improved coordination among livestock breeders, solving the problem of strey dogs and prevention of illegal disposal of slaughterhouse waste.

The Plan also includes a chapter about possible interventions into the wolf population, if those do not disturb the stability of the wolf population and on strictly selective basis.

These interventions are allowed only if there is no other solution and in cases of big damage to domestic animals, contagious disease, unacceptable and proven impact on game and threat to humans. The Large Carnivores Monitoring Committee proposes the quota on annually basis, concidering regional differences. These quotas include regional quotas, emergency response, traffic kills and other death causes. It also takes into account the social capacity and acceptance. After the first 6 months a status analysis must be made, which may result in a decrease or an increase of the planned intervention size. This intervention is only allowed in the period that exclude reproduction time. It is performed by a local game concessionaire in cooperation with the local coordinators that should report about this activity. In certain situations (rabbies, attacks on humans etc.), outside the planned annual intervention, emergency response may be required. In that connection, it is necessary to develop an emergency plan. Wolf carcasses should be used only for scientific purposes, if there is no other interest. A broader group to control the intervention process will be established, including representatives of all interest groups.

Education and information activities should continue with already started educational and information campaigns. Lectures on wolves, publications, exhibitions and regular press conferences and public announcements are foreseen. The knowledge on wolves will be monitored through human dimension research.

Public participation in decision-making should be furtherly enforced through direct involvement (joint workshops, meetings etc.) and quantitative monitoring of broad public and interest groups attitudes.

Wolf tourism should be initiated as well, as the possibility for economic benefits from wolves. In this regard, the establishment of an educational and information centre for all three large carnivores in Croatia is proposed, along with the design and organisation of visiting tours and design of thematic souvenirs.

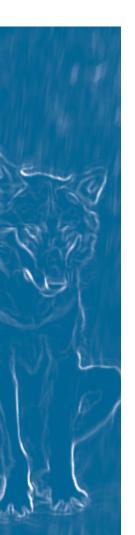
The Plan puts a special emphasis on international cooperation with the neighbouring countries – Bosnia and Herzegovina and Slovenia. Bosnia and Herzegovina must join the Bern Convention and Croatia is willing to assist in implementation of this convention, wolf management planning and public involvement.



Cooperation with Slovenia is already started with the preparation of this Plan. However, it should be improved through regular meetings and joint implementation of the certain activities proposed in this Plan.

The Ministry of Culture is responsible for implementation of this Plan in cooperation with the Ministry of Agriculture, Forestry and Water Management and Ministry for Environmental Protection, Physical Planning and Construction. Other relevant institutions and bodies are also included in this process like the State Institute for Nature Protection, Large Carnivores Monitoring Committee and other interest groups. The Plan should undergo its first revision within two years and later as necessary.

Funds for its implementation must be ensured from the State Budget with possible assistance from international sources and the Fund for Environmental Protection







Similar to other large carnivores, wolf is at the top trophic level of the food chain of inland ecosystems and for many this makes the wolf an important element of biodiversity. However, this very function in the ecosystems often makes them direct competitors with humans. Namely, the wolf's basic diet is at the same time the object of economic exploitation by humans, whether for food, hunt or for other interests.

Further, the wolf has always been a subject of severe prejudice. After all, everyone remembers the stories about Little Red Riding Hood, The three Little Pigs, Wolf and seven kids. Through much of children's literature, it is considered a bloodthirsty animal dangerous for humans. But in reality the wolf teads to be totally the opposite; the wolf tends to avoid direct contact with humans. Unfortunately, negative attitudes to wolf lead to the extermination of this species from many parts of Western Europe.

For some, the wolf is an indicator of preservation and a value of biological diversity of a country. One such country is Croatia that, apart from the wolf, still harbours even bear and lynx populations.

The wolf has been protected by law since May 9, 1995. Four years later, the Interim Wolf Management Plan for Croatia was enacted. The plan was called "interim" due to the fact that the level of the scientific knowledge on wolf status was insufficient and that the Plan did not involve the main interest groups - livestock breeders, hunters, non-governmental-organisations (NGOs), environmental groups, government authorities and the general public.

In the meantime scientific research of wolves has continued by radio-telemetric methods, through human dimensions research on attitudes of various interest groups and of the general public toward wolves in the area of its occupancy, reports on damages done by large carnivores are being electronically processed, a program of donation of guarding dogs started, and certain educational and information activities have been carried out. Intensification of activities in wolf conservation and management by the end of 2002 was made possible by the international LIFE III project titled "Conservation and Management of Wolves in Croatia", which provided a framework for developing the Plan that is before you. All principles of wolf management in Croatia have been agreed through multi-interest group workshops. Implementation of these principles will be defined in annual action plans, and revisions will be possible into the overall Plan.

Workshop participants and authors of this material are aware that wolf management, as well as any other large carnivore, brings about many challenges and requires compromises from all groups. Our joint obligation for the future will remain to secure the survival of wolves in their natural habitats in Croatia, in coexistence with the local population and in line with European trends and expected integration of our country into this milieu.



Traditionally, a wolf management plan would have been created by the governmental bodies directly responsible for wolf conservation with little to no involvement of various interest groups. In fact, the first national wolf management for Croatia took this approach resulting in a plan that was not widely accepted and could not be effectively implemented. This management plan is result of a human dimensions approach involving people. Public involvement is about redistributing power from managers/decision-makers to the various publics. The Croatian State Institute for Nature Protection actively involved all interest groups, involving a facilitated workshop approach using trained facilitators and human dimension researchers.

Development of the present management plan has followed the recommendations of the Action plan for the conservation of wolves (*Canis lupus*) in Europe and its methodology. Involvement of the public in decision-making is a process through which attitudes of all interested parties (interest groups) integrate into the process of making a decision (*Praxis*, 1998). Selection of the method to involve the public is today one of the greatest challenges faced by decision-makers in the field of management of wild animals (*Decker and Chase*, 2001). Table 1 shows a continuum of public involvement approaches available to integrate various interest groups into the decision-making process.

Although certain below presented methods of public involvement (eg. persuasion and education) assume one-way information flow, real involvement should include two-way communication involving listening first before talking, with the final goal of making better decisions to be implemented by a governmental body, or a country as a whole.

Table 1. Scale of public involvement methods – "persuasion" is the lowest, and "independent decision-making" the highest level of public involvement and participation (Praxis, 1998). "Joint planning" was the method chosen for the development of the Wolf Management Plan.

Public involvement levels	Description
Persuasion	Using various methods of public involvement attempting to change the public opinion, but without raising expectations of the public that it will be involved in the planning processes.
Education	Distribution of information and general guidelines with the aim of creating general awareness on programmes and issues.
Feedback	Distribution, by the state, of information on the stage of planning of a certain programme on which the state has a defined attitude, and at the same time request for getting feedback on the public attitude on the same issue.
Consultation	Formal dialogue between the state and the public based on mutually accepted and preliminarily defined goals.
→ Joint planning	Joint decisionmaking. Representatives of the public are members of national committees where they have an equal right to vote. Issues decided upon must be geographically defined and comprehensible to members of the public.
Authorisation	Transfer or responsibility, usually related to government agencies, to the public or some other governmental level, which has sufficient expertise to undertake a task.
Independent decision-making	Direct implementation of the entire planning process by the public.





Benefits of public involvement (Praxis, 1998):

- Improved quality of the decisions made
- Improved management efficiency
- Saving money and time
- Easier implementation of plans
- Avoiding major conflicts
- Maintaining credibility and legitimacy
- Improving management expertise
- Developing possibilities for joint work
- Developing public knowledge and ingenuity
- Better consensus

Joint work

For the purposes of creating a Wolf Management Plan for Croatia a relatively high level of public involvement was chosen. "Joint planning" involves joint decision-making, and in certain cases also joint implementation of activities. The public was involved through a series of facilitated working meetings - "workshops", with representatives of various interest groups and those of the competent ministry being equal participants. Workshops have resulted in a consensus over all controversial issues identified by the participants (see sample Minutes from a workshop in Annex 1). Due to limited time and funding and by consensus from the group, the text of the Plan itself was assembled by a smaller working group according to the agreed results of workshops (Authors). This took 8 workshops, out of which two lasted for two days. Final text of the management plan was adopted on the ninth workshop by the broader interest group.

It is important to note that one of the main assumptions for this type of work is the will of the competent government institution to involve the public in the process.

Participants of workshops for the development of the Wolf Management Plan for Croatia, thus also the authors of the Plan, represent the groups that have shown interest in these issues. Participation in this process depended therefore exclusively on the will of a interest group. In order to avoid a situation in which an interested interest group or organisation would be omitted from the process, the first workshop was used to identify and inform all possible interest group. Invitations for the subsequent workshops were then sent to all groups and organisations identified on that occasion.

Since Croatia is a signatory to the Convention which obliges it to cooperation in the management of wolf populations with neighbouring countries that share the same wolf population, eminent wolf management planning experts from Slovenia took part in the workshops as well.

Unfortunately, despite of regular invitations, representatives of Bosnia and Herzegovina did not participated in the workshops.



Rules of cooperation defined by the the workshop participants:

- Open to listening to different attitudes
- Focus on working toward solutions
- Willing to work in smaller groups if necessary
- Work is based on the principle of consensus, no voting in the room
- Process involves representatives of different stakeholder groups
- Transparent to all interested groups / individuals

Roles of individuals

- Support to the process of management plan development
- If we accept a task, we also accept the obligation to fulfil it
- Inform superiors and other members of the interest group
- Win support from your stakeholder group for the attitudes adopted in the workshop
- Representative of a group must represent attitudes of the entire group
- Representative of a group should present the process of plan development in their organisation
- Take part in the development of the plan continuously (show up at workshops)
- Listen and respect other people's opinions

Figure 1.
The Workshop on the
Wolf Management Plan
preparation held in
Velebno, 13-14 October
2003 (J. Jeremić-Martinko)





Figure 2.
The Workshop on the Wolf Management Plan preparation held in Skradin, 15-16
December 2003
(6. Desnica)



Vision

Strengthening public awareness and support to wolves and ensuring long-term conservation of wolves in Croatia, while minimizing conflicts between wolves and people.

Values

Workshop participants defined the basic values-guidelines in the planning of wolf management in Croatia:

- Long-term conservation of the wolf population in Croatia
- Contribute to the improvement of life in rural communities
- Reduce conflicts between various interest groups and encourage mutual respect and cooperation
- Improve public recognition of wolf management
- Raise public awareness of wolves
- Strengthen political support for wolf management
- Have a flexible approach to management (i.e., adoptive management approach)
- Plan for the future (what if wolves appear where there aren't any today?).
- In areas where wolves appear occasionally efforts should be made that they stay there, unless this causes excessive conflicts
- Involve local interest groups and local communities
- Make decisions based on sound scientific facts
- International cooperation in management (cooperation with Slovenia and Bosnia and Herzegovina).





Biology and Ecology

Scientific classification





The grey wolf (Canis lupus) is a mammal of the order Carnivora and the dog family Canidae. Besides the grey wolf there are two more free-living types of wolf known - the red wolf (C. rufus) and the Abyssinian wolf (C. simensis). The red wolf used to inhabit the southeast part of the USA, but natural populations were most likely exterminated by the 1980s. The Abyssinian wolf considered the jackal until recently, numbers about 550 individuals at the moment, mostly inhabiting the Bale National Park in the mountainous regions of Southeast Ethiopia (Route and Aylsworth, 1999). All dog breeds were created by domesticating wolves, in a process that started some 100,000 years ago, although some mixing with the wolf was recorded occasionally too (Vila et al., 1997). So nowadays the dog (C. lupus familiaris) and the wolf are considered to be the same species. The genus Canis includes also the coyote and two types of jackal who can all be crossbred.

Distribution, status and populations of wolves in the world

The grey wolf historically inhabited each habitat of the Northern Hemisphere (from about 20° of northern geographical latitude up to the Pole) in which large even-toed mammals were to be found (Mech, 1995). The grey wolf belongs to the ecological niche of large predators of the Earth's Northern Hemisphere. Besides the wolf this niche comprises also the mountain lion (*Felis concolor*) of North America and the tiger (*Panthera tigris*) and the leopard (*Panthera pardus*) of Asia, but the wolf is the most valuable predator owing to its high density of population and considerably wider area of occupancy (Mech, 1970). According to the data collected by Route and Aylsworth (1999) the grey wolf population in the world is currently estimated at some 150,000. This number of wolves lives in populations spreading through 41 countries worldwide for which the data on their number, population trends and the legal status were available (Table 2).









Table 2. The grey wolf populations, trends and legal status in the world in 1999 (Route and Aylsworth, 1999). For countries not listed there are no data available.

COUNTRY	NO. OF WOLVES	TREND	LEGAL STATUS
Albania	250	upward	unknown
Bangladesh	< 10	-	-
Belarus	2000 – 2500	upward or stable	unprotected
Bosnia&Herzegovina	800	upward or stable	unprotected
Bulgaria	800 – 1000	upward	some protected areas
Canada	55 000 – 65 000	stable, but varying	hunted, protected
China	6000	stable	protected
Croatia*	100 – 150	stable, upward	protected
Czech Republic	< 20	upward	protected
Denmark (Greenland)	50 – 75	likely downward	protected
Estonia	< 500	downward or stable	unknown
Finland	150	upward or stable	unknown
France	30 – 40	upward	protected
Germany	5 – 10	upward	protected
Greece	200 – 300	downward	unknown
Hungary	< 50	stable	protected
India	1200 – 1500	downward	protected
Israel	150	stable	protected
Italy	400 – 450	upward	protected
Latvia	600	upward	unknown
Lithuania	900	stable	unprotected
Macedonia	> 1000	upward or stable	unprotected
Mexico	0	exterminated	endangered
Mongolia	30 000	stable	unprotected
Netherlands	0	exterminated	unknown
Norway	5 – 10	upward or stable	protected
Poland	1000 – 1100	upward	hunted, protected
Portugal	250 – 300	stable	protected
Romania	2500	stable or upward	hunted with restriction
Russia	30 000	stable, but varying	unprotected
Saudi Arabia	600 – 700	stable	unprotected
Serbia and Montenegro	500	unknown	unknown
Slovakia	350 – 400	downward	hunted, protected
Slovenia	50 – 100	stable	protected
Spain	2000	upward	hunted
Sweden	45 – 60	upward	protected
Switzerland	5	upward	protected
Ukraine	2000 – 3000	unknown	unknown
USA	9790 – 13 500	upward	hunted, protected

 $[\]mbox{*}$ Original data (50–100) corrected by new data (Kusak, not published).



Outer appearance, physical features

The grey wolf is the largest member of the dog family. The largest wolves live in the north (average weight 41 kg – Alaska, Northwest Territory; Mech, 1970), whereas the representatives of more southern populations (India, Pakistan, Afghanistan) are half that size (Kumar, 1998). A full-grown wolf from the area of Croatia weighs on average 31 kg (Huber et al., 2002). From the top of the nose to the top of the tail wolves are 170 cm long on average (tail = 42 cm), with an average height of 70 cm measured on the ridge. The colour of the wolf's fur depends on the share of black, grey and brown covering hairs. In Croatia wolves are always grey; the back and the tail have dark-grey colour turning into light-grey towards the belly and the legs. On the front side of the forearm there is usually a dark stripe, although certain specimens were found to have none (Kusak, unpublished).

Various parts of the world are inhabited by wolves of a colour varying from white, through light brown and reddish to grey and black (Mech, 1970). By it's constitution the wolf is well adapted to running, especially to a long-lasting trot. It's rib cage is narrow, elbows retracted inwards and paws turned outwards. This enables the front and rear leg on one side to move in the same plane. The wolf has four toes on the rear and five on the front legs, but steps never on the first toe of the front leg (big toe, inner side of the leg). Legs are comparatively longer than with other members of the dog family (Young, 1944), which contributes to the speed of moving over relatively long distances. Since the wolf feeds almost exclusively on flesh, bones and other parts of bodies of animals it preys on, the build of it's head facilitates catching and eating of the prey. The wolf's head is elongated forwards, it is 25 cm long and 14 cm wide on average. The brain volume is 150-170 cm, exceeding the volume of the majority of dogs by at least 30 cm. Massive jaws form a basis for strong masticator muscles and 42 specialized teeth. The dental formula is I:3/3, C:1/1, P:4/4, M:2/3. The largest teeth are canines that serve for catching and killing the prev. With a full-grown wolf the spacing between the tops of upper canines is 45 mm and of lower canines 40 mm on average (Kusak, unpublished). For chewing and "cutting" of flesh and sinews the wolf mostly uses the fourth upper premolar and the first lower molar, acting as scissors, and for breaking the bones its strong molars. All the wolf's senses, especially that of smell and hearing, are perfectly developed.



Figure 4.
The wolves are hardly seen in the wild, because they are always looking for a shelter (J. Kusak)





Wolf's way of life

In order to hunt a large prey predators must either be almost as large as their prey (for example, carnivores of the cat family) or can be smaller and hunt in packs (e.g. wolves, African wild dogs) which accounts for their evolutional success. Besides being able to catch a larger prey because they hunt in a group, they can also eat it up immediately and make full use of it. The group in which wolves live together is called a pack. The core of a pack consists of a reproductive pair and all other members of the pack, the young and elder brothers, are the descendants of the same parents. Wolves travel, hunt, feed and rest in packs, which means



Figure 5.
The wolves live in packs
(B. Krstinić/Applaudo group)

they are together all year round. In order to be able to carry out all of these activities successfully, the pack has a relatively complex social structure. The wolf pack is arranged in a hierarchical manner, with the pair of parents keeping the dominant position and other members of the pack building among themselves a relationship of superiority and subordination.

The dominant wolf or female wolf decides when the pack is going to hunt and where the lair will be situated, and the hierarchical structure is best seen when feeding on a prey: the subordinates eating after the superiors. Besides, a strong domination primarily in the female line makes the mating of subordinate members with each other or with one of the dominant wolves impossible. So only one female wolf in a pack can have the young, which is one of the mechanisms to regulate the population size of this top predator. At the same time this prevents mating with kinship. The inability of mating and the lack of food force the subordinate wolves to leave the parent's pack and its territory. This happens mostly with young wolves at the age of two and three.

In search of a new habitat and partner they leave for areas unknown to them, which is called dispersion. Wolves have a markedly territorial character; they mark the space they inhabit by urine, excrements, by scratching the soil and howling. By defending their living space from other wolves, they secure their prey. An alien wolf may enter the territory of a pack, but if found by the pack, it will almost surely be killed and





Figure 6.
The wolves communicate by howling (J. Kusak)

sometimes eaten. The same may happen to a dog entering the wolves' territory, because it will probably be seen as an alien wolf. Consequently, in wolf populations not affected by human activities, as much as 65 to 70 per cent of the total wolf mortality are caused by other wolves. This is another mechanism for self-regulation of the wolf population.

If a wolf in dispersion succeeded in finding a space not inhabited by other wolves and containing enough prey, and if at least one young, not related wolf of opposite sex enters the same space, this will result in a new pack. After they come closer and socialize with one another, a new pair of wolves starts marking their new space with great intensity; they mate next winter and raise their first litter in spring (Mech, 1970; Mech et al., 1998).

Reproduction of wolves

The female wolf is in heat once a year, in the period from the end of January till April, later in northern parts and earlier in southern parts. The heat lasts three weeks and the mating itself takes place in the third week. She is with pups for 63 days and bears the young in a lair that she has prepared earlier. If not disturbed in their lair, wolves can use it several years successively. The litter normally consists of 4 young



Figure 7.
The wolf and the young (D. Huber)



who are blind and deaf until they are 11 to 15 days old and suck until six to eight months of age when they start turning gradually to food brought to them by all other members of the pack.

The place in which wolf-pups live during growing up and to which full-grown wolves of the pack return every day is called a haunt. During summer wolf-pups may be moved from one haunt to another a number of times. Until the first winter wolf-pups reach the size of a full-grown wolf and start travelling with the pack. They are sexually mature at the age of 22 months after which they leave their pack (Mech, 1970; Garms and Borm, 1981).

Wolf's habitat and diet

Wolves may live in any habitat that provides enough prey and shelter. To this very day wolves have managed to survive in hardly accessible areas and are therefore often seen as a symbol of wilderness. Wolf needs shelter only to avoid humans, because it has no other enemies in nature. Wolves may live even very close to humans, in a livestock breeding area (Kusak, 2002), in a grain field or on the outskirts of a town. This is possible if tolerated by humans and if the wolf mortality rate caused by man lies below the annual growth. In such cases they can almost completely switch to feeding on domestic animals. Domestic animals (sheep, goat and to a lesser extent small stock and dogs) account for 84 per cent of the wolf's diet in the area

Figure 8.
The wolves live also in the area of Dalmatinska zagora (A. Štrbenac)





Figure 9. Gorski kotar represents the top-quality wolf habitat (A. Frković)



The wolf's ecological niche is a "hunter of large mammals", meaning that it's main prey are large even-toed mammals (Artiodactyla) and rarely those odd-toed (Perissodactyla). Wolves will eat up any other animal it may catch too, this known as an opportunistic hunter. It has long since been known that when hunting, wolves choose the prey easier to catch at the particular moment (Mech, 1970; Frits and Mech, 1981), but this changes during the year (Mech et al., 1995). So in an ecosystem containing more types of prey they will hunt the type more readily available and therefore easily accessible, taking animals weakened by their age, illness and famine or the young (Ballard et al., 1981; Mech, 1970, 1998; Peterson, 1977). In this way wolves affect positively the health of the prey population and contribute to the stability of the entire ecosystem. Without predators the number of herbivores in unaffected ecosystems can increase to such an extent that it may result in the reduction of their nutritional basis (e.g. disturbance of forest restoration, even a complete defoliation up to creation of karst) which can ultimately lead to a considerable reduction in the number of herbivores themselves or their complete disappearance.

Figure 10. The unguarded livestock is the easiest prey for the wolf (J. Jeremić-Martinko)

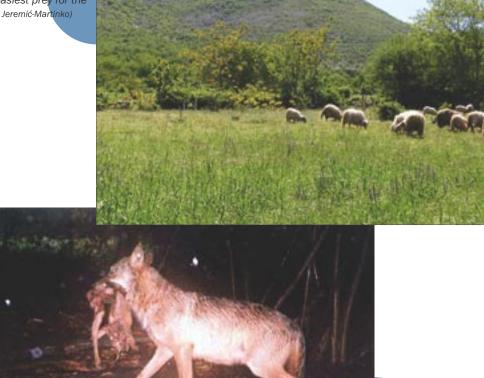




Figure 11. The wolf carrying a piece of its prey (G. Gužvica)





Status in Croatia

Historical overview

Distribution, current population and causes of population decrease

It is considered that back in 1894 wolves inhabited the entire territory of Croatia; each county of that time had recorded at least one killing of a wolf. Later on, the species started disappearing, first from the lowland continental Croatia (Frković and Huber, 1995). In spite of the efforts for their extermination, wolves managed to survive in the Dinaric area and in Dalmatia. According to Schwenk (1985), at the turn of the 20th century the annual kill of wolves in Dalmatia averaged approximately 10 individuals, followed by approximately 10 times more kills of jackals. After World War II, extermination actions increased, and in Gorski kotar alone in the period 1946-1986 there were 540 wolves killed (Frković et al, 1992), while a single hunter in Dalmatia in the area of Svilaja, Dinara and Kamešnica in the approximately same period killed



68 (Mile Lovrić, verbal account). This resulted in the decrease of the wolf population to approximately 50 individuals in the late 1980s in the areas of Gorski kotar and Lika, and their complete disappearance in Dalmatia (Frković and Huber, 1995).

The former wolf's area of distribution is today best seen from the data on wolf kills and captures. The available statistical data (covering Croatia and Slovenia of that time) for the period 1891-1921 account for the killing or capture of 1,324 wolves - 42 wolves per year (with maximum annual quantity of 120 wolves, recorded for 1892). The next statistically processed period for Croatia concerns 1954-'72, when a total of 5,206 wolves were captured, on average 274 per year. In the period 1960-'61 this number decreased to 50, only to fall to 32 in 1989-'90. In Gorski kotar, the number of killed or captured wolves, from the average 15 per year in the period 1945-1976, first decreased to 9 per year

in the period 1977-1986 but, in subsequent years, to only one individual. During this time there were no changes in the legal status of the species, nor in the number of hunters, which leads to a conclusion that the overall wolf population had decreased. The last proven damage done by wolves in Gorski kotar, prior to its legal protection in 1995, occurred in 1984.

In the period after World War II, the wolf was listed among unprotected game to be hunted by "anyone with all available hunting means and methods" throughout the hunting legislation and in other legal acts (Decree on Permanently Protected Game, Game Protected by Close Season, and Unprotected Game; Decree on Extermination of Wolves and Prizes for Killing), coupled by financial incentives. Thus hunting pressure



Figure 12.
In Gorski kotar the wolves used to be hunted individually or in shoots (A. Frković)





had followed the gradual decrease in the wolf population; but until the early 1980s the wolf population in the alpine areas of the country had not been threatened.

At that time, the unchanged hunting pressure was aggravated by the changes in habitat. Boundaries of the total available space for wolves were reduced and became more pronounced due to human impact in the border areas of wolf distribution. Habitat quality decreased in the central parts due to construction of forest roads, opening, exploitation and dying off of forest stands. These actions consequently reduced the populations of available prey, both natural and domestic animals.

Figure 13.
The decline in
the wolf's area
of occupancy in
Croatia over the last
hundred years
(Source: Faculty of
Veterinary Medicine)

Present status

Wolf distribution in Croatia

Wolves have managed to survive in the areas of Gorski kotar, Lika and Dalmatia, in 32.4% of the total land area of the country (17,468 km²). Areas of occasional wolf presence cover 17.7% of inland Croatia (9,543 km²) and include the Dinaric border areas in the north (peripannonian area) and south (southern slopes of Velebit, near Ravni kotari, Kaštela, Biokovo). The territory of Istria (except Ćićarija and Učka) and the continental lowland areas of Croatia are not inhabited by wolves, and the size of this area amounts to 26,843 km² (49.8%) (Figure 1, Table 3).

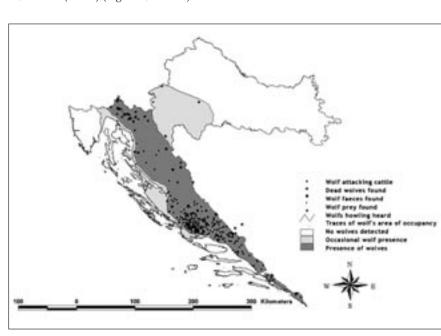


Figure 14.
Distribution of traces of wolves and wolf's area of presence in 2001.



Table 3. Surface areas per extent of presence of wolves in Croatia in 2001.

Pre	sence of wolf	Extent of occurrence (km²)	%
Col	nstant	17,468	32.4
Oc	casional	9,543	17.8
No	ne	26,843	49.8
Tot	al	53,854	100

Population density, number and trends

Introductory remarks and basic knowledge

Estimates of populations of wild animals in nature, especially concerning large carnivores like wolf, are very difficult to make and are usually imprecise.

This document presents the results obtained by several independent methods. Although each method has its limitations, their application was consistent and without subjective manipulation. The resulting estimate shows that there are approximately 130 to 170 wolf individuals in Croatia. There are interest groups in the Wolf Management Plan development process who believe that the number of wolves is lower than the minimum estimate, as well as those who believe the opposite - that there are more wolves than the maximum suggested.

When making decisions in the management of any population it is more important to know the trends than the real number of individuals. By carefully monitoring the trend and impacts of the management measures appllied, it is possible to achieve long-term successful management of a species without ever actually finding out its absolute size. An objective analysis has shown that the wolf population in Croatia reached its minimum in the late 1980s, and in early 1990s started its gradual increase until the end of the decade. Since then, in the last 3 to 4 years, it has stabilised to its present level.

There is a state-of-the-art method that can be used in this respect, but its application in Croatia is just starting, so there are no usable results yet. The method implies identification of each individual on the basis of DNA analysis of a sample taken from the fresh faeces. The samples should be conserved in alcohol (accompanied by a note on the time and place of the finding), and wolf DNA (originating from epithelium cells of the mucous membrane of digestive tract) is isolated in the laboratory. DNA is analysed for the sequence of nucleic bases (genetic code) in a certain number of genes that is sufficient for individual identification of wolves. A big enough sample can be statistically processed to show, with high certainty rate, the number of wolves in the same area. The bigger the sample, the lesser the error margin, with over 90% accuracy. Such certainty is achieved when having the number of samples higher than one third of the number of individuals in a local population. Genetic research of wolves in Croatia has begun, however the usability of results can only be guaranteed by collecting a sufficient number of samples (with the assistance of all interest groups in the field), and ensuring adequate funding to cover laboratory costs.



Local population density may vary greatly, depending on external influences (mainly of anthropogenic character), and it is also hard to make an accurate calculation. However, it is considered that wolf population density in Croatia ranges between 0.53 and 2.38 individuals/100 km²

Methods and results of the estimates used are shown below in greater detail.

Estimates of the wolf population in Dalmatia based on attacks on livestock

In 1997, a total of 355 wolf attacks on domestic animals were recorded in the area of the counties of Šibenik-Knin and Split-Dalmatia. Land area of these counties is $6,462 \text{ km}^2$, out of which wolf is present on $5,937 \text{ km}^2$. Based on the spatial and temporal distribution of attacks, there could have been 20 wolf packs in the area in 1997 (Figure 15). Viewed against the average territory of a pack amounting to 150.5 km^2 it turns out that the wolves covered approximately $3,000 \text{ km}^2$ (46.4%) of the total area, or 50.5% of their estimated area of occupancy in these counties. If a pack is made of 3-4 adult individuals, in 1997 there could have been 60 to 80 wolves in the given conditions.

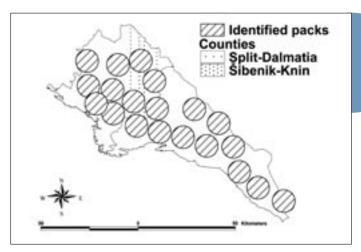
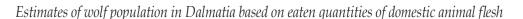


Figure 15. Possible packs identified according to attacks to domestic animals in the counties of Split-Dalmatia and Šibenik-Knin in 1997.



In the counties of Split-Dalmatia and Šibenik-Knin in the period from 30.08.1996 until 30.08.1998 (730 days), 657 wolf attacks to domestic animals were recorded, which averaged to 0.9 attacks per day. 1,807 head of livestock available to wolf fell victims or disappeared in such attacks. In the given counties, livestock had on average 2.5 head attacked at a time, or 2.3 head per day. Out of the total number of attacked livestock, 94% were sheep and goats. Given the average weight of a sheep or a goat (25 kg), as the main prey, this amounted to 57.5 kg of prey daily. Since a wolf needs on average 3.8 kg of biomass per day, this would have sufficed for 15.0 wolves. Since domestic animals make up approximately 84.4% of the wolf's diet, the remaining 15.6% being satisfied from other sources, in the given period there could have been 17.3 wolves in the two given counties.

If 17.3 wolves in the counties of Split-Dalmatia and Šibenik-Knin killed or harmed 1,807 livestock head within 2 years, in the counties of Zadar and Dubrovnik-Neretva there could have been another 2.9 wolves





(one pack), which would account for 302 livestock head. All of the above would total to 20.2 wolves in Dalmatia in the period mentioned.

Estimates of wolf population in Croatia based on local expert reports

Estimates of wolf population have been made for the land area of 16,131 km², or 92.3% of its area of distribution. According to estimates of local experts (certified by the former Ministry of Environmental Protection and Physical Planning), there were 173 wolves in this area in 1999. The reported wolf distribution density for separate areas ranged from 0.53 to 2.38 wolves/100 km², on average 1.3 wolves per 100 km² (Figure 16). Ten of the thirteen areas also show the population trends for the last five years. It was estimated that wolf population has been increasing in the five areas with total surface 8,327 km² (47.7% of their permanent area of occupancy). On 3,321 km² (19.0% of area) the number of wolves hasn't changed, and on 3,284 km² (18.8% of area) it has been decreasing in the period 1995 to 1999 (Table 4).

Table 4. Population trends for wolves in Croatia in the period 1995 to 1999 according to local expert estimates (certified experts of the former Ministry of Environmental Protection and Physical Planning).

Population trends	Surface area km²	No. of areas
Upward	8,327	5
Unchanged	3,321	3
Downward	3,284	2
No data	1,199	3
Total	16,131	13

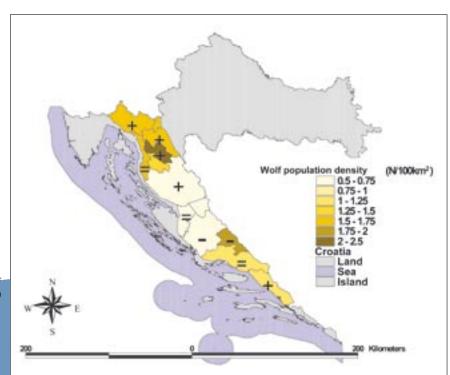


Figure 16. Density of the wolf population in Croatia in 1999 and the trends in the 1995-1999 period based on local expert estimates (population trends: "+" upward; "—" downward; "=" unchanged).

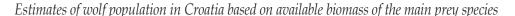


Estimates of wolf population in Croatia based on population density of the major species of natural prey

In the period 1998-2002, in hunting grounds in the area of Gorski kotar, Lika and Dalmatia there were several surveys undertaken to gather data on game. These have shown that the average density of wolf's prey is 169 head/100km². Compared to the data from Poland (Białowieża), such average density of prey might suggest that there could be 1.06 wolves per 100 km². This means that there could be 58.6 wolves on 5,525 km² of the land area for which data have been gathered (Table 5). Assuming that this density of prey persists in the entire territory of Gorski kotar and Lika where wolves are present (9,374 km²), it could be possible that there are 99.3 wolves in the area.

Table 5. Summarised data for 50 hunting grounds in Gorski kotar and Lika, with total surface area $5.525.71 \text{ km}^2$.

Species	Km² registered	No.	No./100km²	Share of the taxon (%)
Chamois	1,267	299	24	3.2
Wild boar	5,509	2,436	44	26.0
Deer	4,537	1,983	43	21.3
Fallow deer	122	59	48	0.6
Mouflon	422	302	72	3.2
Roe-deer	5,368	4,280	80	45.7
Total	5,526	9,359	169	100



On the surface of $5,526 \, \mathrm{km^2}$ (parts of Gorski kotar and Lika) it has been estimated that there are $9,359 \, \mathrm{mg}$ ungulate mammal individuals (Table 5). The total biomass of this quantity has been estimated at $306,930 \, \mathrm{kg}$. For the entire territory of Gorski kotar and Lika ($9,374 \, \mathrm{km^2}$) this amounts to $521,781 \, \mathrm{kg}$. Annual biomass increment of 40% provides $208,712 \, \mathrm{kg}$ available for wolves, lynx, hunters and poachers. The kill quota on $5,526 \, \mathrm{km^2}$ is $44,982 \, \mathrm{kg}$, while on $9,374 \, \mathrm{km^2}$ it amounts to $76,337 \, \mathrm{kg}$, same as estimated for poaching, while $19,006 \, \mathrm{kg}$ get eaten by lynx. It is estimated that lynx consume $1,399 \, \mathrm{head}$ of roe deer and that this totals $29.8 \, \mathrm{md^2}$ individuals. Lynx requires $1.75 \, \mathrm{kg/day} = 19,006 \, \mathrm{kg/year}$. After all, $37,032 \, \mathrm{kg}$ is left for wolves. If a wolf requires $3.8 \, \mathrm{kg/day}$, this could result in $26.7 \, \mathrm{wolves}$ in Lika and Gorski kotar.

Overview of wolf populations throughout Croatia

- 1. Dalmatia based on pack distribution areas and attacks on livestock: 60-80 wolves.
- 2. Dalmatia based on biomass of slaughtered livestock: 20.2 wolves.
- 3. Lika and Gorski kotar based on prey distribution density: 99.3 wolves.
- 4. Lika and Gorski kotar based on prey biomass: 26.7 wolves.
- 5. Total Croatia, based on local expert assessments: 173 wolves.

In view of the above, it is estimated that Croatia harbours approximately 130 to 170 wolves. According to the IUCN criteria, wolves are included in the Red Book of Mammals in Croatia.







Telemetric research

Introductory remarks and basic knowledge

Telemetric research of wolves in Croatia have been done as follows:

- 1. Dalmatia (1998 2001) -3 wolves tracked
- 2. Gorski kotar (since 2001) 6 wolves tracked
- 3. Lika (since 2003) 1 wolf tracked



Figure 17.
Catching radio-signals of a wolf radio-collared
(D. Huber)

the territory of a pack to which the collared individual belongs. It can additionally define whether the pack had any young, the location of the lair, locations of diurnal rest and nocturnal activity, possible abandonment of the pack, and deaths. Determination of activities helps in learning about the complete 24-hour and seasonal activity rhythms. Traces in snow, genetic analysis of faeces, listening to the howling sounds or, rarely, observation of wolves, can define the number of wolves in a pack. Remains of the prey and analysis of faeces give insight into the wolf's diet in a certain area.

The method includes the capturing of live, healthy wolves and collaring them with installed transmitters that emit radio signals for two or three years. With the help of a guided antenna it is possible to get a signal at a distance of more than 10 km (unless blocked by a hill in between), and determine the source of the signal and status of the activity recorded. Measuring from several different positions, the researcher can define a wolf's location by triangulation method. Such tracking for at least one year can help in determining



Figure 18.

Anja, a female wolf captured in the Dalmatian area on 23 August 1999 (J. Kusak)



Satellite tracking is a state-of-the-art technology. The system works in the way that every few hours a link is established with at least 4 geostationary facilities and the carrier's location is determined within 20-meters. Approximately 1,000 times more data is obtained than through conventional telemetry.

Main results of the telemetric and other scientific research done so far are presented below.







Figure 20.
Ines, the first wolf captured in Gorski kotar at the foot of the Guslica hill on 21 June 2002 (J. Kusak)

Figure 21.
Berni, a wolf captured at Vučje
Stine, Uble, in the Dalmatian
area on 28 October 2000
(J. Kusak)



Figure 23. Blaža, a female wolf captured in Gorski kotar on 23 October 2002 (J. Kusak)



Figure 22.
Hilda, a female wolf captured at the foot of the Šija hill in Gorski kotar on 2 July 2002
(J. Kusak)



Figure 25.
Mila, a female wolf captured on
11 September 2004 and GPS-GPM
collared in Gorski kotar (J. Kusak)





Figure 24.
Felix, a pup of the female wolf Hilda captured in Gorski kotar on 25 August 2004 (J. Kusak)





Figure 27.

Jelica, a female wolf captured in the area of Jelovac above Krasno in Lika on 25 November 2003 (G. Gužvica)





Dalmatia

Pack territory

Within 996 days of operation of radio-transmitters installed on wolves in Dalmatia, locations of the tracked individuals were determined 430 times.

The average smallest known territory size of the two tracked packs is 150.5 km². Comparing the spatial relation between the two neighbouring packs ("Opor" and "Vučevica"), there is partial overlapping on 16 km² (Figure 28). Overlap occurs on 11.3% of the entire territory of the "Opor" pack, and on 10% of the entire territory of the "Vučevica" pack. It needs to be noted also that the packs haven't been using the same area simultaneously. That part of the habitat was used by the "Opor" pack in 1998/1999, and taken over by the "Vučevica" pack in 1999-2001. In the summer of 2000, observations and attacks of livestock have shown the occurrence of a stray dogs pack in the central part of the territory formerly covered by the "Opor" pack.

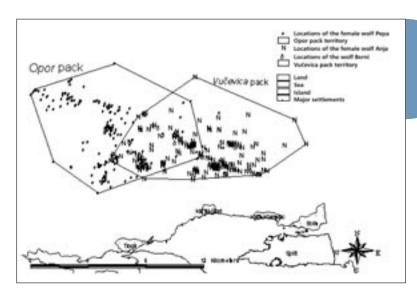


Figure 28. Locations of the female wolves W1 (Pepa), W2 (Anja) and the wolf W3 (Berni); territory of the "Opor" pack in the period from 30.10.1998 to 21.12.1999; and territory of the "Vučevica" pack in the period 23.08.1999 to 22.07.2001.

Habitat features and movement of wolves

Tracked wolves mostly dwelled in forests of early successional stage oak and oriental hornbeam or in degraded types of such forest (only hornbeam without oak). Regarding other "types" of vegetation, they often used thick spruce stands. Disregarding the cases of meadows, pastures and rocky grounds, vegetation thickness in locations of wolf finds averaged at 97.2%. Wolves dwelled on meadows, pastures and rocky grounds - which as such present poor shelters - at dusk, sunrise or during the night.

Comparing the distances from the nearest houses, roads and water wells, with randomly selected locations, it turned out that wolves choose places further away from houses but closer to water wells (N=100). The differences between the two were statistically significant (distance to house p=0.031; distance to water p=0.024; t-test).



Activities of the tracked wolves

The most commonly estimated wolf activity was resting or absence of movement (N=98, 52.9%), followed by movement (N=78; 42.2%). Other activities are significantly rare.

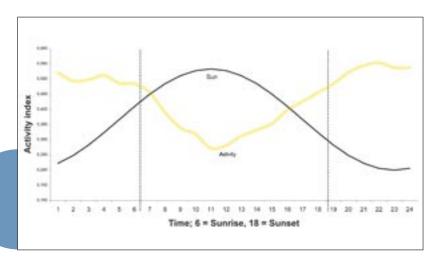


Figure 29. Total diurnal activity of both female wolves per intervals.

Gorski kotar

Pack territory

For the total of 279 days of tracking wolves in Gorski kotar (21.06.2002 to 27.03.2003), locations of wolves were determined 138 times. Further tracking was impossible, since the female-wolf lnes was killed by other wolves on the 177^{th} day after collaring. The female-wolf Blaža was found shot on the 41^{st} day after collaring,

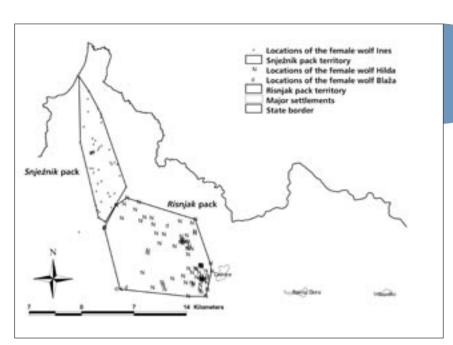


Figure 30. Locations of the female wolves W4 (Ines), W5 (Hilda) and W6 (Blaža); territory of the "Snježnik" pack in the period 21.06.2002 to 15.12.2002; and territory of the "Risnjak" pack in the period 02.07.2002 to 27.03.2003.





while the female-wolf Hilda abandoned the pack 268 days after collaring. Therefore the results obtained are not the real territories of the packs; however their partial territories amounted to 59.3 km² and 140.5 km² (Figure 30).

Activities of the tracked wolves

The first results show that wolves in Gorski kotar, as opposed to those in Dalmatia, could exhibit high activity during the day. Telemetry has recorded movement of the "Risnjak" pack during the day, and a video camera recorded the rare sight of an uncollared wolf from the pack walking the forest road.

Genetic research of wolves in Gorski kotar

Collection of the samples of fresh wolf faeces for genetic research purposes started in 2002. The first results fit in and complement the telemetric data. Genetic analyses have confirmed that a considerable number of wolves haven't managed to survive the winter of 2002/2003, or have abandoned the pack territory, especially the "Snježnik" pack. During the summer of 2002, samples of faeces have been collected over all



Figure 31. Wolf's faeces (Đ. Huber)

area of 123 km², and the corresponding analysis has determined the existence of eight different wolves in this territory. Layering of this map with the maps of the territories of the tracked packs has lead to a conclusion that six wolves belonged to the "Risnjak" pack (individuals 3, 4, 5, 6, 7 and 8), and the remaining two to the "Snježnik" pack (individuals 1 and 2), in addittion that the lowest number of wolves in these packs were in the summer 2002. It is possible that some other individuals haven't been found yet, because the number of faeces samples was relatively small. At the end of winter only four more wolves from the "Risnjak" pack were still alive (according to the tracks in snow). This means that, besides Blaža, at least one more wolf from the pack had disappeared (killed or left the pack) during the winter of 2002/2003.



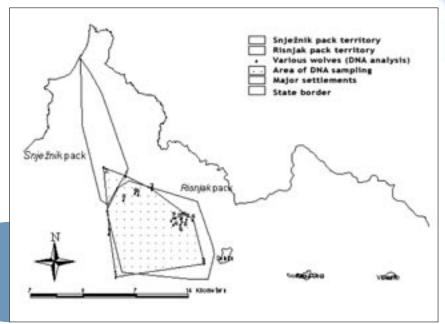


Figure 32. Relation between the positions of genetically determined wolf individuals and the territories of telemetrically tracked wolves in Gorski kotar in 2000.

Lika

In August 2003, the research of wolves was initiated in the territory of Lika, oriented towards the region of Kuterevo, Krasna and Kosinj, and the northern slopes of Velebit. On November 25, a young female wolf (W7, Jelica), seven months old, was captured in the territory of Jelovac above Krasno. It received a collar, which enabled satellite tracking of the animal. The female wolf was in good health and weighed 18 kilos. Basic physical measuraments were made, a registration mark tattooed on its earlobe, and blood and hair samples taken for laboratory testing. Upon releasing the collared female, the subsequent intensive monitoring confirmed that she had joined the pack on the fourth day after release. During the first 10 days, the collar monitored through GPS its geographical location on the hour, and after that 4 locations a day (every 6 hours). On 13.12. 2003 a link with the collar was established, and 202 pieces of data on its geographical location and 5,200 pieces of data on its activities in the period 25 November to 13 December 2003 were obtained. It was confirmed that the pack to which the collared female belonged had been moving in the range of 156 km² during that period. After that, the female was tracked by classical telemetry, and six more positions located within the formerly confirmed territory of this pack's movement were determined.

Wolf mortality

In the period from 1986 until the end of 2003, 108 deaths of wolves were registered in Croatia, which on average amounts to 6.4 per year. The upward trend in wolf deaths was quite pronounced in the period 1990 to 2000 (Figure 34), out of which 33 (35.9%) carcasses or partial carcasses were found and used for research purposes. As to the causes of death, in 8 cases (12.5%) wolves have by natural causes; in 5 (4.6%)





cases they fell victims to rabies; in one (1.0%) it was leishmaniasis; while in 2 cases (1.9%) the wolf was killed by other wolves. For 6 (5.6%) dead wolves the death cause is unknown, while the remaining 94 (87.0%) died by human intervention. The majority of the latter - 62 (57.4%) were shot; 30 (27.8%) of them were killed in traffic (Figure 33). Sex has been determined in 50 cases. There were 28 (56%) females and 22



Figure 33.
A female wolf killed on a road in the area of Prgomet in Dalmatinska zagora (J. Kusak)

(44%) males. Age of individuals, estimated in 36 cases, ranged from 0.3 to 6.0 years, with the average age 1.9 years (median = 2). For the remaining 38 dead wolves, weight ranged from 7 to 47 kg, with 28.4 kg on average. The lowest wolf mortality rate in Croatia was recorded in late 1980s and early 1990s. In 1987 and 1989 there were no recorded deaths, and in 1988 and 1990 only one record of a dead wolf. Since 1990, wolf deaths started increasing, up to the maximum count of 16 dead wolves in 1999 (Figure 34). Frković et al (1988) documented the average annual mortality rate of wolves in Gorski kotar in the period 1945-1986 as 13 individuals (range = 13-27). These data were merged with the recent ones (mortality until 2001, Figure 36). It can be assumed that the number of dead wolves reflects the trend of wolf population in Croatia in general, as well as the intensity of wolf tracking. In the period before its legal protection the death tolls varied, indicating changes in the population size, which was occurring regardless of the kill quotas, probably following the changes in the prey populations.

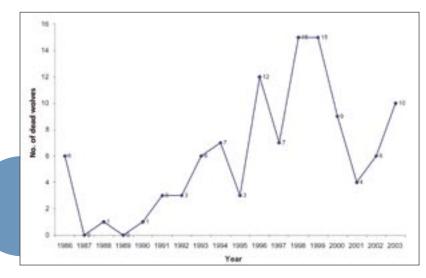


Figure 34. Number of wolves killed in Croatia, annually since 1986.

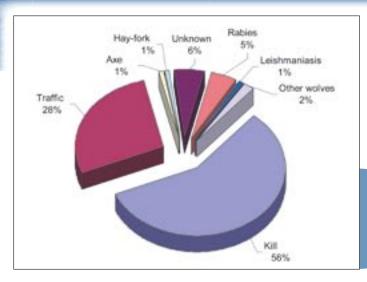


Figure 35. Causes of wolf deaths since 1986.

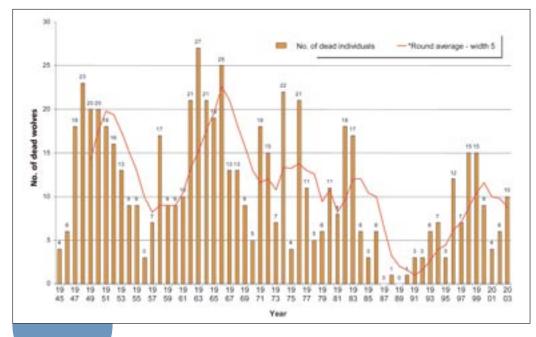


Figure 36. Wolf mortality in Croatia since 1945. Source of data until 1986: Frkovć et al. (1992). The red line presents the trend, shown as a round average, width 5.

Habitats

The entire land surface of Croatia (53,160 km²) is divided into three macro regions (simple division, see: Rogić 1961). Size of the Pannonian macro region is 30,734 km², the alpine macro region covers 8,558 km², and the Mediterranean macro region - 13,868 km². Habitat variable values (minimum, maximum, average) are shown in the Table 6 below.





Table 6. Values of wolf habitat variables for three macro regions of Croatia.

Habitat variable	Pannor	nian macro	region	Alpin	e macro r	egion	Medit	erranean region	macro
	Min.	Max.	Avg.	Min.	Max.	Avg.	Min.	Max.	Avg.
Altitude (m)	79.6	1,178.0	197.9	194.2	1,604.0	834.2	0.0	1,548.2	366.5
Forest cover (%)	0.0	100.0	29.9	0.0	100.0	61.1	0.0	100.0	27.2
Road density (km/km²)	0.00	3.23	0.52	0.00	1.77	0.53	0.00	2.23	0.45
Population density (n/km²)	0.0	*19,646	87.1	0.0	325.1	16.1	0.0	5,584	66.0
No. of species of even-toed wild mammals (n)	2	3	2.02	3.0	3.0	3.0	1.0	1.0	1.0
Sheep density (n/km²)	0.0	58.6	4.0	0.0	89.4	8.9	0.0	322.7	18.9
Bovine livestock density (n/km²)	0.0	82.8	11.8	0.0	29.7	3.9	0.0	23.4	2.2

^{*} City of Zagreb – high value is due to grouping of all values into one reference point

Average altitudes are the lowest in the Pannonian macro region, and the highest in the alpine macro region, although each macro region displays altitudes above 1,000 m.

Forest cover

Concerning the forest cover of 17.9% of the Pannonian macro region, wolf habitation is possible on 5,508 km². The alpine macro region is forest-covered on 5,654 km² (66.1%) that are suitable for wolf. The forest cover in the Mediterranean macro region can accommodate wolf on 3,310 km² (23.9%).

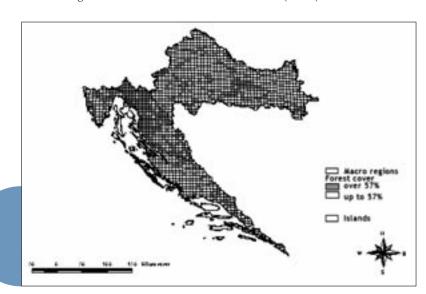


Figure 37. Share of areas suitable for wolf regarding the forest cover exceeding 57% in inland Croatia.



Road network

The most dense road network section in the Pannonian macro region is 3.23 km/km2 (Table 6).

Suitability of the region for the wolf regarding road density (up to 0.5 km/ km2) is high on 12,199 km2 (39.7%) the areas, mainly in the eastern part. The alpine macro region displays moderate road density on 3,619 km2 (42.3%). The majority of appropriate areas are in Lika, while Gorski kotar displays higher road density (Figure 38). The Mediterranean macro region has moderate road density of 5,751 km2 (41.5%). There are many reasons why roads and other large obstacles in the wolf habitat significantly reduce the habitat capacity to sustain their survival.

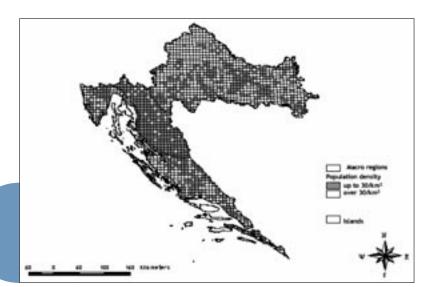


Figure 38.
Share of areas adequate for the existence of wolves viewing the road density (up to 0.5 km/km²) in the mainland part of Croatia

The wolf lives, hunts and rears its young in packs, which are family groupings consisting of a reproductive pair, the young and their elder siblings from an earlier litter. The pack has its territory, which they need to actively defend against neighbouring wolf packs, and have it large enough to enable members of the pack to hunt enough prey for themselves and for their litter. The litter requires additional room for the lair, which should be calm and easily accessible to wolf's hunting grounds. Introduction of obstacles into the territory of a pack may disable survival of the entire group, as it decreases the territory size, prevents access to certain hunting grounds and compromises the calm of the lair. Too small a territory will not provide enough food to rear the young, and the entire group might be destroyed. In the meantime, more damage to domestic animals can be expected, due to inaccessibility of the natural prey. Restricted movement and other changes in habitats due to the construction of roads affect the biology and size of populations of the wolf's natural prey (mainly even-toed mammals), as well as its own population.

Roads, especially motorways, create the most common obstacles in habitats. They affect wolf living conditions in a number of ways: restricting the size of pack territories, restricting the size of population of natural prey and access of wolves to that prey, general disturbance, and wolf mortality. In the period from 1945 to 1995 at least 20 wolves have been killed in traffic. Approximately 300 km of motorways is currently under construction or in operation within wolf habitats in Croatia, namely sections Karlovac-Rijeka and





Bosiljevo-Split, and the planned extension to Dubrovnik. The environmental impact assessment studies for the section between Dugopolje and Ploče are prepared. They foreseen 2-3 green bridges and certain number of viaducts.

For example, the motorway route Bosiljevo-Split for the most part, on at least 200 km length, passes through wolf habitat, so it can be expected to interfere with the territories of approximately 15 wolf packs. Assuming that in Croatia the average number of wolves in a pack is no more than 6, this leads to a conclusion that approximately 90 wolves, i.e. over 50% of the population in Croatia, is under the influence of road construction. Theoretically, loss of such a large part of the population could lead to its extinction. Therefore crossing of the roads should be made possible in all critical spots. Places where wolves and other animals can cross over a motorway are areas above tunnels, under viaducts, and across specially constructed green bridges. Each such structure must be large enough for the animals to feel safe while crossing to the other side. As a rule, only structures opening up over 100 m wide corridors are usable as non-selective passages for all animal species, including wolves.

An example of a specially constructed crossing on the motorway through Gorski kotar is a green bridge (100 m wide) on Dedin near Delnice. Since May 1999 we have been examining the use of this Dedin bridge by using infrared (IC) sensors for recording animal movement. IC rays have been placed at the height of 40 cm so smaller animals (up to the size of a fox, hare or a badger) would go unregistered. The recorder has a memory to allow for 1,000 IC ray interruptions, and records the day and time of each such occurrence. A total of 11,620 IC ray interruptions have been recorded during 792 days of active operation of the monitors (Table 7). Traces on the ground were recorded during 64 site visits. Number of passages of a species has been calculated out of the total number of passages recorded, according to the percentage of traces found.

Shown at the annual scale (365 days), there is an estimated 5,396 passages or an average of 14.8 per day. At the same time 529 animal traces on the ground were recorded, out of which 395 belonged to animal species higher than 40 cm. Share of the wolf is 1%, therefore estimates of the number of passages would be 55 in



one year. Motorway Bosiljevo-Split has 5 green bridges.

Figure 39. Green bridges of Croatia



Table 7. Results of monitoring of the passage of animals over the green bridge on Dedin near Delnice.

Species	No. of traces found	Percentage	Estimated total no. of passages	Estimated daily no. of passages	Estimated annual no. of passages
Roe-deer	166	42.0	4,881	6.2	2,263
Deer	103	26.1	3,033	3.8	1,387
Wild boar	66	16.7	1,941	2.5	913
Bear	39	9.9	1,150	1.5	548
Wolf	4	1.0	116	0.15	55
Man	16	4.1	476	0.6	219
Lynx	1	0.2	23	0.03	11
Total	395	100.0	11,620	14.78	5,396



Figure 40.
The Osmanovac green bridge on the Zagreb-Split motorway - Prgomet-Dugopolje section, constructed due to the presence of wolves (J. Kusak)

Population

According to the data of the National Bureau of Statistics for 1991, population density is highest in the Pannonian macro region (87.1/km²), and lowest in the alpine macro region (16.1/km²) (Table 6). The local population isn't equally distributed across the area, but rather concentrated in several towns and by the coast.

On $11,949~\rm km^2$ (38.9%) of the Pannonian macro region the human population density allows for the coexistence of wolves, mainly in the areas of Posavina and western Slavonia. The major part of the alpine macro region - $7,442~\rm km^2$ (87.0%) is a favourable habitat for wolves due to the low density of human habitation. In light of the human habitation density, the Mediterranean macro region enables wolf presence on the surface of $7,739~\rm km^2$ (55.8%) (Figure 41).







Figure 41. Share of areas suitable for wolf regarding road density (up to 0.5 km/km²) in inland Croatia.

Wolf's diet

The main source of food for wolves are even-toed mammals (roe deer, red deer, wild boar) and smaller mammals, like rabbit and other rodents. In areas with developed extensive livestock breeding they eat livestock as well, which is simpler to hunt than game, unless guarded. However, such actions may cause significant damage.

The research focused on the feeding habits of wolves in Gorski kotar and Dalmatinska zagora (County of Split-Dalmatia) (D. Pavlović, J.Kusak and Đ. Huber). For that purpose in the period 1999-2002 there were 147 samples of faeces and 10 stomach contents collected. Frequency of appearance (%) of certain categories of findings and animal species has been established for each separate region. In the territory of Dalmatinska zagora domestic animals make up the major part of the wolf's diet (73.4%). A large share (22%) of bovine livestock in the food of wolves in Dalmatinska zagora suggests that wolves feed at slaughterhouse waste disposal sites, where such livestock is the most common carcass type. Since a relatively large share of canine hairs (32.6%) could have been predominantly caused by licking their own body, this hasn't been

Figure 42. In the Dalmatian area the wolf feeds mainly on livestock (A. Štrbenac)

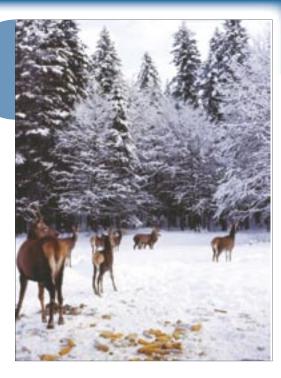






Figure 43.
Roe deer and red deer are
the main prey of wolves in
the area of Gorski kotar
(A. Frković)

included in the calculations. Goat hair is found in wolf faeces (36%) more often than accounted for in the damage compensation requests. The reason for this is the fact that goat's diet involves underbrush, where it's more difficult to guard it and easier for the wolf to get closer. Also, wolf can eat up the entire goat more often than an entire sheep, because in the latter humans disturb them. In Gorski kotar the main prey includes even-toed mammals (red deer, roe deer, wild boar), which account for 84.21% of the wolf's diet.



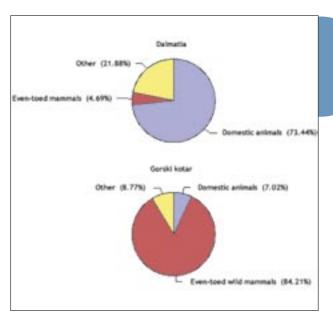


Figure 44. Frequency of traces of various animals in wolf faeces in Croatia

Figure 45. Frequency of various animal species remains in wolf faeces in Dalmatinska zagora.

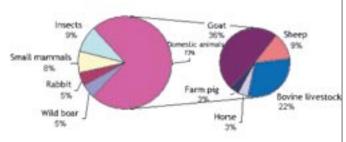
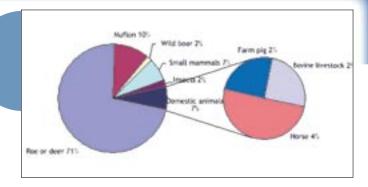




Figure 46. Frequency of various animal species remains in wolf faeces in Gorski kotar.



Game

In forest habitats of the Pannonian macro region, the main types of prey include roe deer and wild boar, also red deer in larger forests. The alpine macro region in its entirety supports roe deer, wild boar and red deer, and in southern habitats of Velebit (transition area towards the Mediterranean macro region) there are populations of chamois and mouflon. The Mediterranean macro region for its larger part supports only wild boar, although chamois can be found on Biokovo. Only the areas supporting three or more even-toed mammal species can be considered suitable for wolf.

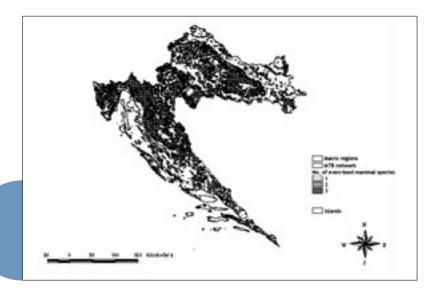


Figure 47. Number of even-toed wild mammals in coastal Croatia

Livestock

The most complete data on livestock can be found at the Croatian Livestock Selection Centre (CLSC). The data do not reflect the true state of affairs however, since they include only the livestock registered at CLSC, and this is based on the information from the requests for state subsidies. Rough estimates say that it shows approximately 80 % of the actual situation in the field, and in some areas even less.

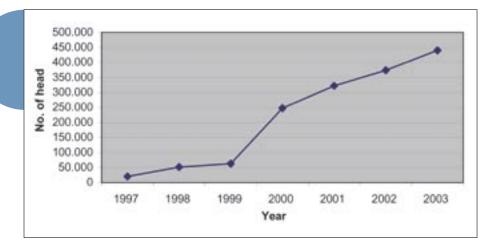


Sheep

According to CLSC data for 2003, based on requests for state subsidies, the largest part of registered sheep has been recorded in the counties where wolf normally dwells. In 2003 the most heads were recorded in the counties of Zadar (83,304), Šibenik–Knin (61,957), Lika-Senj (50,330), Split–Dalmatia (43,532) and Primorje-Gorski kotar (40,372). The numbers are significantly lower in other two counties: Karlovac – 12,968, and Dubrovnik–Neretya – 2,522 head.

Following the trends in the sheep population, a large increase of registered sheep farmers occurred in Croatia in the period 1997-2003; from 254 people in 1997 to 8,207 of them in 2003 (32 times increase). This increased the overall quantity of registered head: from 20,354 head in 1997 up to 440,430 in 2004 (even 20 times more).

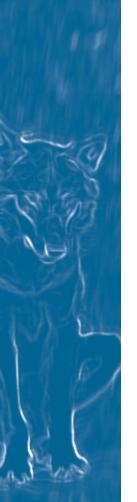
Figure 48.
Population trends
for registered sheep
head since 1997



Among the 6 counties inhabited by wolf, the largest increase in the number of owned sheep was recorded in the County of Šibenik-Knin - as much as 35 times. It must be stressed that this increase is closely connected with introduction of registration for state subsidies.

The sheep population per km² according to the data of the National Bureau of Statistics from the early 1990s was lowest in the Pannonian macro region (4.0 km²), and highest in the Mediterranean macro region (18.9 km²), largely in Dalmatia (Zadar, Šibenik-Knin and Split-Dalmatia counties). Istria and southern parts of Dalmatia keep sheep in lower quantities.

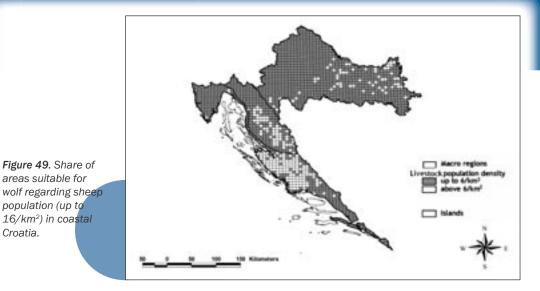
According to the model developed by Dupré et al. (1995), only the areas where sheep population is lower than $16/\mathrm{km^2}$ are suitable for wolves to dwell. Therefore $28,452~\mathrm{km^2}$ (92.6%) of the Pannonian, $6,397~\mathrm{km^2}$ (74.7%) of the alpine, and $9,132~\mathrm{km^2}$ (65.8%) are suitable for wolves. Areas unsuitable for wolf regarding the number of sheep are the counties of Zadar, Šibenik-Knin and Split-Dalmatia (Figure 49).











Goat

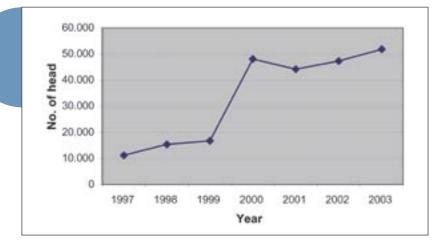
Croatia.

Figure 49. Share of areas suitable for

population (up to 16/km²) in coastal

If we were to follow the trend of the registered goat population in the period 1997-2003, an increase would be noticed, although not as big as it was with the sheep (Figure 50). It is interesting that a sudden increase of the number of registered breeders has occurred in the period between 1997 and 2000 (from 236 to 3,912), only to stabilise 1,281 breeders.

Figure 50. Trends in the number of registered goats in the period from 1997 to 2003



Same as with the sheep, the highest number of goats were documented in 2003 in the counties of Zadar (221), Split-Dalmatia (159) and Šibenik-Knin (128). In relation to 1997, the number has increased 6 fold in the Zadar County.



According to the data on the number of goats and percentage of damage done by the wolf, goats fall victim more often than it would be expected given the total population of domestic animals in the areas of wolf range.

Bovine livestock

The bovine livestock population subject to selection is around 250,000 head according to data for 1991-2002, and this is quite a stable amount. In contrast to sheep and goat, the number of livestock is highest in Pannonian, and lowest in the Mediterranean macro region, i.e. in the areas of wolf distribution. Livestock population is highest in the north-western Pannonian macro region, as it is kept in sheds and thus out of the possible range of wolf attacks.

Population of livestock in the Pannonian macro region on the territory of $10,330 \, \mathrm{km}^2 (33.6\%)$ allows for wolf presence, with a density of over 6 head per km^2 in $20,404 \, \mathrm{km}^2$ (66.4). However, even there the life of wolves would be impossible because livestock is mostly kept in sheds. As concerns livestock, the alpine macro region enables wolf habitation on $6,118 \, \mathrm{km}^2$ (69.1%). Life of wolves is possible on $11,357 \, \mathrm{km}^2$ (81.9%) of the Mediterranean macro region (Figure 51).

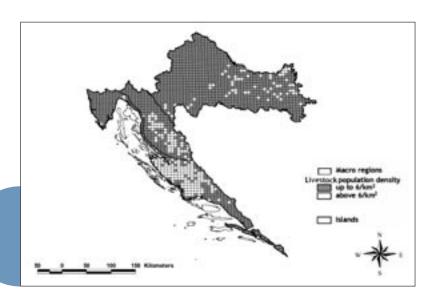


Figure 51. Share of areas suitable for wolf regarding livestock population (up to 6/km²) in coastal Croatia.



Key issues affecting wolf conservation

Economic Considerations

Human impact on wolf population

Direct human influence on wolves

As shown in the chapter on wolf mortality, according to available data the main cause of wolf deaths are humans. Average annual wolf mortality rate is 10, which includes only those individuals where carcasses have been found and analysed (mainly wolves killed in traffic).

Illegal killing of wolves is also pronouncedly present; however the real figures are unknown. So far no perpetrators were appropriately charged. For instance, all collared wolves in the territory of Dalmatia have been shot. Also shot was one of the three collared wolves in the territory of Gorski kotar.

Further, in the territory of Dalmatinska zagora people use poisonous baits as a method of wolf elimination, which often kill some other, "non-targeted", animals.

Human influence on the natural prey and habitats

Humans influence the even-toed mammal populations through legal and illegal kills. According to the data provided by the National Bureau of Statistics, 51,787 hunters were registered in Croatia in 2003. For the sake of illustration, in the area between the rivers of Zrmanja and Cetina, where biggest damage to livestock has been recorded, there are approximately 8,000 registered hunters and still large quantities of various firearms remaining in private possession after the war.

Neither the planned legal kill, nor other aspects of game management take proper consideration of predator presence. Illegal kills exists, but it is hard to point out the real data. This is largely contributed by inefficiency of relevant inspection services that are in charge of sanctioning the illegal kill.



Figure 52.
The wolf killed by poaching (J. Kusak)



Data on the planned and performed legal kills are submitted to the Ministry of Agriculture, Forestry and Water Management and to the competent county authority. The National Bureau of Statistics receives data on game per counties, but the data are not reliable for many reasons. For example the hunting year and the calendar year do not match in scope - according to hunting management documents, this data are managed according to hunting years, while the National Bureau of Statistics collects and processes data on a calendar year basis. In any case, it is evident that the available data are not systematised or unified, and there is no real picture on the status of game in Croatia that could form a basis for planning and monitoring of game management at the national level.

In the past few years, Croatia has intensified its national roads network construction. The inevitable negative impact of this will be somewhat reduced by the existence of a certain number of tunnels and crossings, and especially by the construction of green bridges on critical spots (6 of them in wolf habitats). Special guidelines were developed to help the road designers "Animals crossing the road (Proposal of Designing Guidelines)" (Huber et al. 2002).



Figure 53.
Man affects indirectly the wolf population by shooting his natural prey (A. Frković)







Slika 54.
The construction of roads often causes interruption of animal migration routes (A. Štrbenac)

Impact of wolves on domestic animals

Efficient protection has also been made difficult by various problematic issues related to livestock breeders, which often complain about damage to livestock done by wolf. In the framework of the LIFE project an analysis was made in order to get a clearer picture of the status and trends in livestock breeding and the actual impact of wolf on livestock. The Croatian Livestock Selection Centre generously assisted in the collection of data on the populations of registered livestock in Croatia for 2002 and 2003. The State Institute for Nature Protection maintains a database of damages to livestock by wolf, made on the basis of damage inspection reports.

As analyses have shown, the biggest damage on livestock has been recorded in the territory of Dalmatia, where due to the lack of natural prey, the wolf feeds mostly on domestic animals. At the same time, in this area the culture of livestock guarding has been abandoned, unlike for instance in the area of Lika. Another aggravating circumstance is the heavy war aftermath, because of which a large number of households were reduced to elderly people, incapable of livestock guarding. Only in the post-war period the development of modern, large farms with organised livestock breeding began, bringing along an improved livestock guarding culture.



Slika 55.
The wolf causes damage to livestock
(A. Štrbenac)



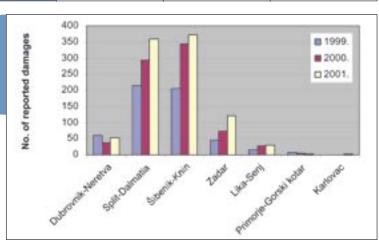
Analysis of requests for the compensation of damage done by protected animal species

In the period from 1999 to 2001 a total of 2,267 requests for compensation for damage done by protected animal species was received and analysed (Table 8, Figure 56). Most damages were reported in the counties of Šibenik–Knin and Split-Dalmatia, and the least reported in the County of Karlovac.

 Table 8. Number of reported damages done on livestock per counties, in the period 1999-2001

County	1999	2000	2001
1. Dubrovnik-Neretva	61	38	52
2. Split-Dalmatia	215	294	359
3. Šibenik-Knin	204	344	371
4. Zadar	45	73	122
5. Lika-Senj	15	27	31
6. Primorje-Gorski kotar	8	4	2
7. Karlovac	0	0	2
Total	548	780	939

Figure 56. Number of reported damages per counties in 1999, 2000 and 2001



In the same period, granted compensation payments ranged from HRK 690,576.00 in 1999 to HRK 1,254,575.00 in 2001 (Table 9, Figure 57) - 1 EUR \sim 7,5 HRK.

Table 9. Total amount granted for compensations in the period 1999-2001

County	1999	2000	2001
1. Dubrovnik-Neretva	74,625.00	58,170.00	93,420.00
2. Split-Dalmatia	325,545.00	481,110.00	516,456.00
3. Šibenik-Knin	184,100.00	371,225.00	422,190.00
4. Zadar	60,910.00	153,800.00	183,849.00
5. Lika-Senj	22,150.00	35,030.00	30,660.00
6. Primorje-Gorski kotar	23,246.00	8,350.00	700.00
7. Karlovac	0,00	0.00	7,300.00
Total	690,576.00	1,107,685.00	1,254,575.00

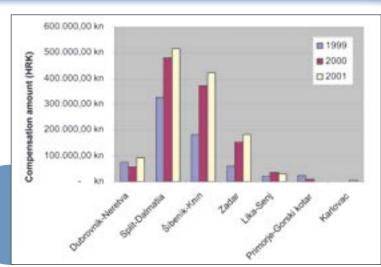
It is clearly seen from the data that the greatest number of reports has come from the counties of Šibenik-Knin and Split-Dalmatia (79%), and that the number of reported damage in the year 2000 increased by 232 (42%) with regard to the year 1999, and by 159 in 2001 (20%) with regard to 2000.





Figure 57. Total financial value of compensations per counties from 1999

to 2001.



Since inspections are done whenever there is a doubt that damage was done by a protected animal (wolf or lynx), the number of inspections doesn't necessarily mean the number of damages done by wolf. Moreover, it has been estimated in 2067 (91.2%) cases of all the reported damage that wolf was the perpetrator of the damage, lynx in 7 (0.3%) cases, bear in 5 (0.2%), jackal in 21 (1%) and dog in 28 (1.2%) cases. In 139 (6.1%)

Table 10. Distribution of reported damage done to livestock according to the estimated predator type, per counties in 1999

cases, estimate was insecure or was not stated (Tables 10, 11 and 12, Figure 58).

1999	Wolf	Lynx	Bear	Jackal	Dog	Unknown	Total
1. Dubrovnik-Neretva	50	0	0	0	3	8	61
2. Split-Dalmatia	202	0	0	0	6	7	215
3. Šibenik-Knin	178	0	0	10	4	12	204
4. Zadar	43	0	0	0	0	2	45
5. Lika-Senj	11	2	1	0	1	0	15
6. Primorje-Gorski kotar	8	0	0	0	0	0	8
7. Karlovac	0	0	0	0	0	0	0
Total	492	2	1	10	14	29	548

Table 11. Distribution of reported damage done to livestock according to estimated predator type, per counties in 2000

2000	Wolf	Lynx	Bear	Jackal	Dog	Unknown	Total
1. Dubrovnik-Neretva	36	0	0	0	0	1	37
2. Split-Dalmatia	274	0	0	0	4	15	293
3. Šibenik-Knin	311	0	0	2	2	28	343
4. Zadar	73	0	0	0	0	1	74
5. Lika-Senj	26	1	1	0	1	0	29
6. Primorje-Gorski kotar	4	0	0	0	0	0	4
7. Karlovac	0	0	0	0	0	0	0
Total	724	1	1	2	7	45	780

Table 12. Distribution of reported damage done to livestock according to estimated predator type, per counties in 2001

2001	Wolf	Lynx	Bear	Jackal	Dog	Unknown	Total
1. Dubrovnik-Neretva	52	0	0	0	0	0	52
2. Split-Dalmatia	326	0	0	0	6	27	359
3. Šibenik-Knin	335	0	1	9	1	25	371
4. Zadar	109	0	0	0	0	13	122
5. Lika-Senj	26	4	1	0	0	0	31
6. Primorje-Gorski kotar	1	0	1	0	0	0	2
7. Karlovac	2	0	0	0	0	0	2
Total	851	4	3	9	7	65	939

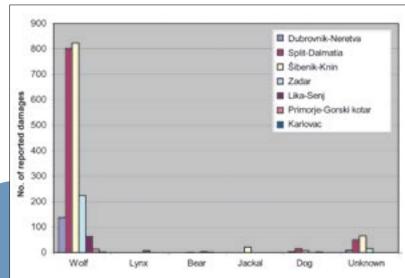


Figure 58. 1999-2001 summary overview of distribution of reported damage done to livestock according to estimated predator type, per counties

Wolves attack a variety of domestic animals – horses, donkeys and bovine livestock, through sheep and goat, even dogs. Annual populations of each attacked type of livestock per counties are shown in tables 13 through 15, and Figure 59.

Table 13. Populations of each attacked type of livestock per counties in 1999

1999	Donkey	Dog	Goat	Bovine Iivestock	Sheep	Horse	Total
1. Dubrovnik-Neretva	2	0	26	20	77	2	127
2. Split-Dalmatia	18	22	197	19	282	9	547
3. Šibenik-Knin	6	5	27	1	359	1	399
4. Zadar	1	0	56	1	94	0	152
5. Lika-Senj	0	0	0	0	58	0	58
6. Primorje-Gorski kotar	0	0	0	0	46	1	47
7. Karlovac	0	0	0	0	0	0	0
Total	27	27	306	41	916	13	1330



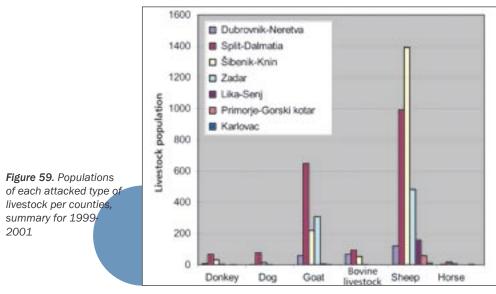


Table 14. Populations of each attacked type of livestock per counties in 2000

2000	Donkey	Dog	Goat	Bovine livestock	Sheep	Horse	Total
1. Dubrovnik-Neretva	1	2	10	21	23	0	57
2. Split-Dalmatia	20	29	203	34	343	11	640
3. Šibenik-Knin	15	3	97	18	527	1	661
4. Zadar	0	1	98	0	173	0	272
5. Lika-Senj	0	0	0	0	61	0	61
6. Primorje-Gorski kotar	1	0	0	0	11	3	15
7. Karlovac	0	0	0	0	0	0	0
Total	37	35	408	73	1,138	15	1,706

Table 15. Populations of each attacked type of livestock per counties in 2001

2001	Donkey	Dog	Goat	Bovine livestock	Sheep	Horse	Total
1. Dubrovnik-Neretva	4	0	22	27	20	1	74
2. Split-Dalmatia	29	27	250	40	367	0	713
3. Šibenik-Knin	11	6	96	34	506	3	656
4. Zadar	2	0	154	1	217	0	374
5. Lika-Senj	0	0	6	0	39	0	45
6. Primorje-Gorski kotar	0	0	1	0	0	0	1
7. Karlovac	0	0	0	0	11	0	11
Total	46	33	529	102	1,160	4	1,874



It is evident in the data on damage that the greatest number of damages is done by wolf to sheep and goat. Comparing these data with the data of the Croatian Livestock Selection Centre we get the share of livestock killed by wolf in relation to the total number of livestock. Unfortunately, the data on the total number of livestock is not totally correct and does not reflect the real situation. This only refers to the livestock that are registered by the CLSC, and the percentage stated in tables 16 and 17 is not therefore completely correct and the real share of livestock killed by wolf is probably a little lower.



Table 16. Share of sheep and goat killed by wolf compared to total number of sheep and goat per counties in 2000

	2000										
Туре	She	еер	Go	at							
Livestock no.	* Total registered by CLSC	Share of livestock killed by wolf (%)	** Total registered by CLSC	Share of livestock killed by wolf (%)							
Dubrovnik-Neretva	3,676	0.6	4,846	0.2							
Split-Dalmatia	47,433	0.7	14,492	1.4							
Šibenik-Knin	36,590	1.45	4,827	2							
Zadar	70,512	0.25	14,918	0.65							
Lika-Senj	25,157	0.25	1,304	0							
Primorje-Gorski kotar	30,615	0.04	618	0							
Karlovac	10,783	0	2,760	0							
Total	224,766	0.5	43,765	0.93							

^{*}Total numbers of sheep head (incl. lambs) in 2000, registered by CCSC

Table 17. Share of sheep and goat killed by wolf per counties in 2001.

	2001										
Туре	She	еер	Goat								
Livestock no.	* Total registered by CLSC	Share of livestock killed by wolf (%)	** Total registered by CLSC	Share of livestock killed by wolf (%)							
Dubrovnik-Neretva	2,127	0.6%	2,767	0.5%							
Split-Dalmatia	52,808	0.6%	10,980	2.2%							
Šibenik-Knin	63,744	0.8%	5,722	1.7%							
Zadar	59,822	0.35%	9,848	1.5%							
Lika-Senj	60,019	0.06%	4,083	0.15%							
Primorje-Gorski kotar	21,582	0%	548	0.2%							
Karlovac	10,435	0.1%	1,872	0%							
Total	270,537	0.4%	35,820	1.4%							

^{*}Total numbers of sheep for which requests for incentives have been submitted in 2001.

Analysing the data on the damage done to livestock it has been noticed that there are differences in the frequency of wolf attacks among seasons and times of day. It is clearly visible that attacks are more frequent in summer than in other months of the year.

Table 18. Frequency of wolf attacks in 1999, 2000 and 2001 across the months of the year

Month	1999	2000 2001		Total	
January	16	11	30	57	
February	19	14	37	70	
March	23	44	57	124	
April	27	48	64	139	
May	40	72	74	186	
June	73	79	87	239	
July	63	96	119	278	
August	54	108	96	258	
September	75	81	99	255	
October	48	71	94	213	
November	45	55	63	163	
December	7	44	31	82	

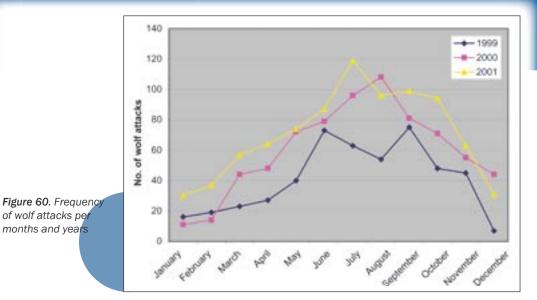


^{**}Total numbers of goat head (incl. kids) in 2000, registered by CCSC

^{**}Total numbers of goat for which requests for incentives have been submitted in 2001.



of wolf attacks per months and years



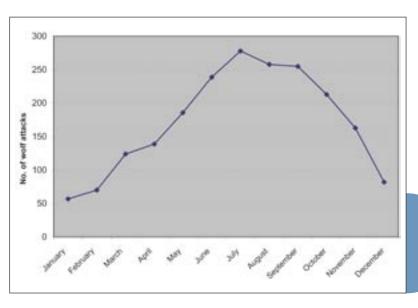


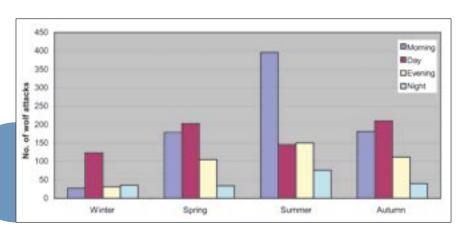
Figure 61. Frequency of wolf attacks per months - summary for 1999, 2000 and 2001

In 2,052 (90.5%) of the processed records there is information on the time of day when the damage was done. In some of the records there was an exact hour of attack, while others mentioned only the time of day when damage occurred. For comparison purposes, all data have been grouped into four categories - morning, day, evening, and night. The categories have been defined according to the hour of sunrise and sunset, and therefore slightly differ among seasons, which have been accounted for during analyses (Table 19, Figures 62 through 65). This clearly shows that the frequency of damage is highest in the morning and during the day, when livestock is grazing, which coincides with a relatively larger number of damages during summer (compared to winter) when livestock spends more time in the open.

Table 19. Frequency of wolf attacks on livestock during the day regarding seasons of the year in 1999, 2000 and 2001

Season	Time of day	1999	2000	2001	Total
Winter	Morning	3	16	8	27
	Day	34	25	65	124
	Evening	2	6	23	31
	Night	10	13	13	36
Spring	Morning	44	61	74	179
	Day	50	70	83	203
	Evening	24	38	43	105
	Night	10	8	16	34
Summer	Morning	101	143	152	396
	Day	29	37	80	146
	Evening	32	70	48	150
	Night	21	27	29	77
Autumn	Morning	38	73	71	182
	Day	48	78	84	210
	Evening	46	40	26	112
	Night	10	13	17	40

Figure 62. Frequency of wolf attacks on livestock during the day regarding seasons of the year, summary for 1999, 2000 and 2001



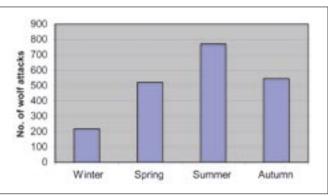
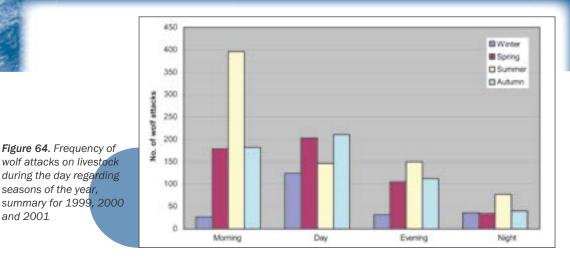


Figure 63. Frequency of wolf attacks on livestock regarding seasons of the year, summary for 1999, 2000 and 2001



seasons of the year,

and 2001



900 800 of wolf attacks 700 600 500 400 300 200 100 0 Morning Day Evening Night

Figure 65. Frequency of wolf attacks on livestock during the day regarding time of day, summary for 1999, 2000 and 2001

Inspection records also contain data on the guarding of livestock at the times when damages have occurred, which clearly display three different guarding methods - shepherd, guardian dogs, or a fence. The fence usually encloses a stable or a pen where livestock is kept during the night, or a pastureland where livestock stay during the day. Combinations of these three basic guarding methods are also possible (Table 20, Figures 66 and 67).

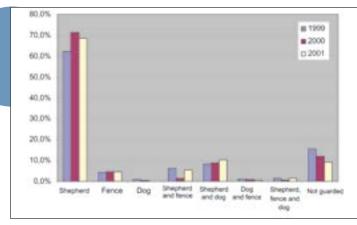
Table 20. Share of various methods of livestock guarding for 1999, 2000 and 2001

Methods of livestock	1999		2000		2001	
guarding	#	%	#	%	#	%
Shepherd	306	62.2%	514	71.3%	583	68.5%
Fence	21	4.3%	33	4.6%	40	4.7%
Dog	4	0.8%	2	0.3%	1	0.1%
Shepherd and fence	31	6.3%	10	1.4%	46	5.4%
Shepherd and dog	41	8.3%	64	8.9%	88	10.3%
Dog and fence	6	1.2%	7	1.0%	4	0.5%
Shepherd, fence and dog	7	1.4%	4	0.6%	11	1.3%
Total keeping	416	84.6%	634	87.9%	773	90.8%

^{*} Note: Percentage stands for shares of each livestock-guarding method in the total annual number of wolf damage.



Figure 66. Share of various methods of livestock guarding for 1999, 2000 and 2001



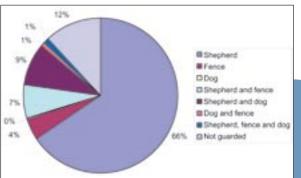


Figure 67. Share of various methods of livestock guarding, summary for 1999, 2000 and 2001

The data show that by far the most frequent method of livestock guarding is by a shepherd alone (66%), followed by combinations of shepherd with a dog (9%) or with a fence (7%), and the fence alone (4%). The least used methods are those with guarding dogs, a combination of a dog and a fence, or a combination of all three. A slight upward trend in livestock guarding is also visible – in 2000 livestock guarding measures have increased by 3.3 % in relation to 1999, and by 2.9% in 2001 in relation to 2000.

Livestock guarding data can be compared per counties as well, in order to see whether there is a guarding method dominant for a certain area (Table 21, Figure 72).

Table 21. Share of various methods of livestock keeping per counties, summary for 1999, 2000 and 2001

	Total shepherd		Total fence		Total dog	
	#	%	#	%	#	%
Dubrovnik-Neretva	36	25.9%	35	25.2%	5	3.6%
Split-Dalmatia	607	72.8%	104	12.5%	73	8.8%
Šibenik-Knin	807	94.2%	31	3.6%	50	5.8%
Zadar	217	91.6%	22	9.3%	91	38.4%
Lika-Senj	45	68.2%	25	37.9%	21	31.8%
Primorje-Gorski kotar	12	85.7%	4	28.6%	4	28.6%
Karlovac	0	0.0%	2	100.0%	1	50.0%
Total	1,724	80.2%	223	10.4%	245	11.4%

^{*} Note: Percentage stands for shares of each livestock-guarding method in the total annual number of wolf damage per each county, summarised for 1999, 2000 and 2001





Figure 68.
A shepherd tending goats (in the Karlobag area)
(A. Štrbenac)



Figure 69.
A shepherd tending goats (in the Ervenik area) (P. Štrbenac)

Figure 70.
Bongo tornjak with sheep on the foot of the Dinara Mountain (A. Štrbenac)





Figure 71. A drystone wall in Dalmatia (P. Štrbenac)



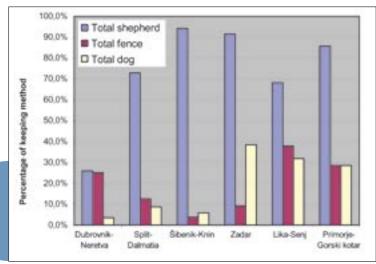


Figure 72. Share of various methods of livestock keeping per counties, summary for 1999, 2000 and 2001

The data show that in all counties percentage of livestock guarding by shepherds alone is much higher than the percentage of using other methods, such as dogs or fences, with the exception of the County of Dubrovnik-Neretva where livestock is equally guarded by shepherds and by fences. It is interesting that the percentage of using dogs and fences in the counties of Split-Dalmatia, Šibenik-Knin and Zadar were very low in relation to the percentage of shepherds (except in the Zadar County, where there is frequent usage of guardian dogs), while oscillations among different methods in the counties of Lika-Senj and Primorje-Gorski kotar are much less, i.e. significantly higher percentages represent both guardian dogs and fences.

Damage done by uncontrolled and stray dogs

In the territory of Dalmatia quite a few attacks on livestock by wild and abandoned dogs have been recorded. In the territory of Lika only one damage done by a wild dog has been recorded, and none of such cases occurred in Gorski kotar.

As already mentioned, during the war rural farms were devastated, which resulted in killing, dying and unrestricted wandering of livestock and other domestic animals. This lead to an increase of stray dogs



Figure 73.
Abandoned dogs organizing into packs (I. Pulis)





which, left to their own, took over the behavioural pattern of wild animals, differing from them by the lack of fear from humans. Often such dogs are mistakenly thought of as wolves by the local population, so three cases have been recorded when the Faculty of Veterinary Medicine received a body of a dead animal considered a wolf, but the genetic and other tests have proven them to be dogs. Such a situation is especially pronounced in the area of Dalmatinska zagora. Therefore this area suffers from damages done by wild or abandoned dogs. There is no actual data on the number of such dogs, nor are there measures for elimination of such dogs adequately applied.

Crossbreeding of wolves with dogs also occurs, which has been proven so far for one case in Croatia (Perković settlement, 1996).

Livestock protection measures against wolves

Donation of guarding dogs

Along with the existing damage compensation system, the state decided to provide additional assistance to livestock breeders, in order to minimise the damage done by wolves. In 1997 the former State Directorate for the Protection of Nature and Environment started the donation programme of guarding dogs - *tornjak*,

Figure 74.
Donation of tornjak
puppies in Lika
(J. Jeremić-Martinko)

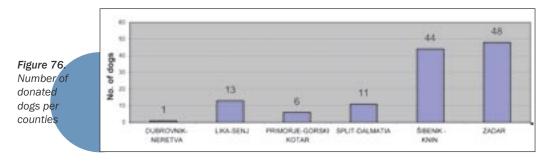


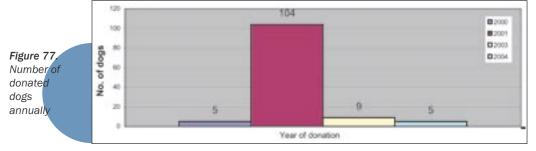
Slika 75. Livestock breeders from the Zadar hinterland who received donations (N. Skroza)



a native Croatian breed of large guarding dogs, traditionally used for guarding livestock against large predator attacks. Donations included puppies aged between 7 weeks and three months. Namely, in the training of *tornjak* dogs it is vital that they live freely near the livestock since early age, especially when it moves around in nature. A dog raised on a chain, in a cage or as a pet, is not useful in herd protection. *Tornjak* dogs can successfully perform their role after they have turned one year, reaching full maturity at the age of two and a half. The work-span of a guarding dog exceeds 10 years. All the donated puppies have been regularly registered in the Croatian Kennel Club, with genealogies.

By the end of 2002, a total of 120 *tornjak* puppies have been donated, most of them in the counties of Zadar and Šibenik-Knin, in the areas where biggest damage to livestock has been recorded. Due to insufficient funding in that period, it was impossible to systematically monitor the condition of the donated dogs, so monitoring relied on the information supplied by the experts, agricultural advisers, phone contacts and occasional site visits. Although proper dog training isn't a particularly complicated process, unfortunately large number of donees failed to follow the instructions of the donations coordinator. So dogs were often improperly fed or kept on a chain too often, or haven't made social connection with the herd due to incorrect training and treatment as pets.

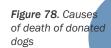




In the beginning of 2004 a phone survey was carried out on a test sample of donees until 2002 - until the start of the LIFE project. This helped in gaining an insight into the condition of donated dogs, method of keeping and their efficiency, breeding system and livestock guarding methods. Based on the responses of donees, we can see that that the livestock breeding methods are based on a combination of stables and pasture land, where livestock is mostly grazed on rocky ground and abandoned agricultural land, and kept in stables during the night. Herds have on average 200 head (mainly sheep), which are constantly guarded by a man of over 60 years of age. Dogs are with livestock during the day and kept on chain during the night, fed by the household food. Most dogs have had contact with predators, mainly wolves, in which situations the dog was mainly chasing predators away. When the dog was near the herd, there were no damages by the wolf or other predators. Part of the donated dogs died, which was caused mainly by poisoning.







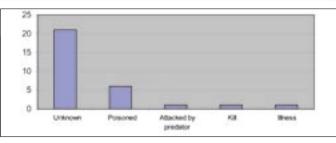




Figure 79.
A donated tornjak poisoned in Ražine Donje in the Šibenik hinterland (N. Skroza)

The actual total impact of guarding dogs on the downsizing of damage inflicted by wolves is difficult to quantify. There is no reliable baseline data, and many other factors might have decreased the number of wolf attacks; these should be systematically analysed. Some important factors are certainly various illegal acts that have reduced the wolf pack sizes (illegal killing and poisoning), and also the improved care of the herds. At the same time, respect for nature, especially towards "harmful" species, is in certain areas at a disturbing level.

So the donation of *tornjak* dogs, in the thoughts of some local inhabitants, is a poor strategy that requires costs and efforts, and assumes a permanent survival of wolves. Therefore the satisfaction good words about the dogs by their successful users is often clouded by objections of others. Those who "know their way around dogs" say that this breed – tornjak - is not aggressive enough for fighting wolves; others spread the "information" that this breed cannot endure the scorching heat and is useless during hot summers. Such rumours, prejudice or misunderstandings can be easily averted or avoided through more regular site visits of experts and active education and monitoring.

Based on the lessons learned and deficiencies of the *tornjak* donation programme by the end of 2002, the LIFE project envisaged a systematic donation scheme with public awareness campaign and education of the current and future beneficiaries and constant monitoring of the donees.

The *tornjak* donation programme within this project, envisaging 60 donations in total, started in July 2003 by printing leaflets with basic information on this breed and criteria for donation (Figure 80). Young *tornjak* dogs could have been donated only to the livestock breeders from regions in which there was a possibility of wolves attacking livestock and which are affected by wolves, the herds of which regularly graze in nature, and are not let into pastures without supervision, whose herds number at least 50 head, and who didn't and wouldn't have any poisonous substances on pastureland in a form that would be dangerous for dogs. The leaflet has been distributed through regional project offices to the livestock breeders from the territories of Gorski Kotar, Lika and Dalmatia.





Figure 80. An informative leaflet about tornjak dogs

Only those breeders who satisfied the prescribed criteria and committed to adequate dog management were selected, so as to obtain the best possible results in livestock protection from wolf attacks, which included mainly those from the territory of Dalmatia. Lectures were held for the selected livestock breeders and written instructions distributed on raising, keeping and feeding of dogs. In order to ensure purchase of the envisaged 60 puppies, the information on project and purchase of puppies has been sent to the addresses of all registered livestock breeders in Croatia, and the data on bitches and predicted terms of litter have been requested as well.

The first takeovers of puppies began in December 2003, and by end March 2004 livestock breeders from Karlobag, Lukovo Šugarje, Ervenik, Kijevo, Mrkopalj and Lukovdol, ten in total, received them as well.

The first takeovers of puppies began in December 2003, and by end March 2004 livestock breeders from Karlobag, Lukovo Šugarje, Ervenik, Kijevo, Mrkopalj and Lukovdol, ten in total, received them as well. Upon receiving the dogs, each breeder was obliged to sign a contract whereby assuming the right of using guarding dog, but also certain obligations in order to ensure adequate keeping and using the dogs for the protection of livestock against wolf attacks.

Regional coordinators inspected the condition of the donated dogs, through monthly visits to the donees. On each visit, coordinators completed the "Dog Protocol", made separately for every dog, containing the data related to efficiency of dogs. This was the method of monitoring the keeping and condition of the dogs. We will be able to estimate the real value of guarding dogs in the sense of herd preservation and protection only after they will have turned one year. A good cooperation in health treatment and inspection of dogs has been achieved with local veterinary stations.

The State Institute for Nature Protection joined the donations scheme by purchasing and donating 5 young female puppies in December 2003 and January 2004 to livestock breeders in the areas of Mrkopalj, Lukovdol, Karlobag and Gospić.

Namely, in the framework of the LIFE project implementation, livestock breeders have shown interest for independent breeding of *tornjak* dogs and for associating through establishing several small regional organisations, which would create centres for *tornjak* breeding in areas where they are most needed and revive the traditional livestock guarding methods.

In any case, based on the results of several years of guarding dog donation programmes it can be safely concluded that their reintroduction has brought about significant progress. An important indicator is the fact that those livestock breeders who invested sufficient efforts in guarding dogs are finally satisfied with their efficiency. Thanking to public focus and visible care of the state for livestock protection the breeders themselves take better care of their herds. Regardless of complaints, they have also benefited from guarding dogs. Many have learned or found out on their own how to use them efficiently. Therefore dogs with herds grazing in the wild are not only a welcome but also a necessary assistance, and again a commonly accepted notion in Croatia.

Quantities of small stock in Dalmatian hinterland are growing fast, human settlements are stabilising and the population standard is increasing as well. These are mostly emigrants returning after liberation of the country to the ruins of their homes, into the minefields and totally abandoned agricultural plots. At the same time, local authorities are still far from having the strength for operating a completely normal business and economic life. Therefore further structuring of local circumstances and relations is to be expected, during which the tendencies that are acceptable and those that are unacceptable will be better articulated.





U ZAŠTITI STOKE OD NAPADA VUKOVA

Electric fencing

Electric fences are applied as an efficient way of livestock guarding against attacks of wolves and other large predators. Therefore the LIFE project has planned the first systematic donation of 20 electric fences. Same as the donation of pen guardians, the electric fences donation programme started in July 2003 by printing an information leaflet (Figure 81).

Byl March 2004 all donated fences had been installed, with the largest amount (16) in the area of Lika (Oteš, Smiljan, Bunić, Široka Kula, Kukuljanovo, Poljic), and the remaining 4 fences donated to livestock breeders in the broader Benkovac area of Dalmatia.





Figure 81.
An informative leaflet about electric fences



Figure 83.

Putting up an electric fence in Smiljan near Gospić (S. Desnica)

By signing a contract for the use of electric fences, the donees obliged themselves to their adequate maintenance and use. In order to increase efficiency of fences, the livestock breeders also obliged to regularly fill out the protocol for the use of fences and submission thereof to the regional coordinators. The protocol contains the data on fence switching dynamics, electric voltage, number of head enclosed by the fence, and on possible appearance of wolf near the fence.



Impact of wolf on its natural prey

Starting from the fact that the main prey in the natural (alpine) areas are large even-toed mammals such as; roe deer, red deer and wild boar, which it hunts successfully in packs, wolves potentially have a rather significant impact on game.

It has been proven that traces of these game types in the wolf's faeces and stomach contents in Gorski kotar and some parts of Lika amount to almost 78% (Kusak, 2002). Reasons for such a high concentration of predatory actions on game in these areas can be found in the fact that livestock (sheep, goat) breeding is not common, and the rare herds are very well guarded (shepherds, dogs) and graze close to human settlements.

In the older hunting publications the wolf was usually considered "exterminator of red deer and roe deer" in mountainous hunting grounds (Car, 1967); this attitude hasn't changed much since. Some hunters still see the wolf and other large predators, which prey on a species hunted and managed by them, as direct competitors, but mostoure willing to share the pray with wolves realizing that wolves should exist in Croatia for future generations. Conflicts between game concessionaires and wolves occur and this may lead to the increase in illegal killing, even though the wolf is formal protected and high fines exist for poaching.

In the lack of reliable numeric indicators of wolf impacts on game, described is a randomly chosen calculation of the "damage" done by wolf on the game in the "Litorić" hunting ground, managed by the "Jelenski jarak" Hunting Association from Vrbovsko (Heski, 2004). According to the hunting management documents for this hunting ground of 6.600 ha in surface area, the available fund (brackets show the planned kill) of red deer 77(18), roe deer 180(42), and wild boar 65(42) make up a total of 332 big game head. Through constant monitoring and observation the game concessionaire has determined that there are 7 wolves dwelling in the area between the rivers Kupa and Dobra and the Ogulin – Vukova gorica motorway, which means 1 wolf per 4.000 ha, and that 1.5 wolves account for the "Litorić" hunting ground. Since, according to the concessionaire's calculation, a wolf eats 4 kg of game meat a day, and 1.400 kg a year, on average 40 big game head is killed by wolves. If one adds here the estimated 10 head "killed but not eaten by wolves" (excess kill), the total amount for the "Litorić" hunting ground would be 50 head per year, or 75% of the planned kill.

The share of prey eaten by the wolf, thus reducing the available killing quota for the game concessionaire, increases proportionally with a decrease in game population. In habitats with naturally big populations of ungulates, such as white-tailed deer in Minnesota (USA), the impact of wolf on its prey is negligible. It is also known that the wolf population does not grow indefinitely but is limited by innate self-regulatory mechanisms, and cannot by itself lead to the extinction of its main prey. It's a different question whether the wolf population size at its natural level (ecological capacity) is at the same time acceptable for the local population (social capacity).

In neighbouring Slovenia, density of ungulates is several times higher then in Croatia, despite the presence of wolf, lynx and bear. Impact of wolf on natural pray exists, but it does not pose a special problem.

Regardless of the above mentioned calculation, which is more or less used by all game concessionaires in the alpine parts of Croatia, there is no doubt that hunting grounds in which wolves regularly dwell are





in an unequal position towards those where this predator is naturally absent. Therefore, in line with the guidelines in this plan, when hunting grounds in which game is the most accessible and the easiest prey to the wolf, calculations of the hunting ground value and capacity should involve wolf presence and the related reduction of killing quotas and concession fees. The management plan should further anticipate the potential controlled interventions into predator populations in certain areas where it has been proven that the impact on prey populations is extremely significant.

Economic benefits of wolf

As demonstrated in the previous chapters, economic interests often prevail over ecological and ethical reasons for wolf conservation. One of the biggest challenges in nature conservation remains to find a fine balance between economic and ecological benefits. This is the case with the wolf. Simply put, attitudes toward wolves would probably be more positive if this species would yield economic benefits to the population in its area of occupancy. Although such opportunities have not been seriously discussed in Croatia, global practice already demonstrates possibilities of making a wolf population more profitable. The best example is in Yellowstone National Park in the USA, earning millions of dollars on account of reintroducing wolves back into the park. The only difference is that in this park, which is the size of Gorski kotar and Lika, visitors can see the wolves through high-powered binoculars, which is not the case in Croatia, where it is very difficult to see a wolf in the wild. However, this is not an obstacle for the development of eco-tourism, which is close to nature, in which signs of the wolf presence (e.g. howling,

Figure 84.

Numerous visitors of the Yellowstone National Park in a photo hunt for the wolf (Ð. Huber)



footprints, faeces) and adequate events and products (publications, exhibitions, lectures) can be attractive enough, especially for people from the countries where the wolf has disappeared. This could at the same time be a good promotion of our country and demonstration that Croatia has preserved its nature.

Romania is an excellent example of this rural ecoturism approach, where a large carnivore conservation programme is being implemented in the Carpathians, including promotion of the large carnivores as part



of a tourist offer. A large carnivore educational and information centre will also be established within the project area where, through exhibits, publications, multimedia publications etc. information on large carnivores could be obtained. The centre is also the starting point of organised tours. The centre employs local residents, who are involved in the production of souvenirs as well. Funds collected by this centre are channelled into a special conservation fund for large carnivores and used on activities to further conservation of these animals. Croatia undoubtedly possesses enough potential to embark on a similar path.

Social Considerations

Lack of knowledge on wolves

Ignorance of the basic facts about the wolf is one of the reasons for developing prejudice and negative attitudes toward this animal. One of the most common prejudices is that wolf is dangerous for humans. The fact is, however, that the wolf does not attack people, but rather avoids them. The bear is actually much more dangerous to humans, but perceptions of this animal are extremely positive nevertheless.

The only concrete information pointing to the level of knowledge on wolves is the research of attitudes toward the wolf in the areas of Gorski kotar, Lika and Dalmatia, in its area of occupancy, which also included questions on the biology and status of wolves in Croatia. According to these results, the best experts in wolves are inhabitants of Dalmatinska zagora.

Inadequate level of information and education on the wolf by the media often results in subjective informing of the public, which hinders the efforts for conservation of this species. Also, the media often feature scandal-tinged news on the wolf, guided by the logic that such news is best sold. The newspapers are known to feature articles presenting the wolf as a dangerous bloodthirsty beast. Electronic media features pictures of bloodstained old women whose sheep were killed by wolf, etc. Such images may help reinforce existing negative attitudes in the general public.

Educational activities aimed at wolf conservation began in 1994, when the "Wolf" Group held lectures on wolves, printed an SOS Wolf poster and in cooperation with the Croatian Nature Science Museum organised an exhibition titled "Did Little Red Riding Hood Eat the Wolf?" This travelling show was first designed in Zagreb, and afterwards moved into Risnjak National Park and Ogulin.

In order to enhance the knowledge of wolves, the former Ministry of Environmental Protection and Physical Planning and the Faculty of Veterinary Science in Zagreb have organised a series of lectures on the wolf, delivered by Josip Kusak, D.Sc., in schools and through seminars for biology teachers.

In the framework of the LIFE project lectures on the wolf are being held in primary and secondary schools in the area of Gorski kotar, Lika and Dalmatia. By end of April 2004 seventeen of such lectures were held; all were positively received by children and teachers. It has been proposed to include such lectures into the regular school curricula. NGO "Croatian Association for Wolf Protection" from Zadar also joined the organisation of the lectures.

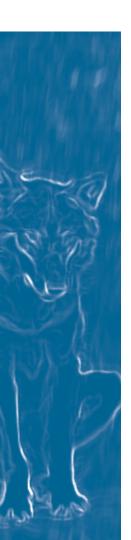




Figure 85.
The exhibition in the Croatian Natural History Museum entitled "The Wolf or Has the Red Riding Hood Swallowed the Wolf?" (1994)
(D. Huber)



An educational brochure with basic information on wolf biology, human attitudes towards this species, status of the wolf population in Croatia and the importance of wolf conservation, was printed, and a poster is in preparation as well. Within the project, a brochure for kindergarten and young school children will be prepared, as well as a number of other activities that will bring the general information on wolf closer to the young generations.



Figure 86. Lecture on wolves in a primary school (N. Skroza)

In the area of public information, the project team maintains regular verbal contacts with journalists, organises press-conferences, and prepares detailed information on the chalanges of wolf conservation in Croatia. Some of this information can be found on the official web-pages of the project (*www.life-vuk.hr*). A project bulletin was published as well with information about project implementation.



The 1950s were especially marked by intensive wolf elimination actions. The Forestry Division of the Economic

Council of the Government of the National Republic of Croatia of that time also had a unit called the Statelevel Headquarters for Organised Wolf Elimination.

With time, wolf elimination was no longer actively promoted, which testifies of the changing, more positive attitudes toward this animal. On the occasion of Earth Day 1994, the Croatian Postal Service issued a stamp featuring a picture of wolf.

The next milestone that has made a strong impact on human attitudes toward wolves in Croatia was the full absolute legal protection of the species introduced in 1995, which was achieved relatively quickly and simply. The initiative for full protection was started and lead by a small group of scientists and wolf enthusiasts, without any major opposition by the public or interest groups.



Upon putting into effect the full legal protection, two interest groups - livestock breeders and hunters - have become louder in expressing their dissatisfaction with the strict protection status, reminding people of the big damages done by wolves on livestock and the negative impact on game. In that connection, the Croatian Hunting Association (CHA) publicly announced its official standpoint in the Hunters Journal (Lovački vjesnik) in 2001. CHA suggested that the wolf remain under special protection in the entire Croatian territory, but with modified intensity in certain parts of the country; that compensations should still be paid for damage done to domestic animals, and damage prevented through spreading of the native breed of guarding dogs; that in places of frequent damage unpunishable elimination of an individual wolf or a pack be allowed, for reasons of preventing significant economic damage or threats to human health (rabies!); that wolf be integrated into hunting management documents in the areas of large forest complexes in Lika, Primorje and Gorski kotar, as a permanently present specially protected species, and that hunting ground value assessments take into consideration wolf's impact on big game populations and the possibilities for isolation, in line with the population status and habitat types and capacities; that areas in Croatia north from the Sava River may not be considered natural habitats of wolf and that certain isolated parts be measured according to the rules of the International Hunting and Game Protection Council, for this would be an important stimulus to the hunters to perform legal kills, and provide a possibility of comparison with the known national and international data.

Attitudes survey

The first human dimension research on public attitudes toward wolves in Croatia began in 1999, within which newspaper articles on wolves from the periods before and after enactment of their legal protection were analysed. The analysis illustrated that articles before the formal legal protection were far more positive towards wolves than those published afterwards. This lead to a conclusion that public attitudes toward wolves may have become more negative due to the protection status. (Bath & Majić, 2000). The study with all research results is available online at www.large-carnivores-lcie.org.

Figure 88.
The first survey on local population attitude about the wolves
(A. Majić-Skrbinšek)





Within the same project detailed survey was implemented to document on the attitudes of the public and various interest groups in the territories where wolves constantly dwell today (Gorski kotar, Lika and Dalmatia). The study used a random sample of the public, hunters, foresters and high-school students (future decision-makers). The sampling ensured reliability of results, with permissible error of +/-5%.

Results documented a generally positive public attitude toward wolves. Looking geographically, the most positive attitudes were expressed by the inhabitants of Gorski kotar, followed by those of Lika, while people from Dalmatia were the least positive.

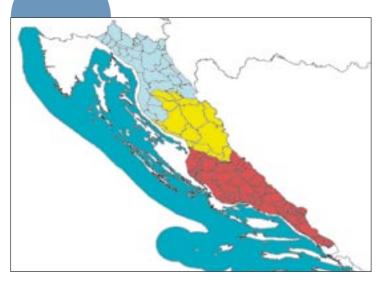
Among the various interest groups, the most positive were high school students, followed by foresters, hunters, with representatives of the broad public at the very end of the scale.

A second survey was carried out in scope of the LIFE project in order to register possible changes of attitudes, thus constituting the first step towards systematic monitoring of attitudes toward wolves in Croatia. The methodology applied was the same as in the previous research, aiming to obtain directly comparable results.

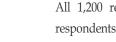
The questionnaire contained 82 questions that included the following topics:

- Viewpoints on wolves in general
- Attitudes on various topics related to wolf management (damage done by wolf on domestic animals, wolf population in Croatia, its protection, etc.)
- Fear of wolves
- Knowledge of biology and of the wolf condition in Croatia
- Experience of respondents with wolves
- Demographic data on the respondent (sex, age, education)

Figure 89. For the purposes of the survey on attitudes toward wolves, the area of wolf range in Croatia was divided into three zones. Blue zone includes broader Gorski kotar area, yellow represents Lika, and Dalmatia is in red.



All 1,200 responses were obtained through personal contact and quantitatives interviews at the respondents' residence. On average, one interviewer completed around 12 interviews a day, data





collection took approximately 99 days in total. Interviews were carried out in more than 360 settlements in the regions of Gorski kotar, Lika and Dalmatia. More than 80% of those individuals contacted at random agreed to be interviewed.

As one of the most important interest stakeholder groups, the viewpoints of which need to be carefully analysed and taken into consideration when making decisions on wolf management in Croatia, the livestock breeders have been a special focus of the research. Regional coordinators in Šibenik, for the territory of Dalmatia and in Gospić, for the territories of Lika and Gorski kotar, have contacted sheep-breeders and goat-breeders in person, and even offered assistance in filling out the questionnaire. 82 livestock breeders completed the questionnaire.

Besides listening to those residents from the wolf-dwelling territories of Croatia, the opinions of inhabitants in urban territories (more precisely in Zagreb) were included also. The questionnaires with a return address and pre-paid postage were mailed to thousands of addresses in Zagreb, selected at random from the phonebook, and 219 of them were returned completed and ready for analysis. The detailed results of this sample can be found in the study by Majić & Bath (2004).

Analysis of the results of the questionnaires filled in by the representatives of the public in the territories where wolves dwell has shown that the viewpoints on wolves in Croatia are still relatively positive. Although the majority of residents consider that their opinions on wolves haven't changed in the last few years, a shift towards more positive and neutral viewpoints compared to the 1999 data is noticeable. For instance, for the question "Which of the following option best describes your attitude toward wolves? (Figure 90), the percentage of respondents who have chosen the answers "I strongly dislike" or "I dislike" has decreased in Dalmatia from 62% to around 50%, in Lika from 47% to 37%, and in Gorski kotar from 37% to 21%.

Attitudes toward wolves are still the most positive in Gorski kotar, and the least positive in Dalmatia. This fact can be explained by a very high rate of discontent of the residents of Dalmatia because of damage done by wolves, and the belief that wolves unnaturally inhabited this territory in the period after the Homeland war.

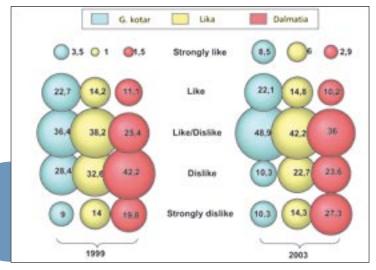


Figure 90. Results of Human Dimension Research in 1999 and 2003. Values are expressed in percentages.



The knowledge of biology and of the status of wolves in Croatia remained at the same level marked in Dalmatia for 1999, while the knowledge of wolves in Lika and Gorski kotar is statistically considerably worse than four years ago. The best experts in wolves are the inhabitants of Dalmatinska zagora region, while the inhabitants of Gorski kotar know the least about wolves. It is interesting that, contrary to expectations, the respondents that have the best knowledge on the biology of wolves and their status in Croatia have shown the least positive attitude on these animals.

Table 22. Some results of the survey on public attitudes to wolves made in 2003

Whic	h of the followir	ng options bes	t describes you	r attitude to wolves?				
A = = = = = (0/)		Livestock breeders						
Answers (%)	Gorski kotar (N=406)	Lika (N=384)	Dalmatia (N=382)	Zagreb (N=219)	(N=82)			
Strongly against	10.3	14.3	27.3	1.4	13.6			
Against	10.3	22.7	23.6	2.8	11.1			
Neither against nor in favour	48.9	42.2	36	32.7	56.8			
In favour	22.1	14.8	10.2	42.1	12.3			
Completely in favour	8.5	6	2.9	21	6.2			
	Wolves	in Croatia sho	ould be fully pro	tected				
Anguera (0/)		Livestock breeders						
Answers (%)	Gorski kotar (N=406)	Lika (N=384)	Dalmatia (N=382)	Zagreb (N=219)	(N=82)			
I strongly disagree	6.2	8.6	7.9	2.3	10			
I disagree	32.8	40.7	46.6	15.2	36.3			
I am neutral	15.9	15.1	17.3	12	13.8			
l agree	31.8	31.6	25.9	39.2	30			
I strongly agree	13.2	3.9	2.4	31.3	10			
	Wolves in	nflict big dama	ige to domestic	animals				
Answers (%)		Livestock breeders						
Alisweis (70)	Gorski kotar (N=406)	Lika (N=384)	Dalmatia (N=382)	Zagreb (N=219)	(N=82)			
I strongly disagree	6	1	0.3	2.8	3.7			
I disagree	30.3	16.7	7.1	30.4	12.2			
I am neutral	18.5	9.9	8.1	27.6	15.9			
l agree	35.5	53.5	62.8	31.3	43.9			
I strongly agree	9.8	18.8	21.7	7.8	24.4			
I support the increase of the wolf population in Croatia								
Answers (%)		Livestock breeders						
- Allowella (70)	Gorski kotar (N=406)	Lika (N=384)	Dalmatia (N=382)	Zagreb (N=219)	(N=82)			
I strongly disagree	8.8	14.4	14.7	2.3	17.3			
I disagree	35.8	49.9	53.7	12.3	32.1			
I am neutral	24.8	19.1	16.8	27.4	30.9			
l agree	25.8	17.8	13.7	45.2	14.8			
I strongly agree	5	1.8	1.1	12.8	4.9			



Table 22 presents answers to some of the key questions from the questionnaire per target groups. It illustrates that respondents from urban areas were most positive. Namely, over 63% of respondents from the City of Zagreb thought of themselves as being in favour or completely in favour of wolves. Next are the inhabitants of Gorski kotar (30.6% in favour), whereas inhabitants of the traditionally sheep farming areas (Lika and Dalmatia) mostly saw themselves as against the wolf (37% in Lika and 50.9% in Dalmatia). It might be important to notice that most respondents from the livestock breeders group from Lika and Dalmatia thought of themselves as being neutral (56.8% neither in favour, nor against). Knowing that the sheep and goat owners chosen by random sampling in the same areas had the most negative attitudes toward wolves, it may be argued that the results for livestock breeders probably do not reflect the true state of affairs. There are two possible explanations - either only the positively oriented livestock breeders were willing to take part in the survey, or the respondents were hiding their true feelings because they thought that the interviewer (ministry employee, which has all the relevant data on the respondent) wouldn't find their attitudes acceptable. A similar situation is seen also in the replies to the other questions, therefore caution is needed when analysing and interpreting results collected by this method.

Most respondents from the areas inhabited by wolves do not approve of the full protection of wolves in Croatia, while respondents from Zagreb approve of it by vast majority (70.5%). Blaming wolves for most damages done to domestic animals mainly originated from the inhabitants of sheep breeding areas, where such damage occurs (72.3% in Lika and even 84.5% in Dalmatia). In Zagreb as an urban area and in Gorski kotar respondents were hesitant regarding damage to domestic animals. Respondents from Lika and Dalmatia are against increasing the wolf population, respondents from Gorski kotar remain indecisive, while respondents from Zagreb would like to see more wolves in Croatia.

Communication and cooperation among interest groups

The wolf is today undoubtedly one of the most controversial wild animals in Croatia, and as such triggers strong feelings, both negative and positive. Traditionally livestock breeders and hunters were the two most interested groups in this issue - livestock breeders because of the damage done to their stock, and hunters because of the impact of wolves on the hunting game, but also because of the challenging wolf hunt that is attractive to them. Both these groups usually complemented each other's activities and attitudes to wolves, and there were no conflicts between them.

Recently certain new groups of stakeholders appeared on the scene – biologists and the so-called "environmentalists". Values and interests of these two groups regarding wolves are partially different from the traditional livestock breeders' and hunters' attitudes. Additionally, no necessary communication or cooperation channels were developed between the "new" and the "old" stakeholder groups, so they were forming pictures of each other based on frequently unobjective media reports, which resulted in the creation of mistrust and conflicts between the groups. It can be said that the conflicts reached the climax after introduction of the strict protection status for wolves in 1995, without consulting livestock breeders or hunters.

One of the key objectives of this management plan is exactly the establishment of communication and cooperation between these stakeholder groups, and the methodology of the plan development has been



adapted to this, as well as the future decision-making processes related to wolf management in Croatia. In that regard, all interests are important and need to be respected and involved.

Legal framework

International agreements governing the wolf conservation issues



• Convention on Biological Diversity, (NN: International Treaties # 6/96)



Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)
 (NN: International Treaties # 3/00)



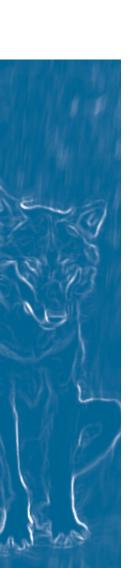
 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (NN: International Treaties # 12/99)



- Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) (92/43/EEC)
- Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein

The Republic of Croatia is signatory to all relevant international agreements in the field of nature protection, this being yet another way of joining the international community in the global nature conservation efforts. One of the framework agreements is the Convention on Biological Diversity, ratified by Croatia in April 1996, committing itself to preservation and enhancement of the existing biological diversity and sustainable use of its components.

Croatia ratified the Convention on the Protection of European Wildlife and Natural Habitats (Bern Convention) in 2000. This agreement sets all the measures to be taken by European countries to protect wildlife, especially the species listed in its Annexes, including the protection of their habitats. The wolf (Canis lupus) is listed in Annex II to the Bern Convention, i.e. in the list of strictly protected species whose exploitation, disturbance and habitat endangerment is prohibited. In special cases, the Bern Convention allows for exceptions from this rule when there is no other acceptable solution and providing that the exception would not be fatal for survival of the population in question. Such exceptions are granted only in well justified cases of protecting flora and fauna; preventing serious damage of crops, livestock, forests, fishponds, water and other property; in the interest of public health and safety, aircraft safety and other prevailing public interest, and for the purposes of research and education, repopulation, reintroduction and necessary reproduction. Further, exceptions can be granted only under strict supervision, on a selective basis, and with limited extraction, keeping and other wise use of certain wildlife species in small quantities. In such cases, the party in question is obliged to submit detailed biannual reports to the Standing Committee of the Bern Convention on the exceptions applied. In order to ensure protection of wolf habitats, parties to the Convention are obliged to include their areas of occupancy into the network of Areas of Special Conservation Interest (ASCI), the so-called Emerald Network. In such areas it is obligatory to implement protection measures and apply management methods aimed at preservation of their natural values. The Bern Convention adopted the Action plan for the conservation of wolves (Canis lupus) in Europe, developed by the Large Carnivore Initiative for Europe (LCIE), which has also listed recommendations for the action plan for the conservation of wolves in Croatia. 76





The Republic of Croatia is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which obliges the parties to control the international trade in endangered species through a system of issuing import and export permits and certificates. Wolf is listed in the Annex II of CITES, meaning that it is a potentially threatened species, and that the related international trade must be strictly controlled.

The Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, 92/43/EEC, is one of the basic regulations governing nature protection in the EU member states. The European Union members are obliged to integrate the provisions of this Directive into their domestic legislation, and the respective legal harmonisation is expected also from Croatia in the process of EU accession. The wolf is listed under Annex II of the Directive, dealing with plant and animal species of interest for the European Community, the preservation of which requires proclamation of Special Areas of Conservation (SAC) as parts of the Natura 2000 ecological network (with the exception of its populations in Spain, north from the Duero River, populations in Greece north of 39th parallel, and populations in Finland), and Annex IV, which includes animal and plant species of interest for the European Community in need of strict protection, with the exception of the above mentioned populations.

The Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, regulates the trade in protected animal and plant species within the European Union, and presents the legal basis for the implementation of CITES Convention in the EU territory. The wolf is listed in Annex A to this Regulation, which includes species that are threatened, extinct or rare, so any form of international trade in such species would endanger their survival.

The European Parliament approved on 24 January 1989 the Resolution (Doc. A2-0377/88, Ser.A) calling upon urgent action of European countries for wolf conservation, adopted the Wolf Conservation Manifest, and appealed to the European Commission to support wolf conservation efforts.

As a signatory to the above mentioned agreements, our country is obliged to undertake all appropriate and necessary legal and administrative measures, at local, regional, national and international levels, in order to ensure protection of wolf and its natural habitat, and also to provide conditions for maintaining its stable population which is also a genetic reservoir/tank and potential source for reintroduction of the species into other European countries wherefrom its populations have disappeared.

National regulations and documents governing the wolf conservation issues

- Nature Protection Law (NN # 162/03),
- Rule Book on the Protection of Certain Mammalian Species (Mammalian) (NN # 31/95),
- Rule Book on Compensation Fees for Damage Caused by Unlawful Actions on Protected Animal Species (NN # 84/96),
- Law on Hunting (NN # 10/94, 29/99, 14/01),
- Animal Welfare Law (NN # 19/99),
- Veterinary Science Law (NN # 70/97, 105/01, 172/03),
- Rule book on Dog Marking (NN#162/03)



- Rule book on treatment of animal carcasses and waste of animal origin and its destruction (NN#24/03)
- Livestock Breeding Law (NN #70/97, 36/98),
- Law on State Subsidies in Agriculture, Fisheries and Livestock Breeding (NN #87/02),
- Biological and Landscape Diversity Strategy with Action Plans for the Republic of Croatia NSAP (NN # 81/99)

Nature protection regulations

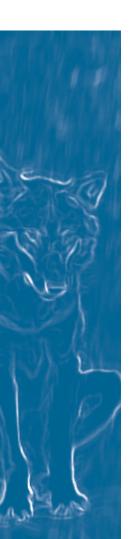
According to the Nature Protection Law of 1994, based on the provisions of the Rule Book on the Protection of Certain Mammalian Species (*Mammalia*) (NN # 31/95), wolf is a protected species, which means that any disturbance of the animal in its natural life and development, hiding, sale, purchase, stealing or any other form of acquisition, including taxidermy, is prohibited. It is also prohibited to export, carry over the state border, or import protected species. Exceptionally, these actions are justified when done for scientific research purposes, with prior permission by the competent Ministry. Pursuant to the Rule Book on Compensation Fees for Damage Caused by Unlawful Actions on Protected Animal Species, penalty for killing a wolf is a HRK 40,000 fine.

In October 2003 a new Nature Protection Law was adopted, which has integrated all the obligations of the Republic of Croatia towards international agreements where Croatia is a party or a signatory. The new Law anticipates 2 categories of protected species, according to the Bern Convention model – (i) strictly protected species, whose protection regime is equal to the protection regime as per the 1994 law, with possibility of exceptional interventions under the conditions and in the ways defined by the Bern Convention; (ii) the second category includes protected species, i.e. those that may be used, with certain protection or control measures involved (e.g. game). The State Institute for Nature Protection is currently conducting a review of species and their categorisation.

The Law anticipates the Republic of Croatia as a promoter and supporter of scientific research in the field of nature protection. Protected species research actions require permission by the competent ministry.

The Law also prescribes that nature protection requirements need to be issued by the competent government authority in the process of natural resource management plans development. These requirements are defined on the basis of expert thematic papers developed by the State Institute for Nature Protection. If the manner or scope of the natural resources use immediately endangers the favourable state of a species or a habitat type, the minister in charge may restrict or temporarily suspend the use until the threats have been removed, with the consent of the minister in charge of managing the natural resource in question. In an event of such restrictions being imposed, owners and authorised persons are entitled to compensation proportionate to the loss of income. The compensation amount is defined by mutual agreement.

Finally, in accordance with the corresponding regulations of the European Union, the law defines special ecologically important areas, which include habitats of species threatened at national or at the European level. Protection of these areas is ensured by enforcement of prescribed nature protection measures and requirements.





Compensation for damage caused by a strictly protected animal species

By virtue of Article 200, a legal or natural person that is likely to suffer economic or other damage by a strictly protected species, is obliged to undertake all appropriate and permitted measures and actions, at their own cost, in order to prevent damage from occurring. The actions should be prescribed by a ministerial regulation. The damaged party may also request that the competent ministry undertake the prescribed actions, with cost sharing agreed by both parties. If the damaged party has previously undertaken all prescribed actions and measures, they are entitled to compensation. Damage compensation is based on the assessment of damage by certified experts, the list of which is published in the official gazette of the Republic of Croatia, "Narodne novine". Guidelines for the procedure of damage assessment caused by a protected animal (predator) have been enacted by a ministerial regulation. The Guidelines contain detailed procedures in the process of assessing damage caused by

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Figure 91. Title page of an investigation report

a protected animal, especially regarding actions to be taken by

the damaged party, inspection procedure, and actions of the expert. It is important to know that damage compensation is paid on the basis of an inspection carried out by a certified expert, i.e. submission of the inspection record form. According to the new law, the damage assessment procedure will be prescribed by a ministerial regulation.



Figure 92.
Investigation conducted
by appointed damage
assessment experts (A.
Štrbenac)



Other relevant regulations

Additionally to the Nature Protection Law, there is a line of other regulations directly or indirectly affecting wolf conservation in Croatia.

The Law on Hunting regulates breeding, protection, hunting and use of game and its parts. Hunting management basis (HMB) constitutes a detailed planning document that regulates management of game and hunting grounds for a certain period, in accordance with habitat capacity and the state and populations of the game being managed. The HMB content, development methods and the procedure of enactment of the hunting management basis, game management and protection programmes in areas outside the designated hunting grounds are prescribed by separate rulebooks, which address the following issues:

- a) determining animal species populations
- b) overview of types and populations of game and animal species
- c) management of animal species
- d) management of (other, auth. note) animal species that includes measures for their maintenance and preservation.

HMB enforcement service monitors the state of predators and other animal species and implements preventive sanitary measures in the hunting grounds aimed at game and other animals' health protection.

The law requires, inter alia, for the obligatory harmonisation of the hunting management basis and the game protection programme with the ratified international agreements in the fields of hunting, protection of nature and natural game habitats, as well as the Nature Protection Law.

Among domestic regulations governing animal protection issues, there is the Animal Welfare Law, in the competence of the Ministry of Agriculture, Forestry and Water Management. The Animal Welfare Law anticipates taking into account animal welfare during keeping, shelter, feeding, protection, and overall treatment of animals.

For the purpose of this law, "animals" mean vertebrates: fish, birds and mammals.

The owner of an animal, depending on its type and specific needs, is obliged to feed, water, look after, provide shelter and secure proper healthcare for the animal.

The owner of an animal may not:

- 1. abandon pets or other animals kept under human control,
- 2. expose a raised or cultivated wild animal to the wild or settle it in the wild, unless prepared for survival in such environment.

Animals protected by virtue of the Nature Protection Law, wild animals and animal species and breeds that are dangerous for humans, may not be kept as pets and are subject to a special regulation. The list of such animals is enacted by a ministerial regulation, upon consent of the state authority in charge of nature and environmental protection.

Actions by which entire populations of, or individual wild animals in nature are exposed to torture or lengthy deprivation from satisfying physiological needs (feeding, watering, reproduction) by various





interventions, such as blocking the access to water, destruction of a habitat or its parts, introduction of alien animal species into the habitat, capturing live animals or putting them to death through suffering, unless exceptionally justified by scientific research and for the purpose of helping a population, and other interventions inflicting harm to the animals, are prohibited.

Public institutions managing protected parts of nature, as well as concessionaires on hunting grounds, must ensure all necessary conditions for biological survival of natural populations of wild animals in natural habitats in accordance with ecological balance, restoration of existing or expected habitat disturbances, as well as veterinary healthcare.

A penalty of HRK 5,000.00-10,000.00 is to be imposed on a legal or natural person should they keep animals protected by virtue of the Nature Protection Law and wild animals as pets. A penalty of HRK 2,500.00-5,000.00 is anticipated for persons treating the animals and wild animals in ways contrary to provisions of this Law.

The law also regulates protection of abandoned and lost animals.

Abandoned and lost animals are caught by the municipal health utility staff in the way that is least harmful for the animals, and transported into animal shelters. When a wild animal is found, the health utility or the animal shelter is obliged to submit to the nearest hunting society a request for its return into the wild if possible; otherwise, the animal should be handed over to the nearest properly equipped zoological garden. In case that the zoological garden is unable to receive the animal, it should be put to death. In case of finding a specially protected wild animal, the authority in charge of nature and environmental protection should be notified, which than decides on further procedure. Municipalities, towns, counties and the City of Zagreb are obliged to take care of the proper management of abandoned and lost animals and encourage establishment of shelters and health utilities.

The Veterinary Science Law regulates animal health protection. Among others, provisions of this law anticipate obligatory marking of bovine livestock, sheep, goat, pigs and horses, carried out by certified veterinary stations and surgeries, and keeping the records thereof. Costs of animal marking are to be borne by the owner. Dogs also require proper markings, and the owner needs to possess a prescribed registration and rabies vaccination certificates. Dogs are entered into the central canine register, which is divided into epizootic sectors according to the area of competence of separate veterinary medicine stations. Conditions and requirements for dog keeping, treatment of unregistered dogs, as well as with abandoned and lost animals, should be prescribed by the municipal or town assembly in line with the Animal Welfare Law provisions.

The Division for Veterinary Science of the Ministry of Agriculture, Forestry and Water Management adopted a *Rule book on dog marking*. It prescribes a mode of dog marking, a form of obligatory mark and contents of dog register. All dogs must be marked by microchips (all pups born after 1 October 2003) or mark (all pups born before 1 October 2003). Owners can also mark dogs by microchips although they are subject to marking by special marks. All marked dogs will be registered in a central database within the Ministry of Agriculture, Forestry and Water Management. This regulation would enable uniformity in marking, thereby also facilitating identification of owners of the lost and abandoned animals.

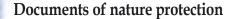


Utilisation and harmless removal of carcasses and animal products, confiscates, inedible by-products of slaughtering and hatchery wastes is regulating by a *Rule book on treatment of animal carcasses and waste of animal origin and its destruction*. Designation or construction of utilisation facilities for management of carcasses, animal products originating from animals with contagious diseases, and hatchery wastes has been foreseen, and in certain cases it is allowed to perform harmless removal by destruction or incineration in specially designated facilities (livestock cemeteries, pits and incineration plants). Utilisation and harmless removal is subject to a fee prescribed by a ministerial regulation. Control of facilities, sites and resources is performed by the veterinary inspection.

The Livestock Breeding Law regulates a number of issues related to raising domestic animals, including breeding and production of animals used for further reproduction. Production of reproduction animals is carried out according to defined breeding programmes, in which target animals need to be permanently marked and recorded in the central parent head register. The Croatian Livestock Selection Centre maintains the register of breeders of reproduction animals. Protection of native and protected species and breeds is carried out under special programmes. Funds for the protection of necessary quantities of domestic animal reproduction heads, and of genetic material of certain native and protected breeds are regularly secured through the State Budget.

The Law on State Subsidies in Agriculture, Fisheries and Livestock Breeding regulates types and amounts of financial incentives and charges, areas in which certain incentives can be granted in larger amounts (strategic areas), beneficiaries and methods for securing and using of these funds. Funds used for such subsidies are secured through the State Budget. Eligible beneficiaries of subsidies are legal and natural persons performing agricultural and fishing activities, and implementing selective breeding measures in livestock management and dairy health protection, living or headquartered in the territory of the Republic of Croatia, i.e. providers of goods or services in the Croatian market. A subsidy can be granted for 26 types of activity, including: 1. production of cow's milk (HRK 0.55 per litre, strategic areas HRK 0.90), goat and sheep milk (HRK 1.00 per litre, strategic areas HRK 1.50); 2. raising of breeding bulls (HRK 1,480.00 per head, strategic areas HRK 2,000.00), pigs, sheep and goat (HRK 450.00 per head, strategic areas HRK 650.00), horses (HRK 1,850.00 per head, strategic areas HRK 2,500.00), rabbits, poultry and selected queenbees; 3. keeping of reproduction heads of native and protected breeds: bovine - Istrian ox, Slavonian podolian cattle (HRK 2,000.00 to 5,500.00 per head), sheep - ruda of Dubrovnik, Istrian sheep, tzigai sheep (HRK 150.00 to 400.00 per head); 4. keeping seed-stock herds of bovine (HRK 300.00 to 800.00 per head), sheep and goat (HRK 75.00 per head) in a strategic area defined by virtue of this law. Administrative enforcement of this law and its by-laws is in the competence of the Ministry.





The Croatian State Parliament in June 1999 approved the Biological and Landscape Diversity Strategy with Action Plans for the Republic of Croatia - NSAP (NN # 81/99) that, among others, states the obligation of developing action plans for the protection of threatened species. One of the priorities of this Strategy was the need to develop an action plan for the conservation and management of wolves in Croatia. NSAP also lists a number of action plans referring to the protection through other sectors. For instance, NSAP anticipates an action plan for incorporation of biodiversity protection measures into the hunting sector activity.

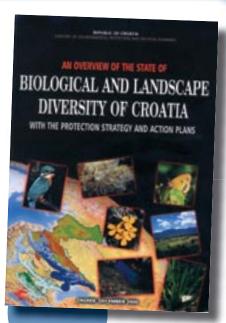


Figure 93.

National Strategy and Action Plan for the Protection of Biological and Landscape Diversity is the fundamental nature conservation document

ACTION PLAN FOR THE CONSERVATION OF WOOVES IN EUROPE (CAMS LURUS)

Figure 94.

The Action
Plan for Wolf

Europe

Conservation in

Recommendations for the action plan for conservation of wolves in Croatia

The Large Carnivore Initiative for Europe was founded in 1995 with the aim to solve the problems of large carnivore protection or rather conservation of large carnivore populations (the brown bear, the wolf, wolverine, the Eurasian lynx and the Iberian lynx) in coexistence with humans. This group prepared action plans for conservation of large carnivores approved by the Council of Europe at the meeting of the Standing Committee of the Bern Convention held in November 2000. One of these plans was also the "Action Plan for the Conservation of Wolves in Europe". In its Recommendation No. 74 (2000) the Council of Europe urges national authorities to incorporate recommendations of the Action Plan for Conservation of Wolves in Europe into their national plans for the management of this species.

The following items were recommended to Croatia:

- 1.1 The Bern Convention adopts this Action Plan and the Country participates in establishing a Group of Experts on Wolf Management.
- 1.2 The Group of Experts produces a detailed European Wolf Management Plan and submits the Plan to be approved by the Bern Convention.



- 2.1 The Group of Experts identifies at large scale all areas of Europe where wolves or their potential wild prey are still present with viable populations.
- 2.2 The Group of Experts identifies all current and potential connection areas. Through this process, wolf recovery and management will be linked to the overall planning for the restoration of European ecosystems.
- 2.3 Each area (or group of areas at regional, national or sub-national level) is provided with a detailed Management Plan (National or Regional) drafted by national authorities in co-ordination with neighbouring countries.
- 2.4 The national and local public is involved in the process of area identification and drafting of the preliminary Management Plans.
- 2.5 The final European Wolf Management Plan, composed by all national and/or regional Plans is submitted to the Bern Convention for approval, and national legislation is adjusted accordingly.
- 3.1 Design a national PR campaign with the aim of informing the public opinion and making the wolf a political issue.
- 3.2 Prepare a document on the ways the Country and the EU are implementing the international laws and directives they have signed.
- 3.3 Organise logistics and funding for national and international networks of government and NGO representatives on wolf management issues.
- 3.4 Ask the European Union to review and correct the economic incentives policies to shepherds in areas with wolves.
- 4.1 Identify and establish national wolf management groups and empower them to design the national wolf management plan.
- 4.2 Co-ordinate the work at national level with that of the international Group of Experts established by the Bern Convention.
- 5.2 Evaluate the status of the food supply for the wolf in various regions and identify the needs for specific actions.
- 5.3 Evaluate the presence and impact of existing and planned infrastructure in zones where the wolf is present or recovering.
- 6.1 Assess the status of all recovering and small populations, including counting or monitoring wolf abundance, identifying wolf habitat quality and quantity (i.e., prey distribution and abundance).
- 6.2 Identify and manage source populations to ensure their continued existence.
- 6.3 Assess the attitudes of humans in wolf recovery areas.
- 7.1 Assess the feasibility and desirability of the management approach of removing selected problem wolves
- 7.2 Assess and manage the problem of feral and stray dogs, and the existing legislation to control them.
- 7.3 Prepare a census of existing facilities with captive wolves.
- 7.4 Assess the genetic identity of local wolves.
- 7.5 Review and correct the economic incentives policies to shepherds in areas with wolves.
- 7.6 Establish a sound scientific programme for assessing and implementing the optimal use of large guarding dogs.









- 7.7 Establish a permanent monitoring programme for damages caused by wolves and other predators.
- 7.8 Define the most suitable compensation scheme for each national/regional group of wolf areas.
- 8.1 Assess the quality of wolf hunting in its biological and social perspectives.
- 8.4 Establish strong and credible fines for illegal hunting of wolves and enforce them.
- 8.5 Implement more research on the impact wolves and hunters have on local prey.
- 9.1 Assess the feasibility for an economic exploitation of the wolf.
- 10.1 Identify opinion leaders and stakeholders in wolf management; set up local management boards and involve them in management planning and implementation.
- 10.2 Establish a permanent protocol of consultations with local people about the management actions to be implemented in their area.
- 11.1 Identify the need/desirability of an educational campaign at local or national level.
- 11.2 Design and implement an educational and information programme.
- 11.3 Design and implement a press campaign.
- 11.4 Identify and empower credible wolf managers to represent the case of the wolf in front of the public and the press.
- 12.1 Co-ordinate a programme of scientific research at European level, distributing research topics along with local priority.
- 12.2 Contribute to maintaining a close link among all researchers working on the wolf in Europe.
- 12.3 Contribute to the regular gathering of all necessary data to monitor the management and biological conditions of the wolf in all European countries.

Protected areas

It is impossible to say that areas outside the boundaries of protected areas (national and nature parks) are not entitled to protection; protection of such areas is based on physical plans of various levels, forest management documents, Law on Agricultural Land, Hunting Law, etc. In these areas, economic priorities prevail, respecting environmental concerns to the highest extent possible.

Viewing from the aspect of managing the wolf population in Croatia, within boundaries of a national park – where priority is given to the protection of the entire territory, the fundamental natural phenomenon, flora and fauna – there is almost absolute protection and, in principle, tourism is the only economic activity that can exist there in its entirety.

Concerning Croatian national parks, wolf can be found regularly in the following: Risnjak, Plitvice Lakes, Northern Velebit, Paklenica, and Krka, making up the total area of approximately 669 km².

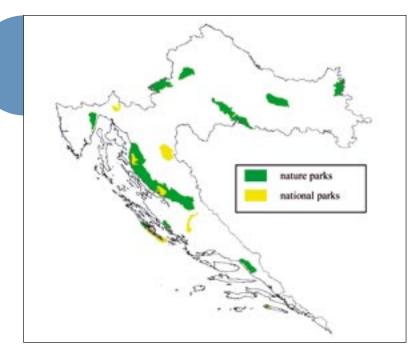
Nature park is defined as an area under the influence of constant human presence and impact on natural environment, which has not resulted in destruction or depreciation of natural resource values, but has been preserved by sustainable use in its specific landscape and biological diversity. As a rule, these are much larger territories than those covered by national parks.



Possibilities for the wolf population survival and management are realistic in the following nature parks: Velebit with 200,000 ha, and Biokovo with 19,000 ha. Wolves have been said to occasionally appear in the Žumberak-Samoborsko gorje Nature Park, Učka Nature Park and probably also in the Lonjsko polje Nature Park.

Hunting activity in the mentioned nature parks is carried out in an organised manner, through leaseholds or concessions on hunting grounds, with hunting management documents focusing on economically more important game types, while other animal species that (might) affect the hunting management are only briefly mentioned.

Figure 95. Map of protected areas in Croatia



Law enforcement

Illegal killing of wolves occurs despite their legal protection. No accurate data is available, because no one would willingly report such acts. Perpetrators have been found out only for two cases of killing. The first such case happened in January 1996, when hunters of the Perković hunting unit killed 5 wolves, but went unpunished until today. Another case was the one in hunting ground in Dragonožec near Zagreb. After the offence process the perpetrator was found guilty.

Other cases of illegal kills can only be left to speculation, although some prominent hunters claim the unwritten rule that every wolf has to be killed. Most hunters do accept that illegal killing is an issue that must be addressed. Not as much perhaps on biological ground as for establishing better trust and credibility with other interest groups, illegal killings need to be reduced. The agreement to allow some wolves to be killed annually is dependent upon illegal killing being reduced and eventually eliminated. Further, in Dalmatinska zagora there are frequent cases of poisoning, which often kills dogs and other animals.





The only section of legislation that is regularly enforced is the compensation for damages caused by a protected species. Damage assessment is carried out by certified experts - 13 for the Counties of Karlovac, Primorje-Gorski kotar, Lika-Senj, Zadar, Šibenik-Knin, Split-Dalmatia, and Dubrovnik-Neretva. Four seminars have been held to train the experts (Crni Lug 1995, Vodice 1997, Velebno 1999, Risnjak 2003), and the brochure "Who did it?" was printed as a guideline for identifying damage perpetrators.

Condition and status of wolf populations in neighbouring countries

Bosnia and Herzegovina

The wolf population is stable, not threatened, and it is estimated at 600-700 individuals. During regular monitoring periods, the average annual kill amounted to approximately 200 individuals. There are no natural or artificial barriers for the movement of wolves, therefore no isolated populations. Forest covers 48% of the country territory, and the area of permanent wolf range is known to be 2/3 of the territory. The wolf population is connected to the populations in Montenegro and Serbia towards the southeast, and those in Croatia all along the border south of the Sava River. There is a lack of natural prey. Damage to livestock is rather large, but the exact amount cannot be established, because damage is not reported and there is no compensation system in place. No public campaigns have occurred, nor would they be feasible in the current situation.

The wolf is not protected by any piece of legislation, with the exception of the Hunting Law calling for the protection of each species. Prizes for killing wolves were abolished in 1986. The wolf however is recognised as having a sanitary role in the ecosystem. The country is not yet a party to the Bern Convention, and there is no expert group for monitoring the wolf population. International cooperation does not exist in an organised manner, apart from occasional individual cooperation.

Slovenia

Since the establishment of a legal protection framework in 1993, the wolf population has been spreading geographically and in creasing in numbers. Estimates of the wolf population vary, and most probably there are at least 50 individuals. The population is concentrated along the southern border with Croatia in the length of 232 km, out of which there is constant wolf presence in 112 km, and occasional in the remaining 120 km (Table 23, Figure 96). Westward and northward there are anthropogenic barriers for the wolf to spread, although some individuals do manage to penetrate quite deep into that space. It is important that there is no possibility of connecting with other wolves in that direction, because there are no wolves in Austria or northeastern parts of Italy. Therefore the wolf population in Slovenia and its survival depends exclusively on its population in Croatia.



Table 23. Length of state border (km) between Croatia and Slovenia with permanent or occasional presence of wolf, bear and/or lynx

	Wolf	Bear	Lynx
Permanent presence	112	131	112
Occasional presence	120	196	120

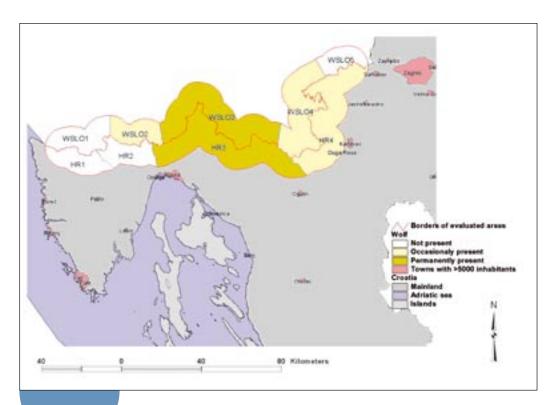


Figure 96. Border area between Croatia and Slovenia (10 km wide zone), showing presence of wolf

The natural prey for wolves in Slovenia is sufficient in its area of occupancy. Forest-covered surfaces have increased by 500 km² in the last 50 years, today amounting to approximately 3.500 km², which favours both the prey and the wolf itself. Damage to livestock is quite large, and similar in size to the damage caused by bear. The State pays compensation for damage done by wolves, which is especially increasing for sheep, because the number of sheep in the country in the last 10 years has increased 6 fold. Livestock protection measures have not been adequate.

The wolf is a species protected by law, and quotas of permitted annual intervention into the population are defined, usually in the range of 4 to 10 individuals. Wolves killed by traffic and from other causes are deducted from the annual quota, and the rest is killed by the local hunters. There is a well-established system of monitoring of the wolf population and its mortality.





Goal of the Plan

The main goal of the Wolf Management Plan is ensuring long-term survival of the population of this large carnivore which is capable of survival in qualitative and quantitative terms, in as harmonious coexistence with humans as possible. However, for planning such activities it is necessary to know the available resources. This includes knowledge of the wolf biology, diet and behaviour, as well as determining its population and area of distribution, populations of its natural prey and quality of its habitats. It is also necessary to determine intensity of the human impact on wolf and prey populations. On the other hand, one needs to be aware of the needs of the local residents as well as general attitudes of all interests groups; environmentalists, foresters, hunters, scientists, NGOs and the broad public. Only these basics will enable identification of concrete activities for achieving an efficient conservation of the species. It is also important to remember that this requires mutual consent of all stakeholders involved because this is the only way to ensure practical implementation of the proposed activities.

Since the Dinaric wolf populations capable of survival are distributed across several countries, wolf management in Croatia is planned in cooperation with neighbouring countries, Slovenia and Bosnia and Herzegovina.



Wolf Management Plan

1 Research and Monitoring

1.1 Establishment of a national system for monitoring wolf population

The Wolf Management Plan is based on the knowledge of the wolf population and the factors determining the state of this population. For that purpose it is necessary to establish a national system for monitoring wolf population, in accordance with the similar system established for lynx. Therefore scientific research, and monitoring of the population status, dynamics and ecology as well as the natural prey, human impact and competitor species, will be systematically implemented. This of course needs to be harmonised with international standards of wolf population monitoring which are stated in the Action Items of the Large Carnivore Initiative for Europe, as part of the Bern Convention.

In the collection of these data, the key element is cooperation among different stakeholders, as it was already partially achieved during collection of data for the development of the present management plan.

Monitoring of the wolf population

In order to obtain the most reliable data a combination of several research methods should be used.

a) Collecting wolf carcasses

- All stakeholders and other possible finders should report each wolf carcass (whatever the cause of death) to the competent medical institution. During development of this plan the competent institution is the Biology Institute of the Faculty of Veterinary Medicine in Zagreb (Heinzelova 55, 10000 Zagreb, phone +3851.2390.141, fax +385.1.2441.390, e-mail: huber@vef.hr). The carcass should be kept in one piece, preferably stored in a refrigerator or, if so agreed, in a freezer.
- The wolf carcass will be used for determination of all morphological parameters, sample keeping (skeleton, organs, bodily fluids), analysis of the digestive system contents, which will serve as a source of data on standard morphological features, genetic structure, health condition (fitness, parasite concentration, exposure to contagious diseases like rabies, etc.).
- Genetic analysis of the dead wolf tissue and faeces samples. Above described genetic methods enable identification of individuals, which serves as a basis for calculating population trends and size.







Figure 97.
Measurement
and dissection
of killed wolves
are carried out
by the scientists
at the Faculty
of Veterinary
Medicine of the
University of
Zagreb
(J. Kusak)

• Wolves will be captured alive into specially designed traps, chemically immobilised, and after measuring and sampling, marked by collars with installed radio-transmitters and released at the place of capture. Transmitters and portable guided antenna will enable tracking of the collared wolves, thus the direct collection of data on their movement and activity, and indirectly on the size, selection and use of the haunt, and activity rhythm. It will particularly provide insight into the frequency, hunting success and prey types, and on the method and level of exploiting the prey, areas of higher livestock depredation risk. It will further help in gaining knowledge on the social hierarchy within the pack, reproduction complex (sexual maturity, birth frequency, litter size, survival of the young), health, causes of mortality and life expectancy. As said above, 7 wolves in Croatia have been telemetrically monitored.

Figure 98.
Measuring and collaring the anaesthetized W5 wolf (Hilda) in Gorski kotar on 2 July 2002 (J. Kusak)

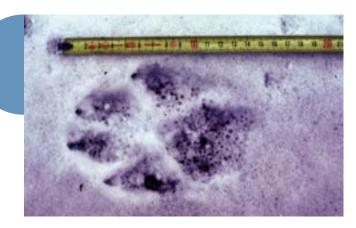




c) Monitoring based on wolf tracks in snow

In the areas with lots of snow during the winter, the tracks of wolves in snow must be observed and monitored.

Figure 99.
Footprints in the snow may also provide information on wolves (D. Huber)



Monitoring of prey populations

Quantitative and qualitative status of the prey populations will be monitored by:

- data on the kill and wastes,
- estimates of local game concessionaires and public authorities managing the protected areas,
- population estimates based on marking,
- monitoring the signs of presence,
- application of other available methods.

Using the Geographical Information System (GIS)

All data will be mapped through the Geographical Information System (GIS) which will enable their spatial and temporal interpretation, regarding natural habitat features, human impacts in the habitat, and their interrelations (e.g. distribution of prey, locations of damage, lairs, resting places, locations of guarding dogs and electric fences, roads, etc.).





2 Habitat preservation

In order to preserve habitats it is necessary to maintain their integrity and quality.

2.1 Maintaining habitat integrity

a) As much as possible avoid habitat fragmentation caused by construction, in order to preserve biological unity,



Figure 100.
The Medina gora green bridge on the Zagreb – Split motorway, the Otočac – Lički Osik section
(J. Kusak)

- b) Build "green bridges" for safe passage of game during road construction,
- c) To the largest extent possible maintain the spatial proportions among forests, meadows and arable plots.

2.2 Maintaining habitat quality

- a) Monitor quality of habitats with recorded presence of wolf (monitoring of certain habitat elements and providing feedback on actual habitat conditions through field research),
- b) Prevent excessive exploitation of natural resources and prevent modifications of fundamental habitat features,
- c) Enable participation of members of the Croatian Committee for Monitoring Large Carnivore Population in the development of physical plans for counties, the territories of which are inhabited by wolf, in order to take into consideration known corridors of wolf movement during road construction, opening of new quarries and sports facilities etc.,
- d) Viewing the well-preserved biodiversity of Croatian forests in European proportions ensure the preservation of its current state. Maintain selective forest management in order to preserve forest stands of varying age structures and their use as shelter for daily rest and for rearing of the young.
- e) Prevent introduction of alochthonous animal species into the habitats.

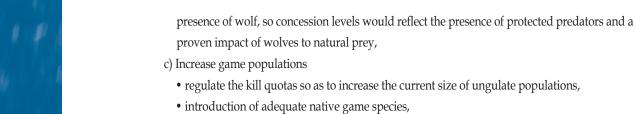


3 Hunting

- 3.1 Harmonisation of hunting management documents with the conservation measures for wolf and other protected predators
 - a) Establish a system of game monitoring in Croatia (obligatory submission of data on game to the relevant ministry by all game concessionaires, and setting up of a central GIS database),
 - b) When calculating the game increment coefficient and game fund, take into consideration the



Figure 101.
A wildlife
monitoring
system is to be
established and
shooting measures
regulated
(A. Frković)



d) Scientifically justified objective assessment of the impact of wolves and other predators on game populations (Slovenian example)

3.2 Prevention of illegal kills of game and wolves

- a) Increase authorities of the competent inspectors and gamekeepers, education training of authorities,
- b) Increase liability scope for game concessionaires in cases of illegal kill,
- c) Education of authorities,
- d) If illegal kills are not reported, increase the responsibilities of game concessionaires,
- e) Introduce stricter sanctions for poaching (additional seizure of the weapon).





4 Livestock breeding

4.1 Streamline the livestock management and increase guarding efficiency

- a) stimulate larger, but not excessively large, herds (optimal range is 50-100 sheep),
- b) maintain assistance to livestock breeders in guarding against wolf attacks
 - donation of tornjak dogs, Croatian shepherd dogs, and electric fences, accompanied by necessary training,



- through the system of permanent control of beneficiaries and donations, maintain efficiency monitoring that has been set up under the LIFE project,
- permanent employment of regional coordinators and strengthening control via the farmers support services, and guiding the work of kennel clubs towards education on breeding and use of shepherd and guarding dogs,
- c) set up an autonomous breeding and selection system for shepherd and guarding dogs in wolf and other predator areas of distribution.

4.2 Finalise livestock registration process for Croatia

- a) the competent authority should ensure labelling of all domestic animals (veterinarian or CLSC labels),
- b) develop an appropriate database and establish the central livestock register.

Figure 102.
Lecture on keeping
donated tornjak dogs



4.3 Improve the existing system of damage compensation

- a) Ensure a more regular and quicker compensation payment
 - increase the number of the competent ministry legal staff that would exclusively deal with processing of inspection reports,
 - more regular submission of completed reports to the competent authority by experts,
 - ensure and speed up withdrawal of budgetary resources intended for compensation payments,
- b) Improve the work of experts
 - organise periodic (annual) training for experts,



Figure 103.
A seminar
on education
of damage
assessment
experts – a lecture
(S. Desnica)

- · regional coordinators should monitor the work of experts,
- c) Revise the existing Instructions for assessing damage caused by a predator, with the list of compensation rates
 - prescribe basic livestock guarding measures,
 - condition the payment of compensation fees by proper application of guarding measures,
 - withhold compensation for unlabelled mature livestock,
 - condition the payment of compensation fees by the regular payment of charges for the use of state-owned pastures for grazing,
 - payment of actual wholesale market prices for sheep and goat in the areas of permanent wolf presence (Gorski kotar, Lika, Dalmatia), which is defined on an annual basis (in June),
 - damage to a registered reproduction head should be compensated in accordance with the value defined for it by the Selection Service.

4.4 Improved coordination among livestock breeders

- a) activate the existing livestock breeder associations,
- b) stronger cooperation among existing breeder associations,
- c) fund local breeder associations in the entire area of wolf presence.



4.5 Solving the problem of uncontrolled and stray dogs

a) improve the work of sanitary utilities in the concerned counties.

4.6 Prevention of illegal disposal of slaughterhouse waste

- a) inventory and remediation of illegal waste disposal sites,
- b) strengthen inspection control and sanctioning of all offenders.

5 Interventions into the wolf population

Viewing the current state of the wolf population, reported damage to livestock and impact on game as well as failure to enforce efficient protection in the field, which results in illegal killing of this species, participants of several workshops have agreed to allow an intervention into the wolf population, upon enactment of the Plan. In planning the intervention it must be considered to preserve the present teritorial distribution of wolves. In cases of wolf presents outside this area, each case will be treated separately. This management regime would be implemented for a trial period of two years, starting with 2005, with obligatory monitoring of the results of such intervention. It is particularly important to assess whether this management approach will really contribute to solving the key wolf issues of minimisation of illegal killing and better cooperation among stakeholders, and livestock damage reduction. Further planning for wolf management in Croatia will depend upon this. The plan is a "living" document that will be regulary adapted based on new dana and new directions agreed upon by all interest groups.

The two key preconditions for this intervention are:

- a) not to disturb the status (stability) of the wolf population,
- b) intervene on a selective basis (problematic individuals and packs).

5.1 Implementing the intervention

Intervention should be made in the following cases:

- big and often damage to domestic animals in a certain area,
- contagious disease (individual rabies victims),
- unacceptable and proven impact on game (questionnaires and monitoring based on tracks in snow),
- threat to humans.



Who should propose and decide on making an intervention

- the State Institute for Nature Protection in cooperation with the Faculty of Veterinary Medicine of the University of Zagreb develops annual reports on the status of the wolf population in Croatia,
- Data collection should involve local hunters were possible to help build credibility of the data and subsequent results,
- the Committee for Monitoring Large Carnivore Populations proposes a quota expressed as a percentage of the estimated wolf population,
- the competent authority makes a decision on the intervention, upon proposal by the Committee.

Defining the quota

- the quota is defined annually, the end of a calendar year, (suggestion at beginning of new year in January),
- the quota should be defined on a regional basis; larger intervention is due in areas where damage has been done to domestic animals; smaller intervention where wolf feeds on its natural prey. The regions concerned are Gorski kotar, Lika and Dalmatia.
- social carrying capacity is one of the factors in defining the quota,
- the total quota includes regional quotas, emergency responses, traffic kills and other death causes,
- after the first 6 months a status analysis shall be made, which may result in a decrease or an increase of the planned intervention size.

Intervention method

• the kill.

Period of intervention

• October to January; reproduction time (February - September) excluded, except in emergency situations.

Operationalisation of intervention

- the kill is performed by a local game concessionaire in cooperation with local coordinators (certified damage assessment experts that are at the same time hunters),
- each intervention should be recorded in writing, in order to be submitted to the Council of Europe,
- local coordinators in all regions have the role of facilitators between game concessionaires and the competent ministry and should take care of producing records on the killings,

Emergency response

In certain situations, outside of the planned annual intervention, emergency response may be required, namely:

• in the case of rabies, attacks on humans, and other deviant behaviour,

In that connection, it is necessary to develop an emergency plan.





Management of wolf carcasses (equal to the above described procedure during monitoring)

- carcasses of wolves killed within the quota shall be submitted to laboratory analysis at the Faculty of Veterinary Medicine of the University of Zagreb,
- skull and fur are returned to the hunting concessionaire if interested,
- wolf carcasses killed in some other way are permanently deposited with the authorised scientific institution.

Controlled intervention

- a broader group to control the process of defining and performing of the intervention is established, which will next to the present Committee members include the representatives of all interest groups. The broader group meets at least once a year,
- intervention is controlled in the field by the nature protection inspection in cooperation with experts, forestry and hunting inspections, gamekeepers, nature park guards and the police.

Financing

- costs of the kill are financed by the game concessionaire,
- wolf carcasses management is financed by the state budget (ministries in charge of science and nature protection).

6 Education and information

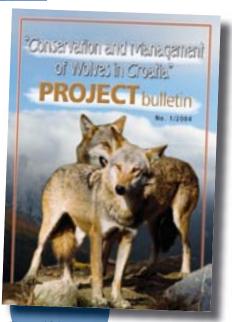


Figure 104.
The LIFE Project bulletin on
"Conservation and Management of
Wolves in Croatia"

6.1 Conducting an educational and information campaign

- designate an institution, agency etc. that will be in charge of fundraising for educational and information activities after the LIFE project ends,
- maintain the existing activities and design a wider information and education campaign (publications, exhibitions, TV commercials, production and sale of souvenirs in protected areas, etc.),
- hold lectures about the wolf for teachers and students in primary and secondary schools,
- propose introduction of lectures on wolves and other large carnivores into regular school curricula in the areas of distribution of these species,
- regularly inform the public on wolf conservation activities via press-conferences, public announcements, etc.,
- monitor levels of knowledge on wolves by sociological surveys, continue to work with all interest groups and local communities using various human dimension approaches.





Figure 105. Lecturing on wolves in a primary school (D. Šarić)

7 Public participation in decision-making

An important precondition for quality involvement of the public into decision-making is good public information (see above). There are two main ways to involve the public:

- direct involvement of active representatives of stakeholders into decision-making processes, especially concerning revision of the Plan, and development and adoption of action plans, through consultations, workshops etc.,
- quantitative monitoring of broad public and stakeholder attitudes to proposed measures and actions in wolf management, and use of these results for decision-making.



Figure 106.
The Workshop on the Wolf
Management Plan preparation held
in Velebno
(S. Desnica)

Figure 107.
The Skradin Workshop, work principles – writing down the participants' ideas (S. Desnica)





8 Tourism

- establish an educational and information centre for all three large carnivores in Croatia in the areas of their occupancy (Gorski kotar or Lika) (see under 6),
- in cooperation with tourist boards design and organise visiting tours to areas inhabited by large carnivores,
- design thematic souvenirs on wolf and other large carnivores, that can be sold in the education
 and information centre and in protected areas, and motivate and involve local people in their
 production.



Figure 108. Photo-hunting of a wolf (J. Kusak)

9 Cooperation with neighbouring countries

Bosnia and Herzegovina

Cooperation and defining of the status of wolves in the country should be promoted. This requires for Bosnia and Herzegovina to sign the Bern Convention, designate an expert group for wolf management issues and develop a wolf management plan. The Croatian side can offer its assistance based on experiences with the implementation of the Bern Convention, wolf management planning and public involvement.

The existing known facts on the wolf population in Bosnia and Herzegovina do not call for the strict protection of this species. It is necessary to define the size of the wolf population that is in line with ecological and social capacities of habitats, determine quotas, introduce protection measures for livestock and a possible system for damage compensation.



Slovenia

The goal is to make the wolf population on both sides of the border permanently capable of survival, and to maintain the flow of individuals and their genes in both directions.

It is necessary to carry out regular harmonisation of population management plans, and especially the size of approved isolation quotas. The methods of population monitoring should be as similar as possible, for purposes of better comparison and summarising of results. Population monitoring through analysis of genetic features should be particularly encouraged.

It is proposed to organise regular annual meetings of experts and permanent reporting on all important events and developments.

10 Implementation of the Plan

Competent authority

Wolf related issues are in the competence of the Ministry of Culture – Nature Protection Division, which makes decisions based on thematic background papers developed by the State Institute for Nature Protection and through consultation with the Committee for Monitoring Large Carnivore Populations.

The Ministry of Agriculture, Forestry and Water Management, as the competent authority for hunting, livestock breeding and veterinary issues, is also obliged to take part in the implementation of the Plan, within the scope of its competence.

The Ministry of Environmental Protection, Physical Planning and Construction is also important in the Plan implementation, especially in the part concerning environmental impact assessment for the purposes of intervening into habitats.

Inspection and gamekeeping services

Practical implementation of all activities defined in the laws and regulations is ensured by inspection and other authorised services.

State Institute for Nature Protection

The State Institute for Nature Protection is in charge of preparing thematic background papers for monitoring of the wolf population in Croatia with the inclusion of any of the interested parties.





Committee for Monitoring Large Carnivore Populations

The Committee for Monitoring Large Carnivore Populations reviews, suggests and advises the competent authority on all activities envisaged by this Management Plan.

Stakeholder cooperation in the management

Precondition for successful implementation of a management plan is the cooperation among all interest groups. Environmentalists, scientists, hunters, foresters, non-governmental organisations and the local population, as well as other competent state and local authorities all need to work together on the collection of relevant data on wolves, planning and implementation of possible interventions in the population, and also implementation of activities aimed at preventing poaching and illegal actions related to protected animals. In that respect, it is necessary that stakeholder representatives meet at least once every year.

11 Revision of the Plan

The Wolf Management Plan should undergo its first revision within two years after enactment, and later as necessary. The revision should be initiated by the Ministry of Culture based on the thematic papers developed by the State Institute for Nature Protection and upon the proposal by the Committee for Monitoring Large Carnivore Populations. The revision process is carried out by representatives of all stakeholder groups in the same way in which the Plan was first developed (through workshops). This will ensure the possibility to review outcomes in relation to planned results, whether any changes have taken place, and make any necessary modifications and implementation of new activities if required.

12 Financing implementation of the Plan

Funds for implementing the Plan would largely have to be ensured from the State Budget, with possible assistance from international sources. County budgets may also provide part of the funding needed. The establishment of a Fund for Environmental Protection is another possibility for financing the implementation.



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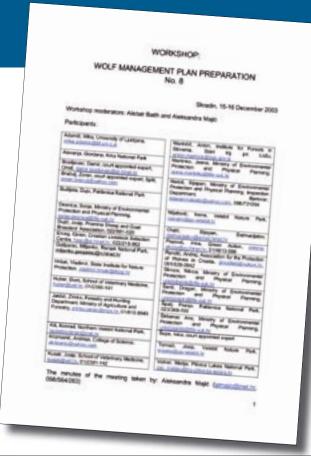


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Annex 1

MINUTES FROM THE WOLF **WORKSHOP**





d-upon principles for wolf manag personal in Columbia

- Who decided?
 At was proposed to set up a committee comprising all stages?
 groups, which would convene once a pair, and the existing technical committee exout propose intervention to the mereties, as required. Decisions would be laken by the mereties or the basis of a propose.

 In A water committee incretion if supervises the process and the beforeast committee submits proposels to the minister and commit out revisions.

- to controls?

 a Nature protection inspection, forestly and hunting inspection, garanteepers and supervision in nature parts, police, b. To increase the number of inspectors, c. To grant velor powers to game-keepers, d. Policemen education sentimen.

3. Who carries out?

- to carries out?

 Local co-ordinators in all regions (suggested to be the current exceptions of the Minery of Environmental Protection and Physical Planning and set to responsible for occurred and of the process between the beamers of the huntry rights and the Minery.

 I thinking self to comed out by the local beaver of the furning rights in concentration with local co-ordinators.

 Local co-ordinators participate also in interventions in related parts.

- Series*

 a. Wolf population status (statisty).
 b. Selective approach problematic individuals and packs).
 c. Responsi approach.
 d. Infectious desears in the area or in the population (indires).
 e. Amount of damage caused to domestic animals in a
- f. Implementation of fivestock protection measures. g. To exclude the reproduction period (March-September)

- emorphicy measures to draw up the action plan for emergency measures, to draw up the action plan for emergency measures, in The goots is determined as a percentage of the estimated

- N. All evident elementals fall enthristine quote.
 Negari worlf KSI.
 Approximant on the necessity to stop diagot worlf KSI.
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 Assistance or hearings must be more effective.
 Necessations and the state of the compensation of the must be more effective.
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 To control of evidents of funding management basis, procedus applied in funding grounds covering of steels, procedus applied in funding grounds covering of steels.
 To date the shooting of wolves (the slegal kill becomes serialists).

 - i. To grant wider powers to game/sepers in hunting ground

 - contex.

 j. Higher maponishing of bearins of hunting rights in case of degal kit.
 a 5s increase the game stock.

- uttend co-operation Co-operation in population monitoring and eclerific
 - Exchange of wolf management experiences.
 Harmonization of wolf management plans.

- Emergency measures
 a in case of rables, allactic on humans and other deviand fahrance.
 b. Face selection of eteroproduc methods
 c. To draw up the action plan for emergency measures.

- What to do with wolver' carcasses?
 Carcasses of ective littled within the shooting quote are to be submitted for examination and measurement.
 The soul and the fare are returned to the beaver of harding rights. If measured.
 Carcasses of wolves hitted in any other way are to be given to the competent institution for safeteeping.



- are funded from the funded.

 Uhealevith breeding.

 a. Deligurishment of compensations within a shorter period of time.

 a month upon signing the contract.

 b. Playment of the actual response market price.

 c. The price is fixed on a peoply teste, responsity and by obligation.

 d. The debursement of compensation is connected with tooking after the fivestock.

 a. The state should lasen on providing support to the prevention of demapse course by ecities.

 f. The registering of sheep and goals is to be completted as toon as possitis.

 g. Bother organization of livestock breeders.

 To promote cattle and horse breeding eather than sheep treating in Consci losse.

- 12. Public support is of vital importance for the avoidance of target certifiets, but not the stray decision-making interests. In Tubic support is to be actioned by stigactive information and education (actions, brinchures, teathers, titures, mass martie).
 c. Public support to be investigated by pole and floor groupe.

- Regional differences
 Regional differe

- guotes.

 a. The gusta is determined on a yearly taxin, at the end of the taxindar year.

 b. After 5 enumbers the analysis of the states is to be carried out.

 The guota includes the regional quotas, is mangariny measures, nod-knis and other ways of all.

- It is also agreed as follows:

 1. The management plan based on these principles will be completed by a narrower working group.

 2. And following will consider the composition of the narrower working group.

 3. The plan will be made available to all interest groups prior to its feel adoption.















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Annex 2

List of damage assessment experts in 2004





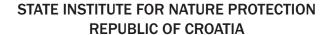






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LYNX

Management Plan

for Croatia



Zagreb 2005





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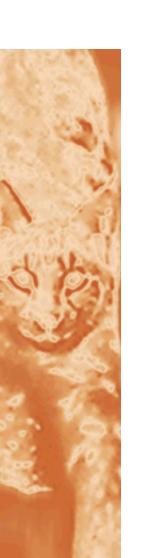
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Committee for Monitoring of Large Carnivore Populations

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Foreword



Croatia is one of few European countries inhabited by all three large carnivores: the lynx, the wolf and the bear. The lynx is, unfortunately, the only species whose autochthonous population has been exterminated from Croatia as a result of man's irresponsible behaviour towards nature. The presence of the lynx has, namely, always been in conflict with interests of man, which is consequently the reason for its extermination from the most part of Europe too.

Owing to the process of re-introducing the lynx into Slovenia in the early 70s it returned to Croatia by crossing spontaneously the border. This population of the lynx has survived in Croatia until today, testifying to a raised level of awareness of the need to protect nature. Each species has its place in nature and is necessary for the maintenance of the natural balance. The loss of any species for nature means also its loss for man in the long run.

It is often emphasized that Croatia is characterized by a well-preserved nature. The principal objective of nature protection is to preserve this wealth and prevent the disappearance of any species, even in case of the so-called "problematic" species. The preservation of the lynx and other carnivores requires necessarily co-operation of all interest groups and a common agreement on the manner in which a specific species may be preserved, at the same time minimizing all possible conflicts. It is only in this way that lynx protection may be ensured in practice, rather than on paper only. This has also been the leading idea when preparing the first plan for the management of a carnivore in Croatia – the Lynx Management Plan. For the first time the representatives of various interest groups, from hunters and livestock breeders to nature protection associations, have decided to talk so as to be able to formulate this Plan by bringing in line opposite viewpoints. This process was ardently supported by Ms. Aleksandra Majić-Skrbinšek, a postgraduate student of Prof. Alistair Bath from the Memorial University of Newfoundland, as the workshop moderator. The same approach was applied to preparation of the Plan for the Wolf Management in Croatia.

The Lynx Management Plan was officially adopted by the decision of the Minister of Culture on 7 December 2004.

The next step is the Plan implementation, which will only be possible providing the co-operation of experts and representatives of all interest groups, because nature protection and conservation of rare species is an obligation of all of us, rather than just a narrow circle of people.

Summary

The goal of this Management Plan contains three main objectives. Firstly, it is to ensure a long-term survival of a viable lynx population in Croatia. The second component is to eliminate or mitigate the conflicts among lynx and people. Finally, the third component is to synchronize the planned actions with the respective actions in the countries with which Croatia shares the lynx population, namely Slovenia and Bosnia and Herzegovina.

In areas with continuous presence of lynx, the goal is to attain lynx population density of one individual per 100 square kilometres. Subsequently, the desired size of the lynx population in Croatia is between 75 and 100 individuals. Areas with occasional presence of lynx and areas with no presence of lynx were also defined. It was recommended that management actions do not depend on the momentary status of the population, but on the spatial zoning proposed by this plan, except in protected areas with higher level of protection (national parks, strict and special reserves) in which all living organisms enjoy permanent protection against possible interventions in their populations.

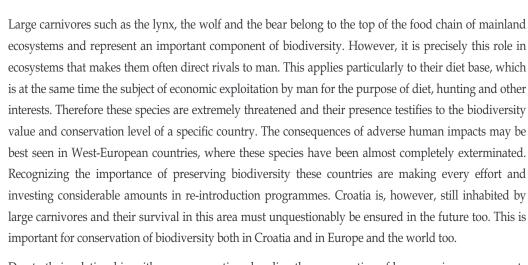
Activities proposed by this Management Plan address the following issues: biology research and monitoring of the population (collecting the remains of the dead lynx, radio-telemetry, monitoring of the lynx and its prey populations), interventions into the lynx population, non-consumptive exploitation of the population, interventions in the prey populations, activities for conservation and improvements of the lynx habitat, mitigation of conflicts due to possible damages to livestock and prevention of those damages, documenting and monitoring of public attitudes toward lynx and lynx management and raising public awareness of the lynx by using targeted information and education campaigns.

Cooperation of all interest groups with the competent Ministry, the Committee for Monitoring of Large Carnivore Populations and other government services is crucial for implementation of actions proposed by this Plan.

The Lynx Management Plan will undergo a process of revision within a time period of maximum two years from the day of its finalization. Subsequent revisions will follow as necessary. The revision will be carried out by representatives of all interest groups. The methodology to be used is the same as for the preparation of this Plan (through workshops).



Introduction



Due to their relationship with man, as mentioned earlier, the conservation of large carnivores represents one of the most complex nature conservation problems. One of the steps in resolving this problem is the preparation of management plans which represent specific instructions with respect to measures to be taken so as to preserve populations of large carnivores in a long run and ensure a harmonious co-existence with man. Here we imply the conservation of the so-called viable population or rather population, whose quantitative and qualitative values allow its survival under conditions of being exposed to natural and human impacts. Since nature is ignorant of borders between countries, viable lynx populations are in most cases distributed over the areas of several states. For that reason the lynx management in Croatia has been considered in the context of international or rather regional co-operation, emphasising the need for this plan to be in line with the existing or future plans of the neighbouring states – Slovenia and Bosnia and Herzegovina. The management plan is prepared within the framework of the current legislation, particularly in compliance with international obligations of the Republic of Croatia as a signatory or a party to the majority of international treaties in the field of nature conservation.

The lynx management plan is a result of a close multidisciplinary co-operation of a number of interested experts from Croatia or rather representatives of various interest groups from the neighbouring Slovenia and Bosnia and Herzegovina. In organizing the work on the management plan oral instructions given by Prof. Dr. Alistair Bath (Memorial University of St. John's, Canada) were applied in principle. The Plan was prepared through joint worshops with harmonized opinions for management of Lynx in Croatia. The workshops were moderated by Aleksandra Majić-Skrbinšek. In preparation of the management plan the participants of the workshops supported primarily their personal views.



Figure 1. Eurasian lynx (Lynx lynx). (B. Kulić)

The plan is structured in three main units. The first unit deals with the methodology of its preparation. Due to a specific innovative approach to the method of formulating the management plan we deemed it necessary and, hopefully, beneficial to include a detailed description of the management plan formulation. The following, i.e. the second unit provides a summarized insight into the essentials of the management plan preparation such as the description of relevant regulations and documents, the biology of the Eurasian lynx, its number and distribution in Croatia and similar. And finally, the third unit is the management plan itself, specifying all necessary and conditionally necessary actions required to achieve the management plan objective and the manner in which these actions are to be undertaken.



Methodology of Management Plan Preparation



Wildlife Population Management

One of the numerous contemporary definitions of the wildlife population management describes the wildlife population management as a dynamic, objective and targeted process going on in the environment along with the culturological, economic, political and ecological components. The culturological component covers traditions, religions, values and philosophies of the general public, specific interest groups and decision-makers (competent government institutions) (Decker et al., 2001b). Although the ecological component was traditionally more emphasized than "social" components, today it is evident that wildlife management, as an activity based on human values and primarily focused on "managing" interactions between humans and the wildlife, must also contain all "social" components. According to Decker et al. (2001b) the culturological component has, as a rule, the strongest effect on the establishment of objectives in the wildlife population management, and social values contained in these objectives represent the principal moving force. The area of the "human dimension" in the wildlife management seeks to investigate the ways in which humans evaluate the wildlife, how they would like to manage these animals and how they effect the wildlife, but also how the wildlife and its management affect the humans (Decker et al., 2001a).

In a democratic society the wildlife is managed by competent government institutions on behalf of the electoral body. In doing this the decision-makers apply combinations of biological and sociological methods with increasing frequency. From the viewpoint of a human dimension the conflict between humans and the wildlife may only be deemed solved when interest groups involved consider the conflict solved (Decker and Chase, 2001). One of the ways to solve the wildlife management problems used with increasing frequency is a direct involvement of the public and interest groups in the decision-making.

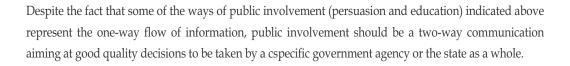
Public Involvement in Decision-Making

Public involvement in the decision-making is a process through which viewpoints of all interested parties are incorporated in the decision-making procedure (Praxis, 1998). The selection of the way to involve the public is at present one of the major challenges facing the decision-makers in the field of wildlife population management (Decker and Chase, 2001). Various ways of public involvement are shown in Table 1.



Table 1. The scale of public involvement forms - "persuasion" represents the lowest and "autonomous decision-making" the highest level of public involvement (accepted from Praxis, 1998). "Joint planning" was chosen for preparation of this lynx management plan.

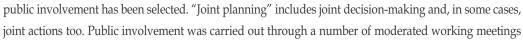
Public involvement levels	Description				
Persuasion	Application of various techniques for public involvement in an effort to change public attitudes, but without arousing expectations of the public to participate in planning processes.				
Education	Dissemination of information and general instructions with the aim to raise public awareness of programmes and related issues.				
Feedback	Furnishing, on the part of the state, of information on the status of planning a specific programme on which the State has taken a definite position, and at the same time making a request for feedback on public views in this regard.				
Consultation	Formal dialogue between the state and the public based on mutually accepted and originally determined objectives.				
→Joint planning	Joint decision-making. Representatives of the public participate in government commissions and have equal right to vote. Issues under consideration must be geographically defined and understandable to representative of the public.				
Transfer of responsibility	Transfer of responsibilities usually associated with government agencies to the public or another level of government apparatus possessing adequate competence.				
Autonomous decision-making Immediate implementation of the entire planning process by the public.					

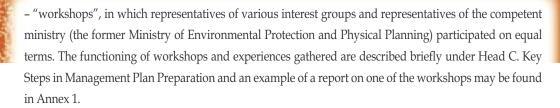


Advantages of public involvement (Praxis, 1998):

- quality improvement of decisions taken;
- management efficiency improvement;
- saving of time and money;
- facilitation of plan implementation;
- avoidance of major conflicts;
- maintenance of credibility and legitimacy;
- improvement of management competence;
- provision of possibilities of joint actions;
- development of public competence and inventiveness;
- more conformity.

For the purpose of formulating the plan for lynx management in Croatia a comparatively high level of public involvement has been selected. "Joint planning" includes joint decision-making and, in some cases,





It is particularly important to note that such a method of work presupposes willingness on the part of the competent government institution to involve the general public.

Key Steps in Management Plan Preparation

Step I

Selection of the workshop moderator. The person selected as the workshop moderator should represent an autonomous, neutral party in whose presence all workshop participants feel comfortable. The moderator must be flexible and devote his/her attention equally to all participants in the process.

Identification of interest groups. The entire process must be constantly open to all interested parties. Before the process itself starts certain effort is to be made to inform all possibly interested parties about the intention to start the process of involving the public in decision-making. Workshop participants must be willing to express their interests, listen to the others and discuss the principles rather than positions.



Figure 2.
One of the workshops on the Lynx Management
Plan (26 February 2002)
(D. Huber)

Apart from the representatives of the competent ministry, the representatives of the former Ministry of Agriculture and Forestry, the former Ministry of Tourism, the Ministry of Defence, the Croatian Forests Directorate and individual forest administrations or rather forest offices, the Croatian Hunter's Association, the Faculty of Veterinary Medicine of the University of Zagreb, the Faculty of Biotechnical Engineering (Ljubljana, Slovenia), the Forests Institute (Ljubljana, Slovenia), the Forests of Herzeg-Bosnia (Mostar, B&H), the Faculty of Science of the University of Zagreb, the Green Action and other interested individuals took part in the preparation of the lynx management plan too.



Venue selection. Workshops are to be held at a neutral place (e.g. local sports hall, local school, local community centres, etc.) where all participants will feel secure enough to express their views. Due to financial constraints, in case of the present management plan these criteria were observed in case of the first workshop only, which took place in a local hotel in Gračac. All subsequent workshops were held at the premises of the competent ministry, which might have affected the quality of public participation in the process.

Step II

The first workshop started with the following question: <u>Are all interested parties present?</u> The representatives of various interest groups and process planner will, namely, recognize all possible interest groups with less difficulty together than the planners alone.

Afterwards, in order to ensure an effective discussion the following discussion rules were defined:

- To avoid long monologues, the speech duration was limited, as a rule, to 30 seconds, whereby only one idea could have been expressed at one time.
- All ideas were written down on square cards, subsequently displayed on large boards so that the discussion could have been followed easily.
- Questions and comments on ideas were written on oval cards of a different colour, additionally indicated by a red arrow and displayed beside the respective square cards.
- And finally, the most important message repeated at the beginning of each workshop was: By saying "yes" when we mean "no" we make problems even more serious.

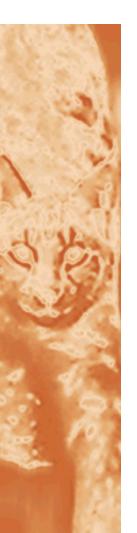
After having defined the discussion rules, the <u>"ice-breaking exercise"</u> followed, in which the participants expressed their expectations with respect to the process. For that purpose they were offered a simple statement of "I know why I am here".

The following important exercise enabled the moderator to get an insight into the spectrum of key issues and use them to plan the following workshops. The participants were required to think about the reasons for and against the lynx in Croatia. Then the reasons stated were grouped and issues such as "biodiversity" identified.

Step III

Formulation of a common vision and basic values. The participants were randomly divided into groups of 3 to 5 persons and required to formulate and express their vision of Croatia in thirty years, firstly by means of a drawing and then in one sentence, placing an emphasis on the role of the lynx.

Identification of advantages and barriers to realization of the vision. The participants, still divided into groups, tried to recognize barriers to and advantages of realizing the visions as defined in the previous exercise. This exercise made it possible to identify topics and issues to be taken into consideration when





Formulation of objectives. After having identified and prioritized the topics, specific objectives in relation to topics must be established. These objectives represent basic management plan principles.

Identification of work method for individual issues arising from the objectives. At this stage actions were formulated as a method of tackling individual problems. In doing this the <SMART> approach was applied. This means that each action must be specific, measurable, attainable, realistic and timed. For each action tasks were set based on the following questions:

- What is the task?
- What is the desired final result?
- Who should be responsible?
- How much would it cost?
- Where the finance can be secured?
- What is the first logical step?
- Which current projects and processes would be affected?

Step IV

After that individual representatives of various interest groups and the competent Ministry were tasked with drawing up certain parts for the printed version of the management plan. These texts were repeatedly edited by the entire working group using computers and a multi-medial projector.

And finally, it should be noted that this is a comparatively slow process of management plan preparation. However, the preparation of management plans by only a narrow group of experts may, at the first glance, seem more cost-effective, but often entails ignoring of the views of diverse interest groups and consequently results surely in a management plan that will not be approved by all interest groups and whose implementation will be either limited or even next to nil. Nevertheless, public involvement in the management plan preparation cannot guarantee success, because it depends to a large extent on the will of all participants i.e. interest groups to solve the problems.

The credibility of decisions taken in the course of the process of public involvement in the management plan preparation is to be continuously verified along with the general public by a public opinion survey among a statistically representative public sample.

Background for the Preparation of the Lynx Management Plan

Historical Background

Autochthonous population

In the past the lynx ranged through much of the European continent. Treated as a harmful and unprotected carnivore, it was extensively hunted and extirpated. Deprived of any protection, it has so far survived in the Carpathians and in the point furthest to the southeast of the Dinaric Alps only, where it is threatened by extermination. The last individuals of the autochthonous lynx were caught in Slovenia (Kos, 1928), Serbia (1908), Bosnia and Herzegovina (1911), Montenegro (1913) and Bulgaria (1935). In Croatia the lynx stayed longest in Gorski kotar and on the Velebit Mountain. One of the last lynxes in the Risnjak massif, in the area of the present Risnjak National Park, was captured and "shackled" in 1854 (Hirc, 1989). The last lynx in Croatia is believed to have been trapped in the forests around Tršće in Gorski kotar in 1903 (Koritnik, 1974).

The only find of lynx remnants from prehistory in Croatia comes from the Velika pećina cave on the Ravna gora Mountain in the north-western part of Croatia. Malez (1986) was the first to determine the find of the upper left canine, subsequently reviewed and confirmed by Gužvica (1996). The stratigraphic position of the tooth points to an age of about 10,000 years, which means the end of the last ice age.



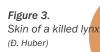








Figure 4. The area where the first lynx in Croatia was observed – the mountain meadow of Lazac, the Risnjak National Park (A. Frković)



Figure 5. The first lynx shot in Croatia (Snježnik hunting ground, Gorski kotar, 1978) (A. Frković)

Little is known about the diluvial lynx in the adjacent Slovenian area, much as in the larger part of Europe. The oldest known evidence of the lynx in the area of Slovenia dates back to the time of pile dwellings in Ljubljansko barje (4,000 years B.C.). In 1875 a well preserved lower jaw of a lynx was excavated along with bones of other animals on the southern edge of Barje close to Igo, which is considered the oldest known evidence of the lynx presence in the area of Slovenia (Kos, 1928).

Re-introduced population: colonization, shooting, trends and research (1974-2000)

By releasing three lynx families – 3 males and 3 females – of the Slovak origin from quarantine in Kočevsko (Slovenia) on 2 March 1973 this carnivore re-appeared in Croatia by a spontaneous translocation after almost a century. The first mature individual was observed in the mountain meadow of Lazac in the Risnjak National Park (Fig. 4) on 16 June 1974, since when data have been regularly collected about the course of colonization and about lynx shot or killed in other ways (Frković, 1998). The fact that animals originating from the Slovak Carpathians were used for re-introduction is still strongly objected by hunters due to their belief that the autochthonous lynx was considerably smaller and did not prey on big game.

The first evidence of the re-colonized lynx in Croatia was found in the Snježnik hunting ground, at the Kašljevac locality (Fig. 5) on 27 September 1978. It was a two-year old female weighing 16 kg (no bowels). A year later, on an unidentified date of 1979, two lynxes were shot in Gorski kotar (at Škurina locality) and the Croatian littoral (Križišće) and one in Žumberak, the wooded area of Blaževo brdo in the County Zagrebačka.

From the Cabar area of Gorski kotar the lynx gradually spread towards the south-east. In 1975 and 1976 it already colonized the entire Gorski kotar (125,000 hectares) and the greater part of the Croatian littoral and started causing the first perceptible reductions in even-toed ungulates (roe deer, chamois, re-colonized mouflon in Grobinšćina). Late in the 70s the presence of lynx was recorded in Velika Kapela, in 1980 in the Vinodol valley and Ričićko bilo, in 1981 in Javornica, the area of Drežnica and in Miškovci (Otočac) and in 1983 in the Northern Velebit area. The shooting increased in parallel with this. So in 1980 5 lynxes were shot in the area of Vrbosko, Ravna Gora, Crikvenica, Bribir and Brod na Kupi municipalities, 9 were shot in 1980 (of which the first three lynxes in the Ogulin area and in north-western Lika) and 11 in 1982. In order to prevent any further uncontrolled shooting the Republic Nature Protection Insitute took the Decision on Special Protection (Mikulić, 1982) based on the Nature Protection Act in 1982. From that year up to 1998 the shooting of lynx was only permitted under shooting quotas (special licences) approved by the institute mentioned, or rather its legal successor since 1993 - the State Directorate for the Protection of Nature and Environment. The licence to shoot lynx was based on a provision of the 1976 Nature Protection Act that allowed measures to be taken on protected species solely for scientific research purposes. It was, namely, believed that in this way scientific information on this species would be collected. On the other hand, efforts were made to reduce to a certain extent the pressure of hunters - hunting ground managers who believed that the lynx would considerably affect the number of the wildlife, especially that of roe deer in their hunting grounds. Towards this end the Institute set up the Committee for Lynx Population Monitoring in which Janez Cop, responsible for the project of colonizing the Slovene forests by lynx along the left bank of the Kupa River, participated along with the domestic experts too. One of the bases for the approval of shooting quotas was a poll. The questionnaire contained questions targeted at identification of the legal person as a respondent and also at the lynx number, its impact on the prey and requirements for measures to be taken in the lynx population. This questionnaire was regularly submitted to forest holdings or rather municipal local associations for which it was assumed to have the lynx in their respective areas. The committee used to convene twice a year, i.e. on the eve of approving the measures and analysing the questionnaires received and after the winter hunting season or rather after expiry of deadline by which it was permitted to shoot the lynx within the quota agreed. The approved measure covered between 7 and 14 individuals and was seldom implemented. The implementation of the measure included also the killed lynxes found accidentally and individuals shot outside the time, spatial and other frames as laid down. A great part of lynxes shot was submitted for the analysis to the veterinary institutes of Zagreb and Rijeka. In the Zagreb Veterinary Institute a total of 46 lynxes were analysed (Kovačić et al., 2002).

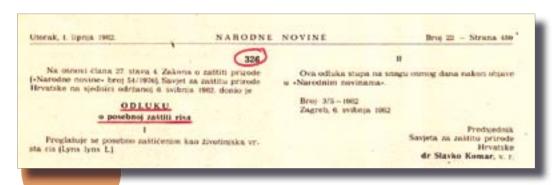


Figure 6. Decision on the special protection of lynx dated 6 May 1982

In the period from 1978 to 2000 (23 years) a total of 211 lynxes were shot or in another way killed in Croatia (Table 2). The largest documented number of lynxes was killed in the County Primorsko-goranska (135), followed by the County Ličko-senjska (56) and the County Karlovačka (11). Three lynxes were killed in the County Zadarska, two in each of the counties Istarska and Zagrebačka and one lynx each in the County Vukovarsko-srijemska and Splitsko-dalmatinska. The annual mortality rate ranged between 1 and 17 lynxes, with the mean annual value of 9.2 lynxes (Frković, 2001).

Table 2: Lynx mortality by counties

County	Land area (ha)	No. of lynxes killed	Share in total lynx mortality (%)	
Primorsko – goranska	253,800 (mainland area)	135	64	
Ličko – senjska	374,600	56	27	
Karlovačka	331,100	11	5	
Zadarska	-	3	1	
Istarska	-	2	1	
Zagrebačka	-	2	1	
Vukovarsko – srijemska	-	1	0,5	
Splitsko – dalmatinska	-	1	0,5	
Total		211	100	

After coming of the Decision on the Special Protection of the Lynx into force (1982) the majority of lynxes were acquired within the hunting period as permitted by special licences, or rather from 1 or 15 November till 28 February. However, despite this fact 58 lynxes were shot in the period between 1982 and 1998 beyond the quotas approved. Apart from the shooting recorded in the first 5 years (1978 – 1982) and in the period from the passage of the Decision on Lynx Protection, the lynxes shot outside the permitted hunting time included primarily individuals killed in highway collisions, by poisoned baits or trapped, captured in or close to human settlements and died for unknown reasons (Fig. 5).

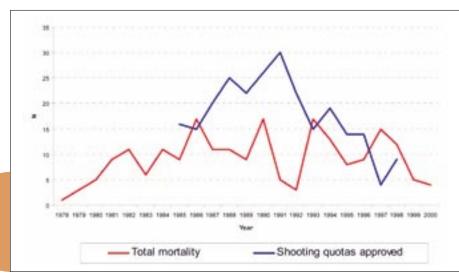
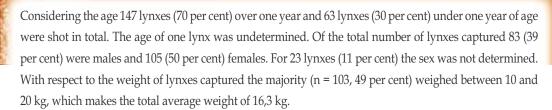


Figure 7. Total mortality and lynx shooting quotas approved in Croatia



The lynxes were killed in various ways and by various means (Fig. 8 and 9). With 157 (74 per cent) lynxes caught, shooting is well ahead of other practices, which account for 54 (26 per cent) of the lynxes. Lynx shooting took place by individual (103, 72 per cent) and collective (44, 28 per cent) hunting. The most successful individual hunting practice refers to accidental meetings with hunters in search for other kinds of wildlife, how 78 (50 per cent) of a total of 157 lynxes caught were killed. Collective hunting holds the second position with 31 (20 per cent) of the lynxes shot, mostly by chasing and hunting with pointers, and finally by waiting at a high stand close to a bait or a feeding place. In this way 19 (12 per cent) lynxes were killed, whereas other killing practices account for 9 (4 per cent) lynxes.

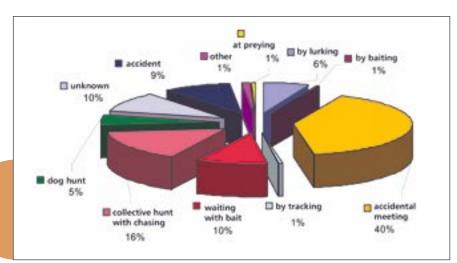


Figure 8. Lynx kill means and practices (by Frković 2001)

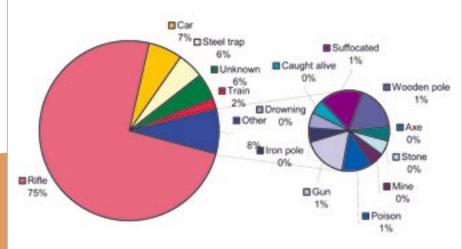
Other causes of lynx kills are traffic, traps, poison and other. 17 lynxes (8 per cent) were killed by collision, of which 13 collided with a car and 4 with a train. 10 lynxes were trapped and 2 died because of poisoned baits. One lynx was killed by an anti-personnel mine, one was found drowned in the sea and one cub was captured alive. In the area of Snježnik a case of a female bricked up alive was recorded. 10 lynx kills with unknown causes were recorded. In case of two lynxes killed in the settlement itself (Kuželj, the Kupa river valley, 6 May 1984, and Potkilavac, the field Grobničko, 29 January 1994) the rabies test results were positive (Fig. 10). For the lynx of Kuželj this result was later refuted. For the purpose of investigating the spread of leptospirosis with the wildlife 46 blood samples of lynxes killed in Gorski kotar were submitted for analysis in the period from 1985 to 1998, with antibodies proved in only one of them (Kovačić et al., 2002).

The re-introduction of the lynx population may be said to have had a positive effect in terms of the increased number of individuals and their distribution in the space since the appearance of the first individuals in Croatia in the mid 80s. On reaching its peak, the population seems to have stagnated and in the 90s the number dropped and stabilized at the present lower level.



Since the return of the lynx to Croatia the dead individuals were tested on rabies and some of them on Leptospira too (Kovačić et al., 2002). Since 1999 all the dead lynxes collected have been thoroughly examined in terms of morphometry, health, digestive tract contents and genetics. On 16 December 2001 the first lynx in Croatia (an 8-month old female named Bela) was furnished by a radio-transmitter close to Bijele Vodice by the Risnjak National Park border and in June 2002 located in Slovenia in the area of the Kuželjeske stijene.

Although it is a matter of a re-introduced population, already controversial due to this very fact, no research has been carried out into the human dimension of managing this population so far, either in Croatia or in the neighbouring countries that we share this population with.



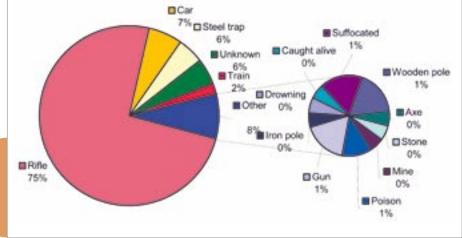




Figure 10. News report on a rabid lynx in the field Grobničko

Figure 9. Causes of lynx

kills (by Frković, 2001)



International regulations governing the Eurasian lynx conservation



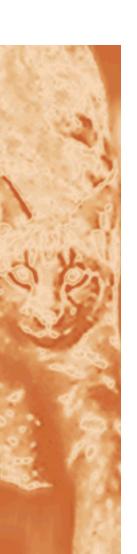
- Convention on Biological Diversity (Official Gazette International Treaties 6/96);
- 9
- Convention on Conservation of European Wildlife and Natural Habitats (Bern Convention)
 (Official Gazette International Treaties 3/5/00);



- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Official Gazette - International Treaties No. 12/99);
- 1,,,
- Directive on the Protection of Natural Habitats and Wild Fauna and Flora (Habitat Directive)
 (No. 92/43/EEC);
- EU Regulation on the Protection of Species of Wild Fauna and Flora by Regulating Trade (No. 338/97 of 9 December 1996).

The Republic of Croatia is a signatory to all relevant international regulations in the area of nature protection and has thus joined the international community in nature protection on a global scale. One of these regulations is the Convention on Biological Diversity that Croatia ratified in April 1996 and in this way committed itself to conservation and improvement of the current biological diversity and sustainable utilization of its components.

In 2000 the Republic of Croatia ratified the Convention on Conservation of European Wildlife and Natural Habitats (Bern Convention) that lays down all the measures to be taken by the European countries in the protection of wild species as specified in relevant Annexes and their habitats. In Annex III to the Bern Convention the lynx (Lynx lynx) is indicated as a protected species whose population may be managed along with control and protection measures prescribed. Given its status in Croatia the lynx is treated as a species under Annex II to the Convention, or rather a strictly protected species that may not be exploited and disturbed, nor its habitat threatened. In order to ensure protection of lynx habitats, the parties to the Convention are bound to include the areas of its distribution into the ecological network of areas of special conservation interest (ASCI) or the so-called Emerald Network. In these areas protection measures must be taken and management methods applied aiming at conservation of their natural values. Exceptionally, the Bern Convention allows a deviation from the provisions stated in case that no other satisfactory solution is available and that the exception will not be fatal to the survival of the respective population. This may only be permitted if justified by flora and fauna protection; prevention of severe damages to crops, livestock, forests, fishponds, water and other forms of property; if it is in the interest of public health, air safety or other prevailing public interests and for the purpose of research and education, repopulation, reintroduction and necessary reproduction. Exceptions may only be permitted under a strict control, on a selective basis and under the condition of a limited capturing, keeping and other reasonable exploitation of certain wildlife species on a small scale. In such cases the party is bound to report in detail on exceptions made to the Standing Committee under the Convention. The Bern Convention adopted the Action Plan for the Conservation of Lynx (Lynx lynx) in Europe prepared by the Large Carnivore Initiative for Europe (LCIE) specifying also the recommendations relating to the action plan for the protection of the lynx (Lynx lynx) in Croatia too.





The Republic of Croatia is a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which makes it obligatory to the parties to exercise control over international trade in endangered species by a system of granting import and export licences and certificates. The lynx has been listed in CITES Annex II, which means that as a species it is not, but may become threatened by international trade unless controlled.

The Directive on the Protection of Natural Habitats and Wild Fauna and Flora No. 92/43/EEC is one of the essential regulations governing nature protection in the European Union countries. The European Union member countries are obliged to incorporate the provisions of this directive into their legislation and approximation of the national legislation with this directive is an obligation of the Republic of Croatia in relation to the EU accession process.

The lynx has been listed in Annex II to the Directive covering plant and animal species that are of interest for the European Union and whose conservation requires the designation of special areas of conservation (SAC) as a part of the Natura 2000 ecological network (excepting the Finnish population), but not as a priority species. It is also included in Annex IV covering animal and plant species of interest for the European Union that require a strict protection.

The EC Regulation on the Protection of Wild Species of Fauna and Flora by Regulating Trade No. 338/97 dated 9 December 1996 governs the trade in protected animal and plant species in the European Union, or rather it represents a statutory base for implementation of the CITES in the EU area. The lynx is listed in Annex A to this regulation covering species that are endangered, extinct or rare and whose survival could be endangered by any level of international trade.

As a signatory to regulations mentioned Croatia has committed itself to take all appropriate and necessary legal and administrative measures at the national and international level so as to ensure the conservation of the lynx and its natural habitat, or rather its stable population, which is at the same time a genetic reservoir and a potential source enabling this species to colonize other European countries from which it has disappeared.

The lynx conservation problems faced by the neighbouring Slovenia are similar to those in this country. Namely, this species has been protected under the Nature Protection Act that prohibits any legal shooting of individuals, as it used to happen in emergency cases due to damage caused to livestock, and on the basis of permissions granted by the committee of the Ministry of Environment and the Ministry of Agriculture and Forestry. The Republic of Slovenia as a party to the Bern Convention is allowed to manage this species up to a certain degree, of course, and under corresponding control and protection measures as prescribed. It is presently investigating the possibility to permit shooting of several individuals yearly for the purpose of reducing the illegal hunting and a better insight into the population status.

There are two lynx protection regimes in Bosnia and Herzegovina. The 1994 Hunting Act of the Republic Srpska treated the lynx as a protected game. In the present Act it is not mentioned at all, but the future Act is expected to grant the lynx the status of a permanently protected game. The Federation of Bosnia and Herzegovina is in the process of preparing the new Hunting Act, which is also expected to grant the lynx the status of a permanently protected game (Soldo 2001).



Viewing the fact that the lynx population is distributed over the territories of the Republic of Slovenia and Bosnia and Herzegovina, both countries have expressed their willingness to co-operate with Croatia in future plans for the lynx population management and protection.

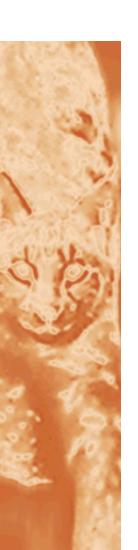
National regulations and documents governing the lynx (Lynx lynx) conservation

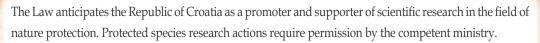
- In 1982 the lynx was originally protected by the Decision on the Special Protection of the Lynx (Official Gazette No. 22/82) based on the 1976 Nature Protection Act.
- Nature Protection Law (Official Gazette No. 162/03);
- Rulebook on the Protection of Certain Mammal Species (Mammalia) (Official Gazette No. 31/95);
- Rulebook on the Compensation Scheme for Damages Caused by Illegal Actions taken on Protected Animal Species (Official Gazette No. 84/96);
- Law on Hunting (Official Gazette Nos. 10/94, 29/99, 14/01);
- Animal Welfare Law (Official Gazette No. 19/99);
- Strategy and Action Plan for the Protection of Biological and Landscape Diversity of the Republic of Croatia – NSAP (Official Gazette No. 81/99).

Nature protection regulations

Viewing the fact that the lynx (*Lynx lynx*), found formerly throughout many European countries and Croatia too, was exterminated by unreasonable hunting in the 18th and 19th century and re-introduced late in the 20th century, the current statutory provisions treat it as a protected species. To be more exact, the provisions of the Rulebook on the Protection of Certain Mammal Species (Mammalia) (Official Gazette No. 31/95) determine the lynx (*Lynx lynx*) as a protected species, which means that it is prohibited to harass and disturb the animal in its natural life and free development, to hide, sell, buy and seize or in any other way acquire and stuff the protected animal. It is also prohibited to export, bring out of the country and import the protected species from foreign countries. The activities mentioned may be exceptionally permitted for scientific and research purposes with the previous approval of the ministry competent for nature protection. Under the Rulebook on the Compensation Scheme for Damages Caused to a Protected Species, the killing of a lynx may be punished by a fine of 35,000 kunas.

In October 2003 a new Nature Protection Law was adopted, which has integrated all the obligations of the Republic of Croatia towards international agreements where Croatia is a party or a signatory. The new Law anticipates 2 categories of protected species, according to the Bern Convention model – (i) strictly protected species, whose protection regime is equal to the protection regime as per the 1994 law, with possibility of exceptional interventions under the conditions and in the ways defined by the Bern Convention; (ii) the second category includes protected species, i.e. those that may be used, with certain protection or control measures involved (e.g. game). The State Institute for Nature Protection is currently conducting a review of species and their categorisation.





The Law also prescribes that nature protection requirements need to be issued by the competent government authority in the process of natural resource management plans development. These requirements are defined on the basis of expert thematic papers developed by the State Institute for Nature Protection. If the manner or scope of the natural resources use immediately endangers the favourable state of a species or a habitat type, the minister in charge may restrict or temporarily suspend the use until the threats have been removed, with the consent of the minister in charge of managing the natural resource in question. In an event of such restrictions being imposed, owners and authorised persons are entitled to compensation proportionate to the loss of income. The compensation amount is defined by mutual agreement.

Finally, in accordance with the corresponding regulations of the European Union, the law defines special ecologically important areas, which include habitats of species threatened at national or at the European level. Protection of these areas is ensured by enforcement of prescribed nature protection measures and requirements.

Other regulations

Among national regulations governing the protection of animals a mention is to be made of the Animal Welfare Law and Law on Hunting whose implementation falls within the competence of the Ministry of Agriculture, Forestry and Water Management.

The Law on Hunting regulates breeding, protection, hunting and use of game and its parts. Hunting management basis (HMB) constitutes a detailed planning document that regulates management of game and hunting grounds for a certain period, in accordance with habitat capacity and the state and populations of the game being managed. The HMB content, development methods and the procedure of enactment of the hunting management basis, game management and protection programmes in areas outside the designated hunting grounds are prescribed by separate rulebooks, which address the following issues:

- a) determining animal species populations
- b) overview of types and populations of game and animal species
- c) management of animal species
- d) management of (other, auth. note) animal species that includes measures for their maintenance and preservation.

HMB enforcement service monitors the state of predators and other animal species and implements preventive sanitary measures in the hunting grounds aimed at game and other animals' health protection.

The law requires, inter alia, for the obligatory harmonisation of the hunting management basis and the game protection programme with the ratified international agreements in the fields of hunting, protection of nature and natural game habitats, as well as the Nature Protection Law.

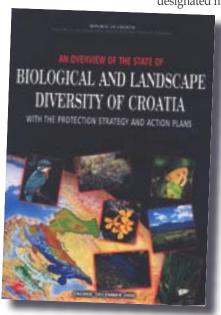
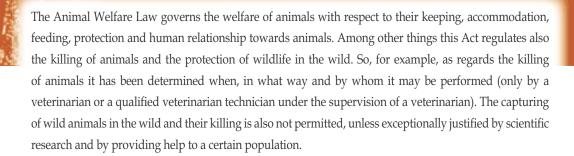


Figure 11. National Strategy and Action Plan for the Protection of Biological and Landscape Diversity is the fundamental nature conservation document.



Documents of nature protection

In June 1999 the Croatian National Parliament adopted the National Strategy and Action Plan for the Protection of Biological and Landscape Diversity of the Republic of Croatia (NSAP) (Official Gazette No. 81/99) laying down, among other things, the obligation to prepare action plans for the protection of threatened species. It also determined the need to formulate an action plan for the protection and a mangement plan for the lynx in Croatia. Based on the conclusions of the meeting of the Committee for Monitoring of Large Carnivore Populations, the Department for Biology of the School of Veterinary Medicine of the University of Zagreb launched the project entitled "The Management Plan for the Lynx of Croatia" funded by the former Ministry of Environmental Protection and Physical Planning.

Legally protected habitat segments

In the area of the lynx distribution, or rather in the area of the counties Primorsko-goranska, Ličko-senjska, Zadarska, Zagrebačka and Karlovačka there are 4 protected nature parts falling in the category of a national park (where economic utilization of natural resources is prohibited, with the exception of tourist and recreation activities in form of visiting and touring) and 3 in the category of a nature park (where only actions and activities are permitted which do not pose any threat to essential features and roles of the space) (Fig. 12).

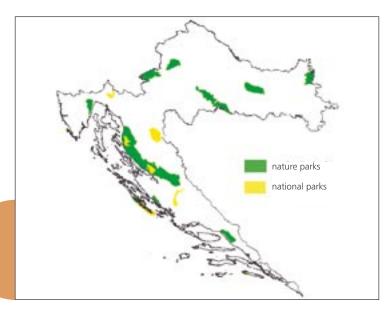


Figure 12. Map of protected areas in Croatia (State Institute for Nature Protection, 2004.)



Table 3. National parks and nature parks in the lynx distribution area

Name	Land area (km²)	Year of designation
«Risnjak» National Park	64	1953
«Plitvice Lakes» National Park	295	1949
«Paklenica» National Park	102	1949
«Northern Velebit» National Park	109	1999
«Učka» Nature Park	146	1999
«Velebit» Nature Park	2,000	1981
«Žumberak-Samoborsko gorje» Nature Park	333	1999

Recommendations for the Action Plan for Eurasian Lynx (Lynx lynx) Conservation in Croatia

The Large Carnivore Initiative for Europe was established in 1995 with the aim to solve the problem of protecting the carnivores or rather conserving the carnivore populations (the brown bear, the wolf, the wolverine, the Eurasian and the Iberian lynx) in their co-existence with humans. This group had drawn up actions plans for the protection of large carnivores, which were adopted by the Council of Europe at the meeting of the Standing Committee under the Bern Convention in November 2000. One of these action plans is also "The Action Plan for the Conservation of the Lynx in Europe". In its Recommendation No. 74 (2000) the Council of Europe urged the government authorities to include recommendations of the Action Plan for the

Conservation of the Lynx $(Lynx\ lynx)$ in Europe into their respective national plans for the management of this species.

ACTION PLAN
HOR THE CONSIDERATION OF
THE EURADIAN LYNEX IN ELECOM
(LYNEX LYNEX)

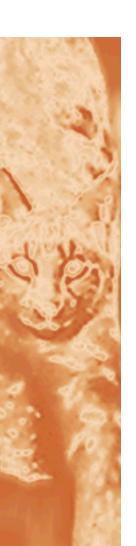
Figure 13. The Action Plan for Eurasian Lynx Conservation in Europe with actions recommended for Croatia

The following actions relate to Croatia:

- 4.1.1. The Bern Convention adopts this Action Plan.
- 4.1.2. Establishment of a national lynx management group that produces a national lynx action plans according to this Action Plan. Cross-border management is secured.
- 4.1.3. The lynx is protected by law. Hunting is only allowed if it does not threaten the long-term survival of the population, and if the harvest is in accordance with the goals formulated in the action plan.
- 4.2.1. The lynx should be given strict legal protection and the law should be enforced.
- 4.2.2. Identify the status of the population and establish a monitoring programme.



- 4.2.4. Public information campaigns to secure the support of the people for the conservation of the lynx should be launched.
- 4.2.5. The viability of the population should be increased through measures that allow the establishment of a viable meta-population (reducing threatening and limiting factors, expand the area or the density of the population, re-introductions, etc.).
- 4.2.6. The genetic status of the population (degree of inbreeding, heterozygositie, relationship to other European populations) should be analysed in order to determine the necessity and strategy of re-stockings.
- 4.3.2. Sub-populations forming a potentially viable lynx meta-population should be connected by habitat corridors. These corridors are maintained or restored wherever they are important for the survival of a sub-population and the genetic exchange between sub-populations.
- 4.3.3. The food supply for the lynx should be guaranteed through proper management and conservation of its most important local prey species. The lynx needs and the impact of the lynx predation are incorporated in the hunting management of the native ungulate populations.
- 4.4.1. Livestock husbandry procedures and protective devices apt to prevent depredation of lynx on sheep, goats, or semi-domestic reindeer in the lynx area should be tested and implemented.
- 4.4.2. The economic loss of livestock owners due to lynx depredation should be compensated for. Compensation systems should aim to promote the co-existence of livestock breeders with lynx rather than to let the owners simply profit from losses.
- 4.4.3. Rules should be fixed saying under what conditions and how lynx causing intolerable losses in livestock herds can be removed.
- 4.4.4. The impact of lynx on its wild prey populations should be recognised and taken into consideration when defining the hunting management of the local (ungulate) populations.
- 4.4.5. Harvest of viable lynx populations through hunting should be allowed when the population can tolerate it.
- 4.5.1. Information campaigns should be launched in order to teach the broad public about all aspects of lynx conservation and management.
- 4.5.2. Detailed educational programmes should be initiated for specific interest groups such as hunters or livestock owners.
- 4.5.3. Local people should be integrated into the planning and implementation of lynx action plans. Establishing boards incorporating all local interest groups could do this.
- 4.5.4. Local people (e.g. represented through management boards) should permanently be involved into decisions concerning lynx management and conservation.
- 4.6.1. Applied research on Eurasian lynx should be co-ordinated, and exchange of methods, ideas, and results must be certain.
- 4.6.2. National or local monitoring systems for the lynx should be designed, tested, implemented and co-ordinated among countries sharing the same lynx population.
- 4.6.3. Human dimension research projects should be launched in order to understand the conflicts between humans and lynx.
- 4.6.4. Research on minimum viable population size, genetic status, (meta-) population dynamics, habitat requirements must be advanced in regard to the restoration of viable lynx populations.



- 4.6.5. Long-term research projects should investigate the impact of lynx on its prey population in relation to human influences of the same populations.
- 4.6.6. Applied and co-ordinated projects should test methods to protect livestock from lynx depredation.

Eurasian Lynx (Lynx lynx) Biology

In the world there are four known lynx species belonging to the genus Lynx. In the taxonomy the cats (*Felidae*) are classified into the sub-order of cat-like carnivores (*Feloidea*) belonging the order Carnivora. Two lynx species inhabit the area of North America – the Canadian lynx (*Lynx canadensis*) and the bobcat (*Lynx rufus*). The European continent is inhabited by another two species – the Iberian lynx (*Lynx pardinus*) found in the Pyrenean Peninsula and the Eurasian lynx (*Lynx lynx*).

In the history the Eurasian lynx was distributed throughout Europe and a great part of Asia. Populations were uninterrupted until the 19th century when they found their last refuges in mountain chains such as the Alps, the Apennines, the Carpathian Mountains and the Dinaric Alps. The assumption that there were several subspecies of the lynx has not been scientifically confirmed to the present day. The subspecies such as *L. lynx balcanica* (Burech, 1941) and *L. lynx carpathica* are also mentioned within the nominal subspecies. Mirić (1978) describes a subspecies *L. lynx martioni* in the south of the Balkan, characterized by a small-sized scull, a more delicate build and differences in the fur coloration. The subspecies is not recognized as valid, but considered to belong to a segment of the nominal subspecies population (Hemmer, 1993).

The Eurasian lynx is larger than other lynx species, with adult males averaging 21 kg, while females are slightly lighter and average 18 kg. They attain the body length of 0.8 to 1.3 m and their short black-tipped tail is 15 to 20 cm long. The height at shoulder is up to 60 cm. In comparison with other lynx species they have relatively long legs and large paws, which facilitate movement across snow and in winter get

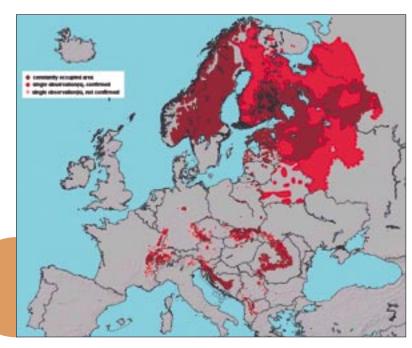


Figure 14. Lynx distribution in Europe (ELOIS)



Figure 15.

Lynx appearance (Ð. Huber)

covered by particularly thick hair. The body is covered by thick reddish-grey fur with more or less visible spots. The pointed ears are tipped with tufts of black hair up to 4 cm long. The head is typically cat-like, round with a short snout and strong jaws. The whiskers growing at the sides of the head make it appear larger. Sensory hairs on the snout may be up to 8 cm long. The lynx has a set of 28 teeth: 3 P, 1 incisor, 2 premolars, 1 molar; 3 P, 1 incisor, 2 premolars, 1 molar. The canines and molars are strong and have sharp edges. On the front legs they have five and on the rear legs four toes with sharp claws that may be pulled in to facilitate quieter movement.

Lynx mate from mid February till the end of March, but mating may also begin in January already and last throughout a part of April (Hemmer, 1993). Exceptionally, some cases are known of mating late in summer and at the beginning of autumn (Schauenberg, 1969; Hemmer, 1993). Although mostly solitary animals, at that time lynx gather at mating places. Females reach sexual maturity at 20 to 24 months and males at 30 months or rather after the third winter (Hemmer, 1993). The gestation period is 73 days on

average – from 65 to 74 days. Litters typically have 1 to 5 kittens, mostly 2 (3). Their birth weight is from 250 to 360 g (males 250 - 360 g; females 250 - 300 g) (Stehlik, 1980). The sex ratio is 1:1. The kittens open their

eyes after 7 and 17 days. Lactation lasts for five months and they begin eating solid food at the age of 35 to 40 days. Permanent teeth are completely developed at 8 – 10 months of age (Hemmer, 1993). Then, at the beginning of the following mating season they are separated from their mothers and leave their home range. If they loose their mother in the last months before separation of the family group, young lynxes are not capable of surviving, the mortality is high and they often approach settlements (Čop, 1988). The juvenile mortality is high. At least 50 per cent of young do not reach maturity. The Eurasian lynx survives 12 to 15 years in the wild, though they may live over 20 years in captivity.

The lynx is a territorial species. The size of home ranges depends on the amount of prey and the population density and varies considerably for males and females. It is known that home ranges vary in size from 10 square



Figure 16. Female lynx with her cub (Đ. Huber)



kilometres to several hundreds of kilometres, even exceeding 1,000 square kilometres yearly (Sunde et al., 2000). In Switzerland Breitenmoser and associates (2001) applied the method of telemetric monitoring and found that in the area of a stable population the male home range may be from 71 to 209 square kilometres (159 square kilometres on average) and the female home range from 45 to 210 square kilometres (106 square kilometres on average). A male home range may cover up to three female home ranges. Overlaps of home ranges of adult individuals mostly do not exceed 10 per cent (8.9 per cent with females and 6.1 per cent with males). Lynx were found to be highly loyal to their home range for several subsequent years $(81 \pm 12 \text{ per cent of overlaps in years})$. Their daily coverage averages 3 to 30 km. They defend their home range by marking it with smell glands secretions, urine and scraping rather than by direct conflicts with the neighbours. The animals do not use the entire home range equally. They remain longer in areas relatively abundant in prey and depart them when the prey declines. Sometimes their movements take them far away from their home range.

The lynx is the most active in the morning and in the evening and generally rests during the day and the night. Their primary food items are artiodactyls and larger rodents. During the winter they more often prey on large animals, because they are easier to catch. They are capable of capturing the prey 3-4 times their size. When they capture a prey, they, as a rule, keep returning to the spot for the following 2-7 days, depending on the prey size, until they eat it up.

Data collected in Norway (Birkeland and Myrberget, 1980) show the following shares of individual types of prey: reindeers 31 per cent, hares 19 per cent, roe deers 17 per cent, birds 10 per cent, small rodents 4 per cent, sheep 4 per cent, other cervids 4 per cent. These amounts vary throughout the year: during summer months cervids account for 20 to 50 per cent of the diet and in winter for 50 to 73 per cent. In Switzerland (Jobin et al., 2000) the share of prey types is different: roe deers 70 per cent, chamois 21 per cent, foxes 6 per cent and hares 2 per cent (in the area studied the roe deer population density amounts to 6-9 individuals per square kilometre and the chamois density 1.2 – 1.9 individuals per square kilometre). This points to the dependence of the share of species in a habitat containing prey. Based on 37 samples studied in Croatia and Slovenia it may be concluded that roe deer and red deer account for 80 per cent of the lynx diet, thus representing almost the only one food item with males. The remainders of 8 other animal species consumed were found in stomachs and excretions of females and the immature young (Rajković et al., 2000).

The share of individual types of the lynx prey according to data coming from the Czech Republic (Červeny and Bufka, 1996) is as follows: roe deers 82 per cent (adult females 53 per cent, young animals 34 per cent, adult males 13 per cent), mouflons 6 per cent, domestic sheep 4 per cent, red deer 4 per cent (young animals 75 per cent, adult females 20 per cent, adult males 5 per cent) and wild boars 3 per cent.

The lynx consumes 1-2.5 kg of meat daily (Breitenmoser et al., 2000). Out of the total weight of the prey this makes 3.3 kg a day, measured as the average reduction in the weight of the carcass remainder after each nocturnal meal. Apart from losses due to discharge of fluids, drying and consumption by other animals, this includes muscular tissue, fat and all internal organs except the digestive system consumed by the lynx. A lynx family (the mother with two kittens on average) needs up to 4.4 kg of prey daily. The area covered daily by the lynx ranges from 3 to 30 km and its living space amounts between 100 and 1,800 square kilometres (Breitenmoser et al., 1993).



Lynx Number and Distribution

Habitat

The general belief that lynx inhabit only forested areas is only partly true (Breitenmoser et al., 2000). In Central Asia lynx occur in open and thinly wooded areas, including semideserts and areas above the treeline. In the north of Europe and Asia they may be found in tundras too. However, in Europe lynx inhabit mostly various deciduous, mixed and coniferous forests.

Figure 17.
National park "Risnjak"
– typical habitat of lynx
(A. Štrbenac)

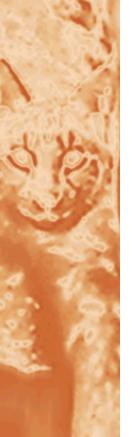


In Croatia the wooded mountainous areas of the Dinaric Alps from the Croatian-Slovene border in the northwest to the border between Croatia and Bosnia and Herzegovina in the southeast are considered the present lynx habitat. In other wooded parts of Croatia lynx are not constantly present, although they could satisfy their needs. The essential feature of a lynx habitat is the presence of adequate numbers of prey, among which the roe deer and red deer are the most important species. Apart from the food, a habitat should provide lynx with shelter for daily rest and especially for raising their young. The chances for survival are determined to a high degree by the amount of the available prey, the habitat integrity and the human-caused mortality due to possible legal and illegal hunting, road-kills and kills in other ways.

Habitat capacity

The habitat capacity for the lynx as a strict carnivore is directly dependent on the prey availability. The dietary base of lynx in Croatia consists of the roe deer and red deer in the first place.

The starting point for estimation of the prey volume, which can satisfy a specific population size, is the daily need of lynx for meat. For an average lynx this is about 1.75 (1.0-2.5) kg of meat or rather one roe deer per week or about 50 roedeers in a year. Apart from the prey biomass, lynx are also dependent on the prey reproduction ability. According to the data available, the influence of lynx on the prey population





ranges mostly from 2 – 15 per cent of the spring number of populations, which can locally reach as much as 40 per cent. In Europe the studies on the general influence of lynx on the prey are few. In a hypothetical model of density based on one lynx per 100 square kilometres it must be taken into consideration that a lynx kills yearly 0.56 roe deers per square kilometre, if roe deer and red deer are its only food item. The research carried out in Croatia and Slovenia shows that roe deer and red deer account for 80 per cent of the lynx diet (Rajković et al., 2000). Given the foreseeable needs of other predators (primarily the wolf) and hunting-related measures, the density of roe deer and red deer populations should exceed 5 per square kilometre. It is to be noted that in the area of the lynx distribution in Croatia the roe deer density is presently considerably below this number, the same as the lynx population density, which is less than one lynx per 100 square kilometres.

Figure 18.
Even- toed ungulates such as roe deer and red deer are the most common prey of lynx (T. Gomerčić)



Estimates of the lynx status and number in Croatia

Two methods were applied to estimate a possible lynx number:

a) Estimates made by local experts

For an area of 8,840 square kilometres the lynx number was estimated at 113 (the first workshop held in Gračac). Taking the entire land area of 9,374 square kilometres, the lynx population size is 130 individuals.

b) Estimates based on prey availability data

Through the mediation of experts from the former Ministry of Agriculture and Forestry, the Croatian Forests and the County Primorsko-goranska data were collected from 50 hunting grounds with a total land area of 5,526 square kilometres relating to estimated number and shooting status of all artiodactyls (roe deer, red deer, wild boar, fallow deer, mouflon and chamois) (Table 4). The results show that there are 9,359 artiodactyls living in the area of 5,526 square kilometres, or rather 1.69 per square kilometre.

It is interesting that the previous collecting of the same type of data (the first workshop held in Gračac) for a land area of 8,840 square kilometres gave the number of 3,668 artiodactyls or 0.42 per square kilometre.

In other words, the repeated collection of data resulted in four (4.0) times as large density of artiodactyls and therefore new data were used for further calculations.

Table 4. Collective data on lynx prey in 50 hunting grounds totalling 5,525.7 square kilometres

Species	N	Km² indicated	LPP share	N/ km²	N/ km² LPPª	Shooting N	Shooting /km² of land area indicated	Shooting /km² LPP
Chamois	299	1267	0.14	0.24	1.69	12	0.01	0.07
Wild boar	2436	5509	0.46	0.44	0.96	607	0.11	0.24
Red deer	1983	4537	0.55	0.44	0.79	255	0.06	0.10
Fallow deer	59	122	0.25	0.48	1.93	3	0.02	0.10
Mouflon	302	422	0.44	0.72	1.63	30	0.07	0.16
Roe deer	4280	5368	0.39	0.80	2.04	429	0.08	0.20
Total/average	9359⁵		0.37 ^c	0.52°	2.07°	1336 ^b	0.06°	0.15 ^c

^a LPP – hunting productive area; ^b Total; ^c Average

Based on the data on lynx mortality and observance in Croatia (Frković 1998, 2001) a GIS map (Fig. 19) was produced showing that lynx are permanently present in an area of 9,374 square kilometres and occasionally in an area of further 7,374 square kilometres (Table 5). Since data on the occasional lynx distribution are based on individual rare data over a longer period of time only, all further capacity calculations were based on the area of 9,374 square kilometres in which the lynx is considered to be permanently present and the prey status more favourable. For lynx calculations it was not possible to apply separately the "productive land area" and therefore for all hunting grounds the total, rather than "hunting productive areas" were used for further calculations.

Figure 19. Map of lynx distribution in Croatia

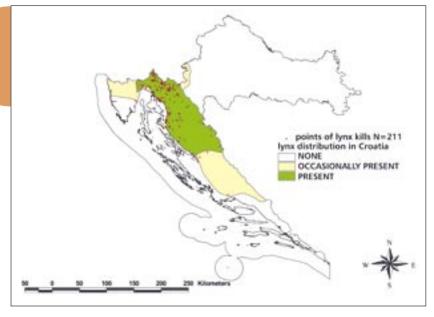


Table 5. Land area inhabited by lynx

Lynx distribution	Land area (km²)		
None	36573		
Occasionally present	7374		
Present	9374		
Total	53321		



Taking into account that roe deer and red deer, with a share of 80 per cent, are main artiodactyl food items of lynx in Croatia (Rajković et al., 2000) and that it takes one week for a lynx to consume a prey of a size of an average roe deer or red deer, a lynx needs 42 artiodactyls of that size a year on average (80 per cent out of 52 weeks). The land area indicated gave the number of 4,280 roe deer and 1,983 red deer. A correction was made for the entire lynx area in Croatia totalling 9,374 square kilometres by multiplying with 1.7. The expected reproduction of 35 per cent would yield 1,840 roe deers and 496 red deers yearly. The share of roe deer poaching was assumed to equal that of the legal hunting and of red deer poaching to be negligible. All further calculations are shown in Table 6.

Table 6. Roe deer and red deer as lynx prey in hunting grounds (80% share in diet)

	Roe	deer	Red deer		
Animal number (N)	Indicated for 5526 km ²	Estimated for 9374 km ²	Indicated for 5526 km ²	Estimated for 9374km²	
Base stock ¹	4280	7276	1983	3371	
Reproduction ²	1498	2547	496	842	
Kill	429	729	255	434	
Growth (reproduction minus kill)	1069	1818	241	409	
Rest after poaching	640	1089	241	409	
Rest after wolf (25% of roes and 75% of deer eaten up)	480	817	60	102	
Lynx capacity (42 roes or deer per lynx/year)	11	19	1	2	
Calculation per biomass (kg)	All artiodactyls				
Calculation per biomass (kg)	in area of	5526 km ²	in area of	9374 km²	
Biomass of all artiodactyls	306,	930	521,	781	
Biomass increase (40%)	122,	772	208,	712	
Legal kill	44,9	982	76,4	169	
Illegal kill	44,982		76,469		
Increase after kill	32,8	308	55,7	774	
Capacity of lynx (1.75 kg/day) and wolf (3 kg/day) – in total 2.4 kg/day = 876 kg/year on average	3	7	64	4	

 $^{^{1}}$ Number of animals at the beginning of a hunting year; 2 Total number of young born in a reproduction year

It follows that the dietary base ensures life for about twenty lynx or about sixty (64) lynx and wolves together in the lynx distribution area of Croatia (9,374 square kilometres).

c) Workshop participants' estimate

It is possible that even after the repeated data collection the number of roe deer and red deer in the lynx habitat has been underestimated. This could be the only possibility to get a higher lynx habitat capacity. If due to such an error the data indicated were only a half (50 per cent) of the actual roe deer and red deer population, then the most optimistic estimate of the lynx number in Croatia would not exceed 60 individuals, meaning that the present population cannot exceed this number. Taking the number calculated on the basis of the available prey as indicated, the lynx population density is 0.22 per 100 square kilometres. Based on the optimistic estimate of workshop participants and on theoretically twice as much prey, this number could be up to 0.64 lynx per 100 square kilometres.



Impacts of Man and Rival Species

Direct human impacts on lynx

The known human-caused mortality of lynx is 10 individuals a year on average (ranging from 1 to 17). The actual mortality is very likely higher, but there is no reliable way to estimate it. There is a possibility of unrecorded mortality in the area of Lika, not covered by systematic reporting, as well as in the entire lynx distribution area of Croatia after 1998, since when shooting quotas have not been granted, which makes each hunting illegal.

Slika 20. Dead lynx (Đ. Huber)



Impacts on lynx prey

The main rival species with respect to lynx prey in the country's habitats are man and the wolf. Man affects the artiodactyl population by legal and illegal kill. The illegal kill varies depending on the area of Croatia and in some places exceeds the legal hunting. A major contribution to this state comes from poor efficiency of relevant inspection services responsible for penalizing the illegal hunting. Neither the planned legal kill nor other aspects of hunting ground management take adequate account of the presence of predators.

The wolf, just like the lynx, is a carnivore and a strict meat-eater. Unlike them, the bear - the third and the largest carnivore – can meet more than 90 per cent of its dietary requirements by eating plants and is, consequently, a rival species to a small extent only. The bear may occasionally find a prey killed and partly consumed by a lynx or a wolf, and then it snatches it away from these predators (snatcher). The actual population size both of the lynx and the wolf in Croatia is unknown. The estimates based on local figures provided give a range of 130 to 170 wolf individuals. All artiodactyl species consumed by the lynx are also consumed by the wolf, with the largest overlapping in case of roe deer. The selective pressure on roe deer is, nevertheless, different. While the wolf captures primarily the slower ones, the lynx is more successful in

capturing those less cautious, and both the wolf and the lynx overpower weaker individuals much easier. However, wild artiodactyls such as the red deer and the boar are equally accessible to the wolf, which can, moreover, satisfy a substantial part of its dietary requirements by domestic artiodactyls (sheep, goat, cattle) and odd-toed mammals (donkey, horse).



Slika 21. Man... (A. Frković)

Slika 22. ... and wolf are the most important competitors for the lynx prey (D. Huber)





Lynx Management Plan

1 Objective

The objective of the lynx management plan is to ensure in the long-term existence of this qualitatively and quantitatively viable carnivore population in a harmonious co-existence with humans. However, to plan such activities it is first of all necessary to know what we have on our disposal. Here we imply the knowledge of the lynx biology, dietary habits and behaviour and the determination of the number and distribution of the lynx population, the population of its natural prey and the habitat quality. It is also necessary to assess the intensity of human impacts on the lynx and its prey populations. On the other hand, account should be taken of the requirements of the local population and of general views of all interest groups, environmentalists, foresters, hunters, scientists, non-governmental organizations and the general public. It is only on this basis that concrete actions to achieve an efficient protection may be identified. Here it must be stressed that this requires the agreement of all interest groups, because this is the only way to ensure the practical implementation of these activities.

As the viable Dinaric population of the lynx is spread over the area of several countries, the lynx management in Croatia has been planned in co-operation with the neighbouring countries – Slovenia and Bosnia and Herzegovina.

2 Desired and Possible Capacity

In European countries inhabited by the lynx, its population density per 100 square kilometres ranges from 0.8 in Slovenia and 1.2 in Switzerland to 6 in Poland. The roe deer population density ranges from 8 to 10 per square kilometre. With its population density of 1.2 in Switzerland, the lynx consumes 54 roe deers/chamois per 100 square kilometres a year.

Considering the Croatian areas inhabited by the lynx the objective should be the average lynx population density of 1 individual per 100 square kilometres. For this purpose it is necessary to ensure yearly about 42 prey individuals (32 roes and 10 deer) per 100 square kilometres. The data collected in Croatia show that in the area of 9,374 square kilometres there are only 10 prey individuals per 100 square kilometres available for its diet at present. This means that the population density of roe deer and red deer should be increased fourfold to reach the desired lynx habitat capacity.

The area of some 9,000 square kilometres inhabited by the Eurasian lynx in Croatia could theoretically, excluding any human impact, support the population of about 200 lynx individuals. Since there are no reliable data either on the lynx population size or on its dietary base (requiring further study of the lynx diet, more accurate estimate of the number of artiodactyls as the major prey, better assessment of wolf and lynx impacts on the lynx diet), the desired size of the base population may be estimated at 75 – 100 individuals. In the area of the lynx occurrence there are several areas protected under the categories of a national and nature park. These areas must form the basis of the space intended for the lynx population. Moreover,





the border areas close to Slovenia and Bosnia and Herzegovina must, with respect to habitat conditions and the population status, provide connectivity between lynx population parts living in those countries, as stipulated by the Act on the Agreement about Cross-border Co-operation and Trade between the Republic of Croatia and the Republic of Slovenia (Official Gazette – International Treaties No. 15/1997).

3 Zoning

Actual and present zones based on the lynx distribution identified in Croatia are as follows:

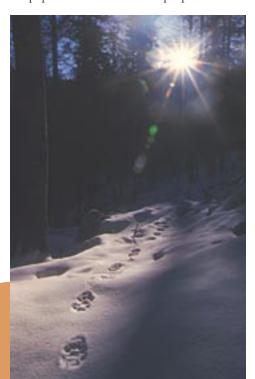
- 1. Permanent presence in the area of 9,374 square kilometres
- 2. Occasional presence in the area of 7,374 square kilometres
- 3. No presence in Croatia's mainland area of 36,573 square kilometres

It is proposed that the lynx management zoning should not depend on the current presence of its population, but rather comply with this Management Plan, except in specially protected natural areas subjected to a strict protection regime (national parks, strict and special reserves), where all kinds of living organisms are covered by permanent protection and thus excluded from possible interventions in their populations.

4 Activities

Research and monitoring

The lynx management plan is based on the knowledge of the lynx population and factors determining the population status. For that purpose it is necessary to establish a national lynx population monitoring



system in order to systematically carry out scientific research and monitor the lynx population status, dynamics and ecology, the presence of its natural prey and the impacts of humans and its rival species. In collecting these data it is necessary and obligatory to ensure co-operation of all interest groups, as achieved to a considerable extent in collecting data needed for preparation of this management plan.

Work methods, the research material and the results expected are as follows:

Collection of lynx carcasses

 Members of all interest groups and other possible finders must notify the competent specialized institution of each dead lynx (killed in any way whatsoever). At the time of drawing up this plan this institution was the Department for Biology

Figure 23.
Paw prints of lynx in the snow (T. Gomerčić)





Figure 24.
Autopsy of lynx at the
Faculty of Veterinary
Medicine (Đ. Huber)

of the Faculty of Veterinary Medicine in Zagreb (Heinzelova 55, 10000 Zagreb, Phone No. 01-2390141, Fax No. 01-2441390, e-mail: huber@vef.hr). The carcass is to be preserved whole, placed in a refrigerator, if possible, or in a freezer, as agreed.

• The lynx carcass will be used for taking all morphological parameters, safeguarding the samples (skeleton, organs, bodily liquids) and analysing the contents of the digestive system. This will be used to collect data on standard morphological features, genetic structure, health condition (physical shape, parasitic infestation, exposure to various diseases such as rabies etc.).



Figure 25.
Samples taken during the analysis of the dead lynx (D. Huber)

Telemetric monitoring of radio-collared individuals

• Lynx will be live-captured into special traps, chemically immobilized and after measurement and sampling radio-collared and released at the point of capture. They lynx radio-collared will be monitored by a receiver and a portable targeted antenna. In this manner data will be directly provided about their movements and activities and indirectly about the size and selection of their living space, the space use and the rhythm of activities. Insight will be gained in the prey frequency, success and types and in the way and degree of prey utilization. This will also improve understanding of the social relations within the species, the reproduction cycle (sexual maturity, frequency of births, litter size, survival rate of young), health, mortality causes and expectation of life. As mentioned earlier, the first lynx was collared for radio-telemetric monitoring in Croatia on 16 December 2001.



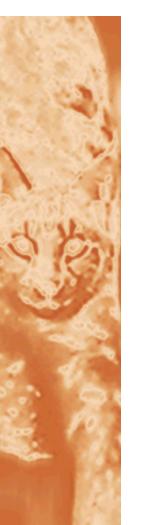






Figure 26.
Marking of the lynx with the radio collar (Đ. Huber)



Figure 27.
Lynx marked with
the radio collar
on the territory of
the National park
"Risnjak"
(T. Gomerčić)

Harmonization of monitoring methodology with international standards

International standards for lynx population monitoring are in the first place specified under action items of the Large Carnivore Initiative for Europe as a part of the Bern Convention. In this regard there are similar international agreements on lynx population monitoring in the area of the Alps, the Baltic countries and the Carpathians. The lynx population is monitored in the most detailed manner in the Alps in the context of the SCALP project. A similar project is to be developed for the Dinaric area, first of all between Slovenia, Croatia and Bosnia and Herzegovina.

Prey population monitoring

The quantitative and qualitative status of the prey population will be monitored on the basis of:

- kill and waste data;
- estimates of local bearers of hunting rights and competent public institutions in protected areas;
- number estimates based on collaring;
- monitoring the signs of presence and
- other possible methods.



Application of the Geographic Information System

All data will be mapped using the Geographic Information System (GIS), which will facilitate their spatial and time-related interpretation in relation to natural features of habitats, human impacts on the respective habitat and their interrelations (e.g. prey distribution, predation sites, lairs, resting places, lynx kill places, etc.).

Action plan:

Establishment of a national lynx population monitoring system and harmonization of that system with international standards

Interventions in the prey and lynx population

One of the essential steps in lynx management is harmonization of the wildlife management in hunting grounds with the lynx conservation. Therefore, when preparing basic documents of hunting economy account should be taken of the lynx as a natural factor in the hunting ground and it should be brought in line with the commercial interest and nature protection in the context of the hunting ground management (e.g. lower rents for hunting grounds inhabited by the lynx, etc.). This is a starting point for interventions in the prey and lynx population.

Interventions in the prey population

Since the rivalry of man and the lynx in Croatia is reflected in the presence of their common prey, the following steps are to be taken to mitigate the conflict:

- to combat poaching (towards this end the efficiency and powers of competent inspection services, game-keepers and hunting ground supervisors are to be improved);
- to regulate shooting measures so as to provide conditions for the growth of artiodactyl populations up to the number specified by this plan (i.e. to quadruple this number gradually);
- when determining the method of managing the local artiodactyl populations account should be taken of the impact of the lynx on populations of its natural prey;
- to re-introduce the prey, if possible.

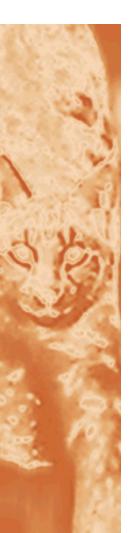
Action plan:

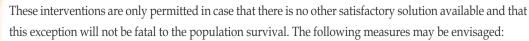
To initiate the action to increase powers of nature protection and hunting inspectors, especially of gamekeepers and supervisors

To reduce the shooting of artiodactyls with the final aim to quadruple their population gradually.

Interventions in the lynx population

Since the population size estimated currently is lower than the capacity desired at the time of adopting this Plan, only minimum interventions in the lynx population may be planned.





- possible translocation of specific individuals within the area of distribution;
- possible introduction of specific individuals into the area of distribution;
- possible bringing of specific individuals out of the country;
- shooting under specific circumstances:
 - for the purpose of preventing serious damage that may be caused to livestock and other forms of property;
 - in case of an objectively identified stronger economic impact on wildlife¹ and
 - in the interest of public health and security and other prevailing public interests.

Population utilization options

The term "sustainable development" is widely used in Croatia nowadays. The sustainable development concept implies a well-balanced relationship between natural and man-made elements in creating a better life. In the effort to incorporate the sustainable development concept into the planning of the lynx population management in Croatia a need has arisen to consider all possibilities of the economic utilization of this population. In this regard it is to be noted that the range of these possibilities is determined by the multitude of values represented by the lynx in the present society.

The most appropriate branch of economy that should create specific products respecting the protection principles is tourism. Due to low estimates of the population number the traditional hunting tourism is not feasible under present conditions. This is further accompanied by a constant downward trend in the popularity of this formerly attractive and important product of tourist industry. At the same time the demand rises for products originating from a comparatively young branch of the tourist industry, the so-called ecotourism. In this context it is possible to evaluate the lynx population through ecotourist product, especially in protected areas.

Creation of products such as the programme for inclusion of the lynx into the tourist offer in protected areas situated in the lynx distribution area, including participation of the local community, may give a significant contribution to prevention of poaching as one of the major threats that might cause extinction of the lynx in its habitats in Croatia.

Action plan:

Investigation of the possibility to include the lynx in tourist offer of 3 protected areas belonging to the lynx distribution areas (Risnjak National Park, Northern Velebit National Park, Velebit Nature Park) in co-operation with representatives of protected areas and local communities.

¹ In this regard it is necessary to organize an objective assessment mechanism or rather to introduce a principle of an objective insight (e.g. mechanism for assessment of damage caused by carnivores to livestock).



Habitats

In order to preserve habitats it is indispensably necessary to preserve the integrity of habitats and their quality.

In order to preserve the habitat integrity it is necessary:

- to make every effort to avoid fragmentation of habitats by various constructions so as to preserve the biological whole;
- when constructing roads, to ensure "green bridges" for wildlife crossings;
- to preserve the spatial ratio of forests, meadow and agricultural areas to the highest extent possible.



Figure 28.
Green bridge "Dedin" on the
Zagreb-Rijeka highway, the
first green bridge for animal
crossing in Croatia (F. Knauer)

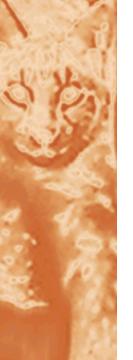
For the purpose of the habitat quality preservation it is necessary:

- to monitor the quality of habitats where the lynx is present (to monitor specific habitat elements and to provide insight into the actual state of habitats by field research);
- to prevent excessive utilization of natural resources and alterations of the basic habitat features;
- when drawing up physical plans of counties whose areas are inhabited by the lynx, to ensure
 participation of the members of the Committee for Large Carnivores of Croatia with the aim to take
 into consideration the known corridors for lynx movements when constructing roads and opening
 new quarries (if data based on telemetric monitoring are available);
- given the well preserved biological diversity of Croatian forests on the European scale, to maintain
 the existing state; to maintain the thinning out practice in forest management so as to preserve
 forest components of various age structures and provide shelter for daily rest and especially for
 breeding the young;
- to prevent introduction of allochthonous species into habitats.

Damages caused to domestic animals

Although Croatia is not faced with the problem of damages caused by the lynx to domestic animals, the following actions are to be envisaged for such a case:

- · to identify circumstances under which the damages occur and
- · to take measures to avoid damage.



Systematic monitoring of public attitude

Public attitude towards the lynx and various options of the lynx population management may have a significant impact on the long-term lynx management. This requires a continuous monitoring of public attitudes towards the lynx, especially as regards the population in the area inhabited by the lynx. The results of these studies must be taken into consideration when making decisions on the population management. Since no major damages on livestock caused by the lynx have been recorded in Croatia so far, it would be interesting to investigate opinions of livestock breeders on this predator too.

Apart from conducting surveys of opinion about the lynx, it is also necessary to identify beliefs concerning the lynx and the level of the basic lynx biology and status knowledge so as to use these data for preparing information and educational campaigns aimed at raising the public awareness.

As the basic method for the collection of above mentioned sociological data it has been recommended to periodically conduct a survey among a representative selection of general public or certain target group representatives.

Action plan:

To make a survey attitudes of local population about the lynx.

Raising public awareness

In conformity with the needs and based on the monitoring of public attitudes towards the lynx or rather the public knowledge of the lynx, targeted information and educational campaigns are to be organized and conducted. Information and educational campaigns are to be primarily conducted in areas inhabited by the lynx, i.e. among the population sharing directly the environment with this carnivore and whose behaviour has a direct impact on the success in conservation of this species. Apart from the general public of the area inhabited by the lynx and special interest groups (e.g. hunters, livestock breeders, school children), these campaigns should also cover the population of large towns, which does not come into direct contact with this

> species, but whose familiarity with this problem area might affect positively its long-term conservation.

In order to record and improve the efficiency of information and educational campaigns in the future, it is necessary to investigate systematically the attitudes of the target population expected to be affected by the campaign, both before and after the campaign.

Action plan:

Organization of an educational and information campaign.





Co-operation of all interest groups in the management

The starting point for a successful organization and implementation of the management plan is cooperation of all interest groups. Environmentalists, scientists, hunters, foresters, non-governmental organizations and local population, including other competent government authorities and competent bodies of local government and self-government units, must co-operate in collecting relevant data on the lynx and in planning and taking possible measures in the population, as well as in undertaking actions as a precaution against poaching and illegal activities in connection with the protected animal. Towards this end representatives of the general public and the government representatives should as a rule meet at least once in two years.



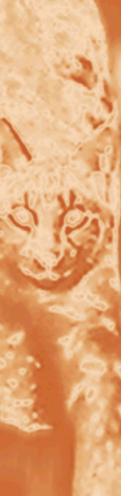
Figure 31:
Workshop for the
development of the
Lynx Management
plan for Croatia
(D. Huber)

Committee for Monitoring of Large Carnivore Populations

The Committee for Monitoring of Large Carnivore Populations considers and puts forward the proposals and recommendations to the competent ministry relating to all activities as provided for by this management plan and in doing this exercises control over implementation of the following action points:

- research and monitoring: at the beginning of each research project and at least once a year, relating to the course of projects and their results;
- requests for interventions in the lynx population: delivers the opinion on justifiability of interventions and in case of a positive opinion puts forward a proposal for the extent of the intervention at least on a yearly basis, but not later than the end of September for the period from the beginning of November till the end of February, as well as at any time as may be necessary;
- proposed possible interventions in the prey population: delivers the opinion, if required, and makes effort to improve the lynx dietary base;







- delivers opinion in the process of proposing and/or taking measures likely to affect the lynx habitat quality and advocates permanently the preservation of its optimum quality;
- delivers its opinion about possible damages caused to domestic animals when requested by competent experts and accompanying services, and keeps trying to find solutions so as to prevent or minimise the damage;
- with respect to **raising public awareness** encourages all activities likely to improve the existing state.

As the advisory body the Committee is actively involved in consultations on specific issues with a wide circle of experts including those from abroad.

The Committee takes special care to co-ordinate all actions with those taken in Slovenia and Bosnia and Herzegovina, and encourages international co-operation.

As required, but at least once in two years, the Committee also encourages organization of meetings of representatives of all interest groups.

Competent ministries

The conservation of the lynx falls within the competence of the Ministry of Culture, the Nature Protection Division, which takes decisions based on recommendations given by the Committee within the framework of international and national regulations.

The Ministry of Agriculture, Forestry and Water Management, as a government authority responsible for hunting or wildlife management affairs, is also bound to participate in implementation of this Plan.

Other ministries and all interest groups submit their comments to the Committee for consideration.

The State Institute for Nature Protection

The State Institute for Nature Protection is responsible for preparation of base documents for monitoring of the lynx population status in Croatia in co-operation with other interest groups.

Inspection and game-keeper services

Practical implementation of all actions as determined by laws and subordinate laws is ensured by inspection and other authorized services.

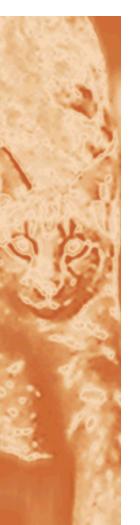


6 Plan Revision

The Management Plan must undergo the procedure of the first revision not later than two years upon adoption and after that, if required. The revision is to be initiated by the Ministry of Culture on the basis of a technical document prepared by the State Institute for Nature Protection and the recommendation of the Committee for Monitoring of Large Carnivore Populations. The revision procedure is conducted by representatives of all interest groups in the same manner as when the plan was adopted (through workshops). In this way insight will be gained into realization of items planned and into possible occurrence of any changes, and new actions will be added in that connection.

7 Plan Funding

The finance necessary for implementation of the Plan will be secured mostly by the government budget, but it is also possible to solicit for financial support from international funds. County budgets may also be a source of a part of the finance. The establishment of the Environmental Fund has provided the possibility of funding the Plan implementation too.







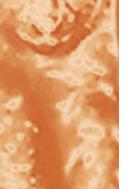
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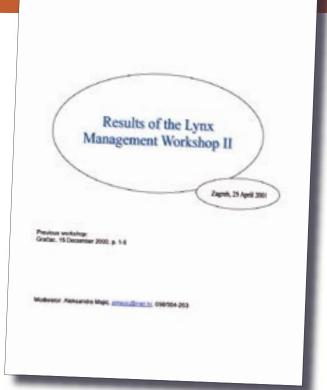
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Annex

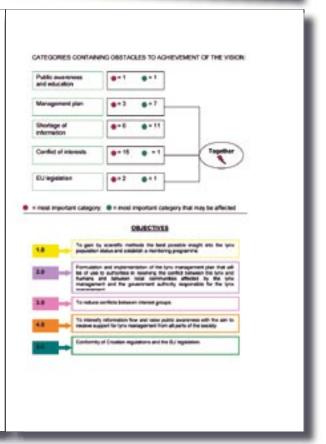


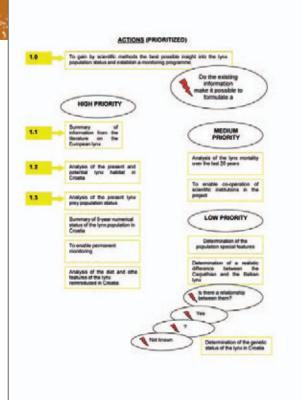
Results of the Lynx
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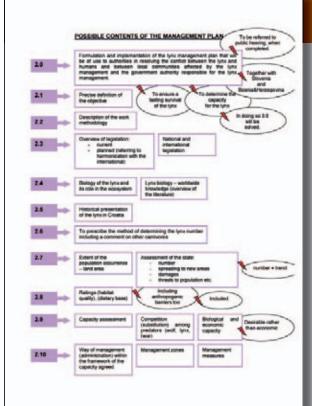




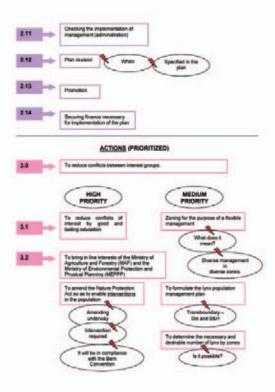
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	Index, Branko	Ministry of Agriculture and Forestry	B.Sc. (Firmsty)
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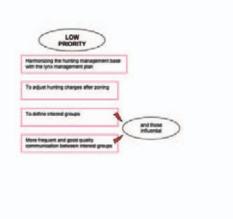












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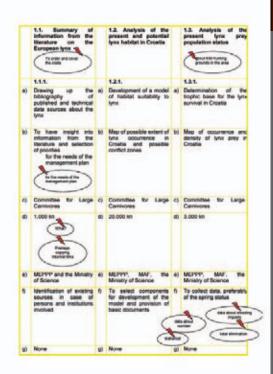
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- a) What is the task?
- b) What is the final result desired?
- c) Who would be responsible?
- d) How much would it cost?
- e) How will the funds be secured?
- f) What is the first logical step?
- g) Which current projects/processes are affected?

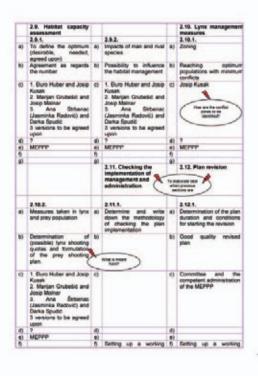
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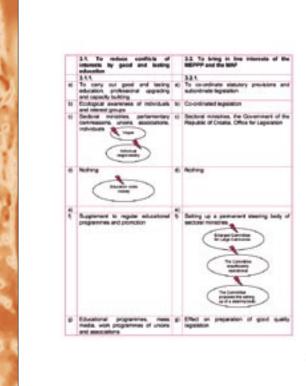


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Brown Bear Management Plan for the Republic of Croatia

Publishers:

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Ministry of Culture, Directorate for the Protection of Nature

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PREFACE

The Brown Bear Management Plan for the Republic of Croatia is the first comprehensive document offering the fundamentals of the brown bear life and management in the Republic of Croatia. This plan is based on scientific and ecological knowledge, placed within the legislative, administrative, cultural, economic and social frameworks in Croatia. Furthermore, it is largely based on the adopted international conventions, plans and recommendations related to the conservation and the protection of the brown bear worldwide, in Europe and in particular in the Alps-Dinaric-Pindos.

The brown bear in Croatia is a free-ranging species inhabiting an ecologically preserved area of more than 10.000 km2 (1.000.000 ha). The area is part of the wider Alps-Dinaric-Pindos region, which is home to a large brown bear population, which requires coordinated action both in the development and implementation of this plan.

In accordance with the responsibilities deriving from adopted international conventions, directives, plans and recommendations, in 2002 the Ministry of Agriculture and Forestry and the Ministry of Environmental Protection and Physical Planning appointed an expert committee for the development of the Brown Bear Management Plan for Croatia. The committee is made up of eight renowned experts and scientists, who were chosen so as to ensure that the different institutions are equally represented.

It must be underlined that the activities for the protection of the brown bear in Croatia began much earlier, as described in Chapters 4.1. and 4.2. Starting from 1997 and aiming at achieving a consistent management and protection of bears in Croatia, a series of consultations on the matter were held with representatives of different stakeholders (Lividraga 1997, Gerovo 1999, Gerovo 2002). Furthermore, veterinary and forestry researchers, as well as hunters, have conducted comprehensive researches over the years, the result of which is the existence of an adequate scientific literature and valuable data regarding the brown bear biology.

This management plan attempts to encompass the current knowledge related to brown bear management, as well as to promote modern, ecologically-based wildlife management that includes protection and conservation of biological and environmental balance of natural habitats and their sustainable use.

The plan has been devised as an active document to be constantly updated, which brought about amendments to both primary and secondary legislation in force governing hunting protection of biodiversity and landscape diversity and other sectors; the Plan itself is based on the Hunting Act. Annual brown bear management plans, monitoring plans and reports for the competent authorities shall be based upon this plan.

In that sense, the plan is to be the fundamental document to which appendices concerning special researches (sociological, economic, biological, ecological, etc.) shall be added, alongside with Action plan for each year.

The Republic of Croatia is currently experiencing substantial changes in various domains, which may also be expected in the upcoming years and which may influence considerably the brown bear population. Those changes shall largely have negative effects, which makes it of even greater importance to recognise them, examine them and find adequate mechanisms to mitigate

their negative effects. This management plan shall be the central point around which the activities for the protection and the conservation of bears in Croatia shall be carried out in the upcoming period.



Preface to the I revised text

The Brown Bear Management Plan for the Republic of Croatia was developed in 2004 and adopted in may 2004 by means of the Decision of the Ministry of Agriculture, Forestry and Water Management. In the past three years of its implementation both its good and bad sides have arisen, different new regulations have been adopted (Nature Protection Act, Hunting Act, Regulation on the National Ecological Network, numerous ordinances, etc.), which resulted in the need to further adapt the Plan to the new situation.

Furthermore, the Environmental Protection and Energy Efficiency Fund has been put "in service", showing full understanding for issues dealt with in this Plan.

Experience concerning the determination and the realisation of annual culling quotas of this species, as well as its distribution is also of great importance.

All those elements, along with other more or less important circumstances, are the reason for producing this revised text which may be expected to add some quality to the Brown Bear Management Plan for the Republic of Croatia, as well as to render it more acceptable (as is the hope of its authors) to other subjects involved in the brown bear population management, also beyond the state borders of the Republic of Croatia.

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INTRODUCTION

Geographically, Croatia belongs both to central and south-eastern Europe. Its innermost part is formed by the Dinara mountain range, the eastern slopes of the Alps and the Dinarides. It is a hilly and mountainous region inhabited by the brown bear for thousands of years, being an extensive, biologically and ecologically preserved habitat of the largest of the European wild carnivores. The integrity of this habitat is also confirmed by the presence of the two remaining large carnivores: the wolf and the lynx, as well as a number other animal species that have disappeared from other parts of Europe.

The brown bear in Croatia is a wildlife species, as well as a game species, which deserves the utmost care and attention and which undeniably has the right to exist. The brown bear is one of the most valuable representatives of biodiversity in this area and plays an important role in its preservation. With respect to other animal species, the brown bear is at the top of the food web and is directly threatened only by man and his activities. Since bear and man inhabit the same areas, it is apparent that there is a need to ensure their coexistence, which is the goal that a series of measures laid down in this Plan aim to accomplish.



Implementation of measures for the conservation and the protection of biological and environmental balance of natural habitats of bears, i.e. the coexistence of bear and man, has to be devised on the basis of modern ecological knowledge governed by the adequate legislation, but there has to be also a general consensus of different stakeholders concerning key issues. Those measures cannot be applied on the basis of individual cases or according to one person's will, but are to be regulated by an official document – in this case, the Brown Bear Management Plan for the Republic of Croatia.

The purpose of the Brown Bear Management Plan for the Republic of Croatia is to determine a management goal within a framework established by international and national regulations, to define measures to be implemented for the conservation of natural habitats and the bear population, as well as measures enabling the coexistence of man and bear. Furthermore, this Plan should be aligned with the equivalent plans of neighbouring countries that equally manage the existing bear populations, as well as with appropriate action plans of the European institutions. Guidelines for Population Level Management Plans for Large Carnivores, drawn up in 2007 by the Large Carnivore Initiative for Europe (LCIE) by contract for the European Commission, has been implemented in that way.

This plan encompasses the following basic sections: I General Overview, II Specific Section and III Bear Management. Certain items of each of these sections are more detailed depending on the issue being dealt with and the prescribed measures.

I GENERAL OVERVIEW

1 THE PURPOSE OF THE PLAN

Due to all its biological peculiarities, the important place it occupies in the human mind and the considerable international interest for its conservation, the management of large carnivores such as bears is extremely challenging. The Management Plan is expected to reconcile different interests, such as environmental, aesthetic and economic interests, as well as care for the safety of man and his property.

The purpose of the Plan is also to ensure conditions for the long-term survival of the brown bear, which listed as an endangered species and protected by a number of international regulations, in a way to preserve its game-species status in Croatia. Careful evaluation of encroachment upon the population is the most critical part of the Plan. Such encroachment should contain the size of the bear population within the social capacity of the habitat, i.e. the number of bears acceptable to man, which should minimize possible conflicts with man ensuring at the same time the long-term viability of the population. In order to achieve this goal, a series of other activities and measures related to the bears' habitat and human encroachment upon the habitat (e.g. construction of roads and so forth), the feeding of bears by humans, the prevention of the creation of nuisance bears and the scientific monitoring of all changes in the population are to be regulated. The implementation of the plan is largely the task of the hunting management experts; however, representatives of other stakeholders should also be actively involved. Finally, the plan should be revised on a regular basis and more extensively than other management plans.

Large carnivore management and especially bear management, presents itself with no final and universal solutions. Each change in the number, home range or behaviour of bears requires new decisions. The Plan should offer a framework for the adoption thereof and it should be adjusted through the review process to new, durable circumstances.

Croatian citizens, citizens of neighbouring countries, as well as Europe and the world, expect from Croatia to ensure the survival of this species on its territory in the largest sustainable number with as few negative effects as possible with its Brown Bear Management Plan.

2 STARTING POINTS FOR THE DEVELOPMENT OF THE PLAN

The key starting points for the development of the Brown Bear Management Plan are the bear population itself and its preserved natural habitat on a surface of more than 10.000 km2 (1.000.000 ha), the already achieved level of understanding among different stakeholders and the society as a whole regarding the need to conserve and improve the coexistence between man and bear, as well as legal provisions and international conventions and agreements concerned with the brown bear protection. Other important starting points are the results of conducted and published scientific studies, rich experience in bear management, top expert knowledge, skilled staff and good organisation of plan managers.

3 LEGAL PROVISIONS CONCERNING BEAR MANAGEMENT

3.1 International Legal Provisions

- Convention on Biological Diversity, (Official Gazette of the Republic of Croatia, "Međunarodni ugovori" [International Treaties] 1/6/96)
- Convention on the conservation of European wildlife and natural habitats (Bern Convention) (Official Gazette of the Republic of Croatia, "Međunarodni ugovori" [International Treaties] 3/5/00)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Official Gazette of the Republic of Croatia, "Medunarodni ugovori" [International Treaties] n. 12/99)
- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitat Directive)
- Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein
- Action plan for the conservation of the brown bear (Ursus arctos) in Europe. Report to the Council of Europe. Convention on the Conservation of European Wildlife and Natural Habitats T-PVS (2000) 24: 1-68 Swenson, J. E., Gerstl, N., Dahle, B. and Zedrosser, A. (2000)
- Guidelines for Population Level Management Plans for Large Carnivores, Large Carnivore Initiative for Europe (LCIE) by contract for EC,2007.

The Republic of Croatia has signed all of the relevant international treaties concerning nature protection and in so doing has joined the international community in their efforts to protect nature on the global level. One of the fundamental provisions is the Convention on Biological Diversity, ratified by Croatia in April 1996 (Official Gazette of the Republic of Croatia, "Međunarodni ugovori" [International Treaties] – 6/96) and taking thereby the commitment to conserve and improve the existing biodiversity, as well as to use its components sustainably.

The Convention on the conservation of European wildlife and natural habitats (Bern Convention) was ratified by Croatia in 2000. This convention lays down the necessary measures that European countries are to carry out for the purpose of the protection of wildlife species, in particular those listed in the Appendices to the Convention, as well as the protection of their natural habitats. The brown bear (Ursus arctos) is listed in Appendix II of the Bern Convention containing strictly protected fauna species, for which all forms of exploitation, deliberate disturbance and deliberate destruction of their habitats are prohibited. Since the bear population

in Croatia is not as much endangered as to require strict protection, the Republic of Croatia has in accordance with Article 9 of the Convention made an exception to the provisions thereof by treating bears in Croatia as species listed in Appendix III of the Convention. The Large Carnivore Initiative for Europe (LCIE) has in relation to the Bern Convention developed the Action Plan for the Conservation of the Brown Bear (Ursus arctos) in Europe, containing also recommendations for the Action Plan for the Conservation of the Brown Bear in Croatia. Therefore, the brown bear in Croatia has the status of a species that may be exploited; however, this exploitation has to be regulated through legal provisions. In order to ensure the conservation of bear habitats the contracting parties shall include the areas inhabited by bears in the eco-network of Areas of Special Conservation Interest – ASCI (Emerald Network). In ASCI areas the implementation of protection measures and management aiming at the preservation of nature is compulsory.



The Republic of Croatia is a contracting party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Official Gazette of the Republic of Croatia, "Međunarodni ugovori" [International Treaties] No 12/99) and is therefore bound to control the international trade in endangered species through a system of import and export permits and certificates. The brown bear is listed in Appendix II of the CITES as a potentially endangered species, which is the reason why the international trade in bears must be strictly controlled. Import and export of that species is possible only with special permits.



Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitat Directive) is one of the basic regulations concerned with nature protection in the European Union. Members of the European Union are to incorporate the provisions of the said directive in their national legislation. As a candidate country for EU membership, Croatia too has that obligation. The brown bear is listed in Annex II of the Directive, including animal and plant species of Community interest, the conservation of which requires the establishment of Special Areas of Conservation – SAC – within the European Ecological Network Natura 2000 (with the exception of the populations in Sweden and Finnland). The brown bear is also listed in Annex IV, containing animal and plant species of Community interest requiring strict protection (capturing, killing and disturbing are prohibited)., with the exception of the above populations. Pursuant to Article 16 of the Directive, the harvest of a limited number of bears in allowed in special circumstances only. Keeping, transport and trade in species listed in Annex IV are strictly prohibited, except in the interest of preventing serious damage to livestock, for public health and safety reasons, use for scientific purposes, restocking and re-colonisation.

Trade is also prohibited by the Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein. This act regulates the trade in protected species of wild fauna and flora in the European Union and represents the legal basis for the implementation of CITES in the EU. The brown bear is listed in Annex A of the said Regulation, including endangered, extinct or rare species, the international trade in which would endanger their survival.

The European Parliament adopted a Resolution on 17 February 1989, inviting thereby the European Commission to encourage the creation of bear protection programmes in Europe and to continue with the implementation of the already existing programmes. The European Parliament Resolution of 22 April 1994 invited the European Commission not to support spatial planning activities which could have a negative impact to bear populations. Such spatial planning is to be avoided by the creation of protected areas and corridors.

The 1st edition of the Brown Bear Management Plan in Croatia (2005) entirely complies with the guidelines of the Action Plan for the Conservation of the Brown Bear (Ursus arctos) in Europe, whilst the 2007 revised version is also in compliance with the Guidelines for Population Level Management Plans for Large Carnivores, taking into account that Croatia shares its brown bear population with Bosnia and Herzegovina and Slovenia.

As a contracting party to the above conventions, Croatia is committed to implementing all necessary legal and administrative measures on the national and international level in order to ensure the protection of bears and their natural habitat, to ensure the existence of genetically viable bear populations which would constitute potential source for the reintroduction of this species into suitable habitats in other European countries in which the species has disappeared.

3.2 National legal provisions and documents

The national legal provisions and documents governing bear management and conservation are the following: the Hunting Act, Ordinance on Closed Hunting Season, Ordinance on Hunting Firearms and Ammunition, Ordinance on Contents and Methods of Development and Approval of Hunting Management Programmes, Game Rearing and Game Protection Programmes, Ordinance on Game Warden Service, Ordinance on the Expert Service for the Implementation of Hunting Management Programmes, Ordinance on Breeds, Numbers and Use of Hunting Dogs, Ordinance on the Assessment of Hunting Trophies, Hunting Trophy Certificates, Hunting Trophies Record Keeping and Report on Assessed Trophies, Hunting Management Programmes and Game Rearing Programmes, Forest Act, Nature Protection Act, Animal Protection Act, Veterinary Act, Ordinance on Handling and Disposal of Animal Carcasses and Animal By-products, National Strategy and Action Plan for the Protection of Biodiversity and Landscape Diversity – NSAP, Recommendations of the Bern Convention for the Action plan for the conservation of the brown bear in Croatia, authorities for the development and the adoption of the Management Plan and public involvement in the development of the Plan.

The brown bear has been included on the Red List of Threatened Species of Fauna and Flora of the Republic of Croatia (2004).

3.2.1 Hunting Act (Official Gazette No 140/05)

The Hunting Act was adopted on the session of 17 November 2005 of the Croatian Parliament and is aligned with the Croatian legal system in single administrative areas, embraces

the fundamental principles adopted by the International Council for Game and Wildlife Conservation (CIC), in particular concerning nature protection, conservation of biological and environmental balance of natural habitats and the protection of game and other wildlife species, as well as the provisions on the protection of game and other animal species and their habitats deriving from adopted international conventions. The Hunting Act is also aligned with international conventions.

The Hunting Act has replaced the old Hunting Act, which underwent numerous amendments in the course of its validity.

The Hunting Act classifies the brown bear as a game species in Croatia. The Act also lays down provisions for its protection, of which the following provisions related to rearing, protection, hunting and exploitation of game, the brown bear included, are listed below:

- Article 4 Game is of special interest for the Republic of Croatia and therefore en joys its special protection;
- Article 12 Hunting unit leaseholders shall enable scientific and academic institutions
 to carry out research activities envisaged by their special programmes at
 own expense on their hunting units in accordance with a Ministry permit.
 Those institutions shall visually mark the areas in which such activities are
 performed;
- Article 49 Game rearing and protection includes all measures and activities pre scribed by the Hunting Management Programmes, as well as the care for other species and their habitats;
- Article 51 a closed hunting season is prescribed for each game species;
 - hunting of a game species may be temporarily prohibited;
 - size, sex ratio and age structure of a game population must be maintained,
 - conditions for breeding and raising of offspring must be ensured,
 - preventative, diagnostic, therapeutic and sanitary measures must be ensured.
 - adequate quantities of food and drinking water must be ensured.
- Article 52 Hunting of mammal game females is prohibited in late gravidity or when nursing young offspring.
- Article 59 The brown bear hunting may be conducted in accordance with the annual Brown Bear Management Plan of the Republic of Croatia, adopted and implemented by the Ministry upon proposal of the National Committee for the creation of the Brown Bear Management Plan of the Republic of Croatia and monitoring of large carnivores populations.
- Article 64 Harvest of game by means causing mass destruction thereof or when threatened by floods, snowfall, frost or fire is prohibited; it is prohibited to use traps or snares for that purpose (except for scientific purposes), to hit animals by vehicles, and to use crossbows and bows, as well as narcotics;

- Article 66 Game may be harvested with hunting weapons and suitable ammunition corresponding to the size of the animal; large game may be harvested by using bullets fired from weapons with a rifled barrel; hunting with automatic weapons is prohibited;
- Article 68 Hunting is permitted to persons who successfully passed a hunting examination.
- Article 74 Game and their parts may be kept, transported or traded only with a certificate containing information on its origin;
- Articles 96 101 deal with criminal matters and applicable sanctions.

The Hunting Act lays down fundamental provisions, which are defined in detail for each procedure and action in the implementing regulations – ordinance, adopted by the Minister of Agriculture, Forestry and Water Management (currently Minister for Regional Development, forestry and Water Management) pursuant to the Hunting Act and the State Administration Act.

The following implementing regulations have been adopted pursuant to the Hunting Act:

3.2.1.1 Ordinance on Closed Hunting Season (Official Gazette No 155/05 and 82/06)

The Ordinance on Closed Hunting Season prohibits bear hunting from 1 May to 30 September and from 16 December to 1 March.

3.2.1.2 Ordinance on Hunting Firearms and Ammunition (Official Gazette No 68/06)

The Ordinance on Hunting Firearms and Ammunition lays down that bears may be hunted with hunting ammunition with a kinetic energy greater than 3,500 joule per 100 m and the bullets must be heavier than 11.50 grams. The maximum allowed shooting distance is 100 metres.

- 3.2.1.3 Ordinance on Contents and Methods of Development and Approval of Hunting Management Programmes Game Rearing and Game Protection Programmes (Of ficial Gazette No 40/06)
- 3.2.1.4 Ordinance on Game Warden Service (Official Gazette No 63/06)
- 3.2.1.5 Ordinance on the Expert Service for the Implementation of Hunting Manage ment Programmes (Official Gazette No 63/06)
- 3.2.1.6 Ordinance on Breeds, Numbers and Use of Hunting Dogs (Official Gazette No 62/06)
- 3.2.1.7 Ordinance on the Assessment of Hunting Trophies, Hunting Trophy Certificates, Hunting Trophies Record Keeping and Report on Assessed Trophies (Official Gazette No 62/06)

3.2.1.8 Hunting Management and Game Protection Programmes

An overview of these regulations is laid down in Chapter "Present-day Management".

3.2.2 Forest Act (Official Gazette No 140/05 and 82/06)

The Forest Act refers to wildlife management with a limited number of provisions. The most significant one is the provision prescribing that forest wildlife should be managed in those numbers that do not jeopardize forest management. Management unit programmes lay down the acceptable number of wildlife animals per surface unit on a hunting ground.

Bear management and protection are also concerned by the Forest Act provisions related to the natural restoration of forest elements, sustainable use of forests and maintenance of a natural ratios among tree species. Provisions prohibiting and regulating the lighting of fires, building of objects in forests, timber harvesting periods and methods, mining, waste disposal, illegal use of forest roads and so forth are important as well.

3.2.3 Nature Protection Act (Official Gazette No 70/05)

The Nature Protection Act regulates the protection and conservation of nature and its resources; within the meaning of this Act, the nature is intended as the totality of biodiversity and landscape diversity.

The Act requires the adoption of implementing regulations which would establish measures for the protection of wildlife. It also incorporates provisions of international conventions and treaties.

Exploitation of protected wildlife species is allowed in those manners and quantities that do not endanger their population on the national or local level. Where a species is considered endangered due to its exploitation, the Minister may adopt an Order prohibiting or limiting such exploitation of the species in question.

3.2.3.1 Ordinance on declaring protected and strictly protected wildlife species (Official Gazette No 7/06)

Endangered or rare wildlife species (species and subspecies) may be classified as strictly protected and protected species. Protected species are important sensitive or rare local wildlife species which are not in danger of extinction on the territory of the Republic of Croatia. Wildlife species endangered within the meaning of this act have been declared protected or strictly protected species on the basis of an assessment of the level of their endangerment and obligations deriving from international treaties signed by the Republic of Croatia. The Ordinance has been adopted on the basis of the Red List drawn up by the State Institute for Nature Protection.

Accordingly, the brown bear is a protected species in the Republic of Croatia and it is managed pursuant to this Plan.

Natural resources management plans must prescribe measures and conditions for the protection of nature which ensure the conservation of wildlife species and their natural habitats.

3.2.3.2 Regulation on the National Ecological Network (Official Gazette No 109/07)

The ecological network is a system of interconnected or neighbouring ecologically important areas, which significantly contribute to the preservation of natural balance and biodiversity by their balanced bio-geographical distribution.

The conservation of the ecological network ensures the conservation of different types of habitats as well as the regeneration of disturbed habitats. Within the meaning of this act, ecologically important areas are the areas of presence of endangered and rare habitat types. The

aforementioned institutes is responsible for monitoring the habitats and their level of endangerment.

Certain ecologically important areas contribute significantly to the conservation of biodiversity and landscape diversity in the Republic of Croatia, of habitats of endangered species on the global, European or national level, of areas which contribute to the genetic exchange between populations of biologic species (ecological corridors), of animal migration corridors and so forth.

3.2.3.3 Ordinance on crossings for wild animals (Official Gazette No 34/06)

This Ordinance lays down protection measures, persons responsible for the protection and provisions concerning the maintenance of crossings, ensuring an undisturbed and safe crossing of wild animals. The said crossings are protected as natural heritage.

3.2.3.4 Ordinance on cross-border transport and trade in protected species (Official Gazette No 34/06)

Pursuant to this Ordinance, the Ministry of Culture issues permits for entry, exit, export or import of wildlife species, their parts and derivatives protected in accordance with the above Act.

3.2.4 Animal Protection Act (Official Gazette No 135/06)

One of the most important national regulations concerning animal protection is the Animal Protection Act (Official Gazette No 135/06). The Ministry of Agriculture, Forestry and Water Management is responsible for its implementation. This Act regulates animal welfare related to the keeping of animals, their housing, nutrition, protection and general conduct towards animals. It also regulates the animal killing and the protection of wild animals. Catching wild animals and their killing are not permitted in a way that causes lasting suffering, except if it is extremely necessary for scientific purposes and in order to help a certain animal population. Article 25 prohibits the use of constrained animals in shows (e.g. bears).

This Act regulated responsibilities, obligations and duties of natural and legal persons with respect to animal protection, including the protection of their lives, health and welfare, manner of conduct towards the animal, conditions necessary for animal protection related to the keeping, rearing and transport of animals, experimenting on animals, slaughter and killing of animals, keeping of animals in zoos and circuses, using animals in shows and competitions, pet sale and conduct towards abandoned and lost animals. Veterinary Directorate of the Ministry of Agriculture, Forestry and Water Management is the competent body for the implementation of this Act. This Act also regulates protection of wild animals in their natural habitats, for which hunting unit leaseholders must ensure the following:

- 1. all conditions necessary for the biological survival of the natural population, as well as ecological balance;
- 2. removal of existing or new habitat disturbances;
- 3. protection of animal health.

This Act also regulates keeping of animals in zoos and the protection of animals used in circuses and other shows. Article 53 prohibits the keeping of wild animals in circuses and their use in circus and other shows, as well as the use in shows of constrained animals and animals with physical defects.

3.2.5 Veterinary Act (Official Gazette No 41/07)

This Act regulates, among other, issues regarding animal health, implementation of veterinary public health measures, control of zoonoses, safety of products of animal origin and veterinary protection of the environment.

This Act also regulates protection of animal health, implementation of veterinary public health measures, improvement of animal reproductions, veterinary protection of the environment, official veterinary controls and inspections.

Within the meaning of this Act, the "animal" means also wild animals, i.e. carnivores.

The bear, like other animal species, is subject to certain infectious diseases. Measures for the detection and prevention of infectious diseases, as regulated by this Act, are defined each year for the following year by the Minister of Agriculture, Forestry and Water Management according to the epizootic situation and level of endangerment. In addition to the measures, with the aim of detecting and preventing infectious diseases, all animals and animal products are inspected during production and after their placing on the market. Each harvested bear is therefore checked for rabies and trichinellosis.

Processing facilities for game meat and other animal products intended for human consumption and facilities for storage, trade and placing on the market of such products must comply with the prescribed animal health conditions.

3.2.5.1 Ordinance on Handling and Disposal of Animal Carcasses and Animal By-products (Official Gazette No 24/03)

This Ordinance regulates the handling of animal carcasses and animal by-products, veterinary and sanitary conditions applicable to facilities and equipment for collection and temporary storage thereof, facilities for thermal processing of animal carcasses and by-products and incinerators for animal proteins and fat, as well as conditions applicable to vehicles for the collection and transport of animal carcasses and by-products.

Article 16 of the Ordinance allows the feeding of animals in hunting units with condemned viscera and slaughter by-products not intended for human consumption only against issue of a special permission by the Ministry of Agriculture, Forestry and Water Management.

3.2.6 National Strategy and Action Plan for the Protection of Biodiversity and Landscape Diversity – NSAP (Official Gazette No 81/99)

In June 1999 the Croatian parliament adopted the National Strategy and Action Plan for the Protection of Biodiversity and Landscape Diversity – NSAP (Official Gazette No 81/99) laying down the obligation to draw up action plans for the protection of endangered species. The Strategy envisages the protection and the development of the Brown Bear Management Plant for the Republic of Croatia.

The Strategy is currently under review.

3.2.7 Recommendations of the Bern Convention for the Action plan for the conservation of the brown bear in Croatia

The Large Carnivore Initiative for Europe was founded in 1995 with the goal to solve problems related to the protection of large carnivores and the conservation of viable populations thereof (brown bears, wolves, wolverines, Eurasian and Iberian lynxes) in coexistence with man. This group of experts prepared Action plans for the protection of large carnivores, which were accepted by the Council of Europe at the meeting of the Standing Committee of the Bern Convention in November 2000. One of those action plans is the Action plan for the conservation of the brown bear in Europe. By Recommendation No 74 (2000) the Council of Europe urges governments to incorporate recommendations from the Action plan for the conservation of the brown bear in Europe in the National Management Plans.

The following actions have been recommended to Croatia:

- Action 4.1.1: Adoption of Action Plan by Bern Convention.
- Action 4.1.2: Establishment of national brown bear management groups and management plans (countries sharing populations produce management plans co-operatively).
- Action 4.1.4: Protection of brown bear by law and game species only where viability is proven and hunting is used to reach population goals identified by management plans.
- Action 4.1.5: Intensification of law enforcement and appropriate penalties in populations where poaching is a limiting factor (bear populations).
- Action 4.3.1: Classification of areas within present and possible bear range according to their suitability and importance as habitat for bear management.
- Action 4.3.2: Identification and maintenance or recreation of linkage zones in fragmented populations.
- Action 4.3.3: Evaluation of impact of existing and planned infrastructure on bear habitat and mitigation of negative impact.
- Action 4.3.4: Control or prohibition of human activities detrimental in bear core areas and linkage zones.
- Action 4.4.1: Establishment of compensation systems.
- Action 4.4.2: Link of compensation system to individual farmer's use of preventive measures.
- Action 4.4.3: Inaccessibility of waste dumps and human waste for brown bears.
- Action 4.4.4: Abandon artificial feeding that may create food- or human-habituated bears.

- Action 4.5.1: Minimise the creation of problem bears through Action 4.4.1-Action 4.4.5 and Action 4.7.1.
- Action 4.5.2: Removal of problem bears in viable populations if preventive efforts have failed.
- Action 4.5.3: Evaluation of costs and benefits before removing nuisance bears in threatened populations.
- Action 4.6.1: Identification and involvement of public opinion leaders and stakeholders in brown bear management.
- Action 4.6.2: Establishment of permanent consultation protocol with locals about their needs and necessary management actions.
- Action 4.7.1: Initiate information campaigns designed for different target groups.
- Action 4.8.1: Co-ordinated scientific research on brown bears in Europe.
- Action 4.8.2: Co-ordination of gathering necessary data to monitor management and biological conditions of brown bears in European countries.

3.2.8 Authorities for the development and the adoption of the Management Plan

An 8-member expert committee developed the Brown Bear Management Plan for the Republic of Croatia in 2004. Four members of the committee were appointed respectively by the Ministry of Agriculture, Forestry and Water Management (currently Ministry for Regional Development, forestry and Water Management) and the Ministry of Culture. The expert committee cooperated also with external associates in developing the plan. The draft version thereof was reviewed by the said ministries and after final negotiations the plan was commonly adopted by the Directorate for Hunting of the Ministry of Agriculture, Forestry and Water Management and the Directorate for the Protection of Nature of the Ministry of Culture.

The 2007 review of the Brown Bear Management Plan for the Republic of Croatia saw the participation of the members of the Committee with a changed structure, as well as external associates.

3.2.9 Public involvement in the development of the Plan

The competent ministries – the Ministry of Agriculture, Forestry and Water Management and the Ministry of Culture – are aware of the importance of public participation in the development of management plans and, in particular, of the effects of such approach to the implementation of planned activities. Representatives of the general public were involved in the development of the 2004 plan through workshops held at the beginning (agreement on guidelines) and at the end of the process (discussion on the Plan proposal).

The expert committee in charge of the development of the Brown Bear Management Plan has taken into consideration the results of a public opinion survey regarding brown bears and brown bear management in Croatia, which was conducted in 2003 (Majić, 2003). Certain results are laid down in Chapter "Brown bears and humans" of this Plan.

A new public opinion survey regarding brown bears and brown bear management in Croatia shall be conducted at the beginning of 2008.

II SPECIFIC SECTION

4 BEARS – BASIC DATA FOR DEVELOPMENT AND UNDERSTANDING OF THE PLAN

4.1 Historical overview

At the Pleistocene archaeological site "Medvjeđa špilja" [Bear Cave] on the island of Lošinj fossil remains of a brown bear were found along with fossil remains of a cave bear (Ursus spelaeus). Bears had lived there until approximately 10.000 years ago, i.e. until the end of the last Ice Age. Fossil findings of both bear species are numerous and present all over the territory of the Republic of Croatia.

Over time the increase of human populations has brought about the shrinking of bear habitats in Croatia. Bears were seen as hunting rivals, as well as harmful and dangerous animals; in the end it became and has remained a game species. Moreover, the number of bears in Croatia has reached the limit corresponding to the capacity of its habitat.

The first written evidence on the presence of bears on an area larger than presently dates back to the end of the 18th and the beginning of the 19th century. Back then the bear had a reputation as "a monstrous enemy of our useful game and livestock and a menace to man". Bears were killed "by chance" or "out of need" by rangers and farmers desiring "both glory and bounty". Since the number of bears was not monitored, it is difficult to assess the size of the population at that time. However, it is known that the regions of Gorski Kotar and Lika were considered "par excellence" for bear hunting in the 19th and the beginning of the 20th century. According to data contained in the reports of the Zagreb Chamber of Commerce and Handicrafts, in the period from 1887 to 1889 a total of 50 bears was killed in Croatia and Slavonia; more precisely, in Modruš-Rijeka County and the Lika-Krbava County. However, according to newspaper articles of the time, these numbers are likely double since many of the killed bears were not officially registered.

Bears were hunted and killed in different ways. They are mostly hunted by waiting in front of a den, tracking, by means of leg-hold traps, snares and poisoned baits. At the beginning of the 20th century the status of the bear did not change: on the national level bears were still considered harmful and remained unprotected, and bounties were paid for their heads. According to the handbill of 27 May 1915of the government of Croatia, Slavonia and Dalmatia, for each adult bear a bounty of 20 crowns was paid from the state budget. The bounty for a killed cub amounted to 4 crowns. A closed hunting season was prescribed for "useful game" (red deer, roe deer and so forth), whilst "black beasts" such as wolves, bears and other predators could be hunted year round.

In the past when they were treated as harmful animals and were unprotected, and when a bounty was paid for the bear's head, bears were mostly hunted by waiting in front of the den, battue hunting, by means of leg-hold traps and poisoned baits; since the 1950s, bears in Croatia have been hunted almost exclusively by waiting on high shooting stands located near a bait. The main reason therefore was the Hunting Act of 1947, which improved the status of bears by

means of stricter law enforcement and "because many old bear hunters died during the war without passing on their skills to younger generations" (Z. Car 1952). Furthermore, bear hunting became more popular among foreign hunters-tourists, who became regular clients of forest management units, the establishment of which began in 1960.

In the mountainous regions of Croatia areas in which free bear hunting was not permitted existed even before the adoption of the 1947 Hunting Act. The vast forests of Gorski Kotar and Kapela, in which bears were permanently present, largely belonged to the state, wealthy municipalities and aristocratic families. In those forests bear hunting was formally prohibited. For example, on the large hunting grounds (30.700 acres) in the Čabar fief owned by the aristocratic family Ghyczy, bear hunting was strictly prohibited to hunters and rangers employed on the estate during the last decade of the 19th century. Similar rules were in force in adjacent fiefs owned by the dukes Schonburg, Auersperg and Windischgratz in neighbouring Kranjska, as well as in the Grobnik fief (owned by the Thurn-Taxis family) and state forest management units, even though rangers freely practised bear hunting in the latter in 1902.

In order to stop uncontrolled bear hunting, the population of which became seriously endangered at the end of the 1930s, the government of the Banovina Savska adopted an Order allowing bear hunting only against state permission. The hunting of bears was allowed only with a permit from the national authorities. The Hunting Act of the People's Republic of Croatia adopted at the end of 1949 included the bear on the list of Game Species, group A. Game Mammals. The Ordinance on Protected and Unprotected Game and Closed Hunting Season of 7 November 1949 listed bears amongst game species to which the closed hunting season from 1 January to 31 October applies. Article IV of the Ordinance lays down that bears may be shot with bullets only and against a special permit issued by the Ministry of Forestry.

Back then the Institute for Nature Protection considered listing bears among endangered animal species in order to better conserve the population and attempted to create special bear reserves (Velebit, Velika Kapela, Mala Kapela and mountains Risnjak and Snježnik) and to prohibit the poisoning of wolves and foxes in the period in which bears come out of winter hibernation. The said activities of the institute were based on the data according to which most bears died due to poisoned baits intended for wolves (for the purpose of reducing their numbers) during 15 years from 1946 to 1960. Namely, the cause of death of 21 (57%) out of 37 bears was poisoning. In the said period two or three poisoned bears were found each spring in state forests.

A positive development for a better protection of bears in mountainous Croatian regions was the establishment of forest management units in 1960, as they became responsible for bear management. Active conservation measures, such as the prevention of illegal bear hunting, selective use of poisoned baits for the reduction of the numbers of wolves and foxes (in 1973 the use of Cyonan poison was prohibited) and additional feeding of bears, soon gave the first positive results.

In 1960 approximately 30 bears were present on the hunting grounds of the Delnice Forest Management Unit. In 1970 in just one of the Delnice hunting grounds (52.300 ha) 55 bears were counted (from high stands near bear feeding and reproduction sites; the number includes females with cubs). Ten years later the number of bears on the same hunting grounds had doubled. Along with the growth of the number of bears, bear harvesting activities increased as well. In the period between 1960 and 1970, marked by the development of hunting tourism, 26 bears were harvested on the hunting grounds of the Delnice Forest Management Unit. During the following nine years (1970-1979) 68 bears, i.e. 72 % of the planned twenty-year bear hunt was carried out.

From the 19th century to the 1950s the outer boundaries of bear-inhabited areas remained generally the same. In the second half of the 19th century bears were present also well beyond the current bear range. Around 1860 in the times of existence of Vojna Krajina one bear was shot in the forest area Miletive in the administrative unit Dvor na Uni, which was under the competence of the Rujevac Forestry Office. In the same area snow tracks made by bears were observed during the entire winter of 1946/47 between villages of Majdan and Komora. Official records of bears far outside their current range in Croatia may be found in the Forestry Chronicles of the Karlovac Forestry Office and concern a bear shot in 1895 in the forest Okićki Lug owned by the Rauch family, in the proximity of the today's ornithological reserve Crna Mlaka.

In the second half of the 20th century bears were given more attention and the numbers and the distribution thereof were determined. Most bears were found in Velebit, Velika Kapela, Mala Kapela, Lička Plješivica and the Mazin Mountain, as well as in Gorski Kotar. Bears were occasionally present on Lika's plains and Resnik. massif, which corresponds to the present situation. Already in the past it was clear that bears do not come into conflict with farmers' and cattle-breeders' interests.

The abolishment of forest management units, the constitution of a public corporation "Hrvatske šume" [Croatian Forests] with local forest administrations (1991) and in particular the new Hunting Act (1994) resulted in a substantial increase of the number of hunting unit leaseholders and physical and/or natural persons in charge of bear management. Since the commercial hunting of bears is very profitable, the up-to-then stable planned annual quota of approximately 40 bears increased considerably.

Since 2005 bears in Croatia have been managed in accordance with the Bear Management Plan and the annual Action Plans. The Action Plan is a shorter implementing document laying down the most important bear management actions to be carried out during the current year; it also sets annual hunting quotas per hunting unit. The adoption of the said documents has entailed amendments of primary and secondary legislation governing this area and significantly altered the brown bear management in Croatia.

On the basis of the overview of the bears' status through history, trends in the estimated size of populations and harvest rates, as well as many other conducted studies, it may be concluded that the legal bear hunting has not threatened the Croatian bear populations. Possible threats regarding the bears' future are constituted largely by the changes of natural habitats and increased hunting ambitions of numerous owners of hunting licences.

4.2 Biology and ecology

4.2.1 Classification and origin

The bear living in Croatia is a mammal belonging to the order of Carnivora (carnivores), family Ursidae, genus Ursus and brown bear species (*Ursus arctos*).



Eight species of the Ursidae family are currently present in the world. These are: the brown bear (*U. arctos*) in Eurasia and North America, the white or polar bear (*U. maritimus*) in the Arctic area, the American black bear (*U. americanus*) in North America, the Asian black bear (*U. thibetanus*) in Asia, the sun bear (*Helarctos malayanus*) in Southeast Asia, the spectacled bear (*Tremarctos ornatus*) in South America, the sloth bear (*Melursus ursinus*) in Asia the and the giant panda (*Ailuropoda melanoleuca*) also in Asia. They had all evolved from a common predator Miacid approximately 25 million years ago.

As recently as fifty years ago different authors described several species and from 70 up to 150 subspecies of brown bears. Recent biological findings, supported by genetic research, have shown them to be ecological variants of the same species. Thus, the North American grizzly bear belongs to the same species as the Eurasian brown bear. Depending on the population of origin, those bears may present considerable differences. The bear has, to a greater extent than most species, an immense ability to adapt its size and appearance to the conditions in his habitat. In Alaska and on the Kamchatka Peninsula, due to long winters and a protein-rich salmon diet (which bears catch in the rapids of shallow rivers during their spawning migration), adult males may attain a weight of up to 1000 kg. On the other hand, the brown bears from the southern parts of Europe (e.g. Italy, Spain) weigh in at almost 10 times less. Nevertheless, they all belong to the same species as bears in Croatia.

4.2.2 Distribution, numbers and status

The brown bear used to inhabit the entire Eurasia and North America. The only place in Europe in which the bear has never been present are Iceland and the Mediterranean islands Corsica, Sardinia and Cyprus. Today, the bear has practically vanished from Western Europe, while the remaining populations are small, separated and disappearing (figure 2). The largest populations are located in Cantabria, Spain, numbering about 120 bears and separated into two groups, and in the Apennines, Italy, where 40 to 50 bears live within and around the Abruzzo national park. Very small groups of bears are still present in the Italian Alps (Trento), where 3 or 4 bears remain, and the western Pyrenees, also with 3 to 4 remaining bears. The last bears disappeared from the central Pyrenees in the 1980s; however, the species was reintroduced

thereto in 1996 and 1997 with three bears from Slovenia. A similar reintroduction was carried out in Austria, where three bears from Croatia and Slovenia were added to the last remaining bear between 1989 and 1993. Today, approximately 15 bears live in Austria. Another 10 bears from Slovenia were added between 1999 and 2002 to the Trento area and 5 Slovenian bears were transported to the Pyrenees in 2004.

The only stable population, numbering approximately 2600 bears, lives in the north-western part of Europe in Scandinavia. In Central and Eastern Europe, Russia excluded, only two significant populations remained at the end of the previous century. Today, it is estimated that approximately 8000 bears live in the Carpathians and about 2800 more in the Dinarides (table 1).

Bears living in Croatia are part of the Dinaric population, which is the second largest population in Central and Southern Europe. The bears in Croatia, together with those in neighbouring Slovenia, are the westernmost, genetically related stable population, potentially representing the last available source for the salvation of bears in Western Europe. Genetic studies comparing base pairs of the same genes of bears from different populations have created a tree of their genetic relatedness on the basis of numbers of different base pairs. Thus, bears from Croatia, Slovenia and Bosnia and Herzegovina are genetically identical to the remaining bears from the Alps and are genetically slightly from the bears from the Pyrenees. On the other hand, the bears from the Romanian Carpathians, Russia and Northern Scandinavia differ significantly from them and are not therefore suitable for reintroduction of the specieis in Western Europe. All this elements place the brown bear on the top of Croatia's most valuable natural heritage.

The limited size of the available habitat and the large living space every bear requires, prevent any significant further growth of the bear population, which is the reason why bears are biologically classified as a rare species.

4.2.3 Description

Bears are the largest terrestrial carnivores. In Croatia, adult females weigh on the average about 100 kg and males 150 kg; however, some specimens can weigh more than 300 kg. In the course of a year the weight of the same adult animal may vary by more than a third: it is largest in the late autumn before denning and lowest at the beginning of summer, i.e. at the end of the mating season.

The body of the bear is covered with long guard hair and thick ground hair. The ground hair is much thicker during winter than in summer. The hair colour is mostly brown and is often darker or even black over the back. However, the tips of the longer hair are sometimes light grey. Some specimens have an evenly distributed chocolate-brown pelt colour. Considering the range of pelt colouring of brown bears, with the predominant brown colour, the use of the name "smeđi medvjed" (brown bear) is advocated for this species. This species is known around the world as the "brown bear", where one word of name is the adjective that denotes the brown colour in the respective languages: English brown bear, Italian orso bruno, French l'ours brun, German Braunbär, Slovenian rjavi medved, Serbian mrki medved.

Similarly to humans, bears touch the ground with the entire surface of their feet while walking. This way they leave tracks that are unlike any of the tracks belonging to other species living in our habitats. The fingers are tipped with claws, which are particularly long (approximately 5 to 6 cm) and strong on the forefeet. A bear uses them to dig soil, break open

rotten logs and dig up anthills, turn rocks, kill and rip its prey. Unlike cats, bears' claws are not retractable.



The bear's dentition has all the characteristics of a carnivore's teeth, with characteristic incisors, canines and carnassials (figures 7 and 8). The tooth formula is I 3/3, C 1/1, P 4/4, M 2/3, which adds up to 42 teeth. However, most specimens are missing some of the first three upper and lower premolars (some specimens are missing all of the said teeth); the existing premolars are usually small and have no functionality in chewing. The chewing surfaces of molars are somewhat flatter than those of other carnivores, which is an adaptation to the grinding of plants. The digestive tract is short and simple, similar to that of other carnivores, with a simple stomach, long small intestine, short vermiform appendix and short large intestine.

Bear scats vary in shape, consistence and colour, depending on the food the bear has eaten. Nevertheless, they can be easily distinguished from scats of other animal species by their size and often aromatic smell. Sometimes, a soft scat of a wild boar may be similar to a bear scat; however the boar scat does not contain bits of undigested food and lacks the recognizable smell.

4.2.4 Diet

Although their physical appearance is that of a true carnivore, bears satisfy approximately 95% of their dietary needs with vegetarian foods. The animal proteins they consume originate mainly from invertebrates and carcasses of larger animals. The plant material the bears eat in spring and summer consists mostly of green vegetation and grasses, which are supplemented in the summer with soft fruits, and in the autumn with beechnuts, which serves as the main food for the accumulation of winter adipose tissue. Due to the short and simple digestive tract, a significant part of the consumed plant material passes through it badly digested or not digested at all. This forces the bear to consume as much food as possible. On the other hand, due to this incomplete decomposition during the digestive process, the bear aids the spreading of plant species by its scat, the seeds of which may be carried over large distances.

The vegetarian foods the bear finds in the forest during spring are wild garlic (Allium ursinum L.) and cuckoo pint (Arum maculatum L.). On forest meadows it feeds on graminoids (Graminae sp.), clover (Trifolium sp.) and docks (Rumex sp.).

During the summer it most often feeds on wild angelica (Angelica silvestris L.), stinking aposeris (Aposeris foetida L.) and strawberries (Fragaria sp.), and in late summer on raspberries (Rubus idaeus L.), blackberries (R. fructicosus L.), common buckthorn (Rhamnus cathartica L.) and blueberries (Vaccinium myrtillus L.).

In the autumn, the beechnuts (Fagus syilvatica L.) are certainly the most important food. At that time it also feeds on crab apples (Malus sylvestris Mill.) and the common pear (Pyrus communis L.). It also eats hazelnuts (Corylus uvellana L.), fruits of the European mountain ash (Sorbus aucuparia L.), chestnuts (Castanea sativa Mill.), cornelian cherry (Cornus mas L.) and acorns of various species of oaks (Quercus sp.). In search of nutritious fruit and nuts a bear can often cover great distances, even leave its permanent home range.

In fields it feeds on all cereals, oats in particular. It is also attracted by cornfields, especially when the corn is still young. It visits orchards and vineyards, where it eats plums, apples, pears, peaches, cherries, grapes and other fruit. It likes to eat forest honey and bee larvae, which is the reason why it breaks into apiaries, causing thereby agricultural damage.

Animal food the bear eats are usually animal carcasses it finds in the forest. It feeds also on invertebrates, especially larvae of ants and other insects, and young wild animals. Among domestic animals, it most often attacks sheep, and occasionally cows, donkeys and horses. Among game animals, it attacks only young, injured and sick animals that it is able to catch.

4.2.5 Life cycle

Bears mate from the end of May until the middle of July. The males cover great distances at that time and fight among themselves if they are near the same female. Every male tries to fertilize more than one female. A female may mate with several males during the breeding season, which makes it possible that cubs from the same litter have different fathers. The embryo in the uterus has delayed implantation and most of its development takes place during the last three months of gravidity, which altogether lasts about seven months. The cubs are born in mid-winter during denning.

A bear spends the winter in a specially selected and prepared den without taking any food or liquid. In our region most dens are located in small natural cavities under rocks, which the bear adapts to its needs by digging. Only around 10 % of dens are located between roots of large trees and just as many out in the open or beneath the crowns of coniferous trees. Inside a den a bear prepares a comfortable bed using dry grass, leaves or twigs. Nevertheless, some specimens remain active throughout the winter. If a bear is disturbed and chased out of its den, it will have a shortage of body energy and will survive with difficulty until spring unless it has a thick layer of adipose tissue. The young two-year-old bears are usually badly prepared for the winter, since it is the first time they have to survive without their mother. However, the climate in Croatia is characterised by frequent warmer periods during winter and snow not covering permanently at least part of the bear habitat. It is not clear yet whether and how additional feeding at feeding stations affects the bears' winter activity.

The longest is the denning of gravid females, which usually give birth to 1 to 4 cubs weighing approximately 350g in the first half of January. They are born blind and hairless. Their

lives depend upon the direct contact with the body of their mother, who keeps them warm and feeds them with concentrated milk. Bear milk has around 22 % fat and 12 % proteins and can be compared only with the milk of seals. The gravest danger to newborn cubs is inside the den in wintertime. If the mother is disturbed and forced to abandon the den, the cubs inevitably die since they are not able to follow her. Attempts by mothers to carry at least one cub in their teeth have been seen in such situations; however, since the mother cannot carry the cub very far in this manner nor prepare a new den in the middle of winter, there is no chance for its survival. It is known that almost every winter a certain number of bear litters in Croatia dies because a den is disturbed. It is known that during the winter of 1987/88 just in the Gorski Kotar region at least ten cubs were abandoned by their mothers. At the beginning of April owing to the nutritious mother's milk the cubs have grown enough to leave the den and follow their mother in search for food. They stay with their mother during their entire first year of life and the following winter in the den, and reach independence at the age of 1,5 years during May and June when their mother mates again. Sometimes after mating mothers permits the previous year cubs to follow her until autumn, when she finally retires to a private den where she will give birth to a new litter. In the northernmost bear populations the cubs stay with their mothers for 2.5 or even 3.5 years, which makes the number of births per female in these places significantly lower.



Croatian bears reach sexual maturity at the age of 3 to 4 and have a life span of 10 to 20 years. The average age of the managed Croatian bear population is around 5 years.

4.2.6 Habitat

As a biological need, the brown bear has distinct habitat requirements. In the past the bears also lived in lowland forests, floodplains and natural meadows. Due to the increase of human presence, they were pushed into areas scarcely suitable for human habitation. Today they inhabit mountainous, forested areas only. As far as bear inhabited lowlands are concerned, bears are found only in taigas in the far north. A habitat suitable for bears must consist of different forest types, with the crucial role being that of the deciduous trees with large seeds (i.e. beech, chestnut, oak). The presence of thickets and meadows is important for escape cover and pasture. It is particularly important that bears have the possibility to move in all directions, including

zones of different altitudes. Peace and quiet in the habitat is of extreme importance during wintertime because of the newborn cubs in the dens.



Each night bears forage for food, usually in lower altitude areas with more open space (which means closer to humans) and during the day it retreats to quiet and densely vegetated areas where it makes the so-called "day bed". The average daily movement of a bear amounts to 1.6 km, while the maximum exceeds 10 km. Furthermore, in springtime bears need lower areas with early vegetation and protein-rich food. During the mating season (May – June) the males cover large areas in search for females on heat. In autumn bears need access to mature forests with large quantities of nutritious nuts (e.g. beechnuts, chestnuts, acorns). In winter they retreat to inaccessible, quiet areas for the purpose of denning and giving birth, as far as females are concerned. If bears are hindered from accessing any critical part of the habitat or if part of habitat is lost to bears for other reasons, significant disturbances in their life cycle can occur: females may remain unfertilized, cubs perish in unsuitable dens or because of lack of food, the bears may be insufficiently prepared for winter, general mortality increases and property damage occurs due to bears searching for alternative sources of food in order to survive. Bear home range in Croatia is estimated to approximately 250 km2 (25.000 ha).

4.3 Results of scientific research in Croatia

The modern radio telemetry methods of wildlife research (bear included) were discovered and implemented in the United States of America during the 1960s. The first radio-telemetric bear study in Europe took place in Northern Italy (Trento) in the 1970s, where two specimens were fitted with radio collars. Our project in Croatia began in 1981 and was the second of this kind in Europe. Here we present a summary of some of the results thereof.

The bears were captured using a leg snare made of steel cable attached to a torsion spring. They were baited with slaughterhouse by-products or animal carcasses. The captured bears were sedated with ketamine and xylazine hydrochloride using a dart gun or a blow-pipe. They were fitted with ear tags and a radio collar. A rudimentary first premolar was extracted for age determination. The locations of tracked bears were determined by means trigonometry from the ground or from an airplane. The size of the bear range was calculated using the minimum convex polygon (MCP) method.

Traps were set for a total of 4256 nights, which resulted in 34 successful bear captures, three of which were re-captures, while 5 of the captured bears were not equipped with radio transmitters. A total of 26 bears were marked and tracked: 14 in Plitvice and 12 on the Risnjak mountain. Only 6 out of the 26 tracked bears were females, 1 out of 14 in Plitvice and 5 out of 12 on Risnjak. 15 bears were adults and 11 subadults, with the average age at the time of capture of 4,7 years (range 1 – 13 years). There was no significant age difference between genders. In 5 cases we tracked a bear family. Two bear cubs were yearlings accompanied by their mothers and brothers. One female gave birth to at least one, while another to three cubs during tracking. One female had 2 yearlings following her at the time of capture. One motherless six-month-old cub was also tagged and it survived on its own for at least 15 months (for the entire duration of tracking). The average weight of adult females was 103 kg, and of males 153 kg.

The locations of the marked bears were determined on 517 different occasions, 487 of which on different days. The females were tracked on average for 712 days and the males for 250 days. Each of the 6 females was tracked for more than a year (range: 561 - 914 days), while only 2 out of 23 collars fitted on males (including 3 recaptures) lasted more than 1 year. 14 collars were taken off by the bears themselves, 5 transmitters stopped working and 2 bears were killed. The location of each female was determined 39 times on average (range: 6 - 130) and of each male 13 times (range 1 - 86). Only 58% of the 434 daily searches for males were successful, while the females were found in 71 % of the 333 daily searches.

Only 3 out of 14 marked bears on the Plitvice lakes were not recorded leaving the national park. However, those three bears were located only on a limited number of occasions. The remaining 11 bears were found up to 11,3 km (the average of distances covered is 4.7 km) outside the national park boundaries. Approximately one half (145 out of 303) of all the locations of bears were outside the park. The total known range covered by all 14 bears was 736 km2. Only 2 out of 7 bears that were tracked during winter were denning within the boundaries of the Plitvice lakes national park. One young female crossed the park boundaries at least 25 times in 16 months.

All 8 bears from the Risnjak area that were captured and tagged in the national park crossed its boundaries and covered distances of up to 25,6 km (average 10,4 km). Those bears were found outside the park for 62 % of the time (86 out of 139 locations). Nevertheless, 4 out of 6 dens of bears captured within the Risnjak national park were located inside the park.

The largest bear ranges amounted to $224~\rm km2$ ($22.400~\rm ha$) in $1330~\rm days$ for a five-year old male and $147~\rm km2$ ($14.700~\rm ha$) in $840~\rm days$ for a three-year old female. The size of the areas covered was gradually increasing with the increase of the number of the determined locations, although the said increase rate slowed down for females after about $40~\rm determined$ locations. The average annual bear range was $128~\rm km2$ ($12.800~\rm ha$) during $4~\rm male$ bear years and $58~\rm km2$ ($5.800~\rm ha$) during $5~\rm female$ bear years.

No significant differences were recorded in size of the bear range in spring, summer and autumn. The average winter bear range was significantly smaller than during other seasons. The winter average amounted to 4 km2 (400 ha) (range 0-18 km and 0-8 ha, respectively), while in other seasons it amounted to 28 km2 (2.800 ha) (range 1-102 km and 100-10.200 ha, respectively). The spring and summer movements of males were significantly larger than of females: 81 km2 in springtime as to 18 km2 (8.100 as to 1.800 ha) and 34 km2 in summertime as to 11 km2 (3.400 as to 1.100 ha). A total of 143 straight-line distances between daily locations were determined. The range amounted to 0,2 to 8,5 km, with the median value of 1,5 km. Sixty-seven percent (n = 95) of daily movements were shorter than 2 km and only 2 % (n = 3) were longer

than 7 km. Only males covered distances longer than 7 km; however, the total difference in daily movements between males and females were not significant.

The tagged bears did not exhibit territorial behaviour. The bears in Plitvice shared their known home range with 2 to 11 (average 7,7) known home ranges of other tagged specimens. In the Risnjak area the home ranges of all 8 bears captured in the park overlapped.

The satellite tracking of brown bears (GPS transmitters) has been used in Croatia since 25 September 2003 as well (Figure, Table 1). The collars fitted on bears contain the GPS device which determines their location by means of geostationary satellites, while an additional GSM device sends data to researches in form of text messages.

Tag	Gender	No tracking days	No of locations	Bear range 100% (km2)	50% KERNEL (km2)
B29	M	224	878	79,4	21,8
B30	M	409	2758	653,8	41,9
B32	F	81	582	53,6	6,9
B33	F	191	922	31,4	4,1
B34	F	42	319	35,4	2,0
B35	F	236	786	87,2	0,9
Average				M = 366,6	M=31,9
km2				F=49,0	F=3.5

The results of the scientific study of brown bears in Croatia through projects led by Đuro Huber of the Faculty of Veterinary Medicine in Zagreb were published in 42 scientific papers (27 in scientific journals and 15 in collections of scientific papers), 11 chapters of books, 47 scientific articles and 71 scientific congress presentations, for a total of 171 published bibliographic units. A partial list of those works is included in the list of references of this Plan.



4.3.1 Diseases

Due to their natural resistance and a relatively low population density, the natural occurrence of bear diseases is relatively rare. Rabies infection in Croatia was confirmed for one bear only in 2000. Most bears have internal parasites, usually Ascarids in the small intestine; however, these invasions are part of a stable host-parasite system that does not affect the health of the host. Serological testing of bears' serum discovered antibodies to most pathogens, but this is primarily a sign of resistance due to exposure to these pathogens and not the consequence of occurrence of the disease.

Table 2: Overview of the population structure of brown bear (Ursus arctos) in Europe (modified according to Linnel et al. 2007)

Western Eastern Western Central Trentino Central Austria ⁷ Southern Austria/Slovenian Alps ⁸	120 15-17 40-50 30-50
Western Central Trentino Central Austria ⁷ Southern Austria/Slovenian Alps ⁸	40-50
Central Trentino Central Austria ⁷ Southern Austria/Slovenian Alps ⁸	40-50
Trentino Central Austria ⁷ Southern Austria/Slovenian Alps ⁸	
Central Austria ⁷ Southern Austria/Slovenian Alps ⁸	
Central Austria ⁷ Southern Austria/Slovenian Alps ⁸	30-50
Southern Austria/Slovenian Alps ⁸	
Austria/Slovenian Alps ⁸	
Northern Dinaric ⁹	2.800
Central Dinaric ¹⁰	
Pindos ¹¹	
Rila-Rhodope Massif	720
<u> </u>	
_	Northern Dinaric ⁹ Central Dinaric ¹⁰

Carpathian	Czech Republic	Western ¹²	8.000
•	Poland	Main chain ¹¹	
	Slovakia	Apuseni Mountains	
	Romania, Ukraine	•	
	Serbia		
Scandinavia	Sweden, Norway	Southern / Central /	2.600
	·	Northern	
North-eastern Europe	Finland		4.300
Karelian	Norway		
	Russia ³		
North-eastern Europe	Estonia		6.800
Baltic	Latvia		
	Russia ⁴ , Belarus		

- 1. Autonomous regions: Asturias, Cantabria, Castilla y Leon and Galicia.
- 2. Autonomous regions: Navarra, Aragon and Catalonia.
- 3. Russian oblasts of Murmansk and Karelia. The southern and eastern border coincides with the natural geographic structures of Lakes Onega and Ladoga and the White Sea.
- 4. Russian oblasts of Leningrad, Novgorod, Pskov, Tver, Smolensk, Bryansk, Moscow, Kalinigrad, Kaluzh, Tula, Kursk, Belgorod & Orel.
- 5. Autonomous provinces: Province of Trento, Province of Bolzano, Regions: Veneto, Lombardia, Friuli.
- 6. Autonomous regions: Lazio, Abruzzo, Molise.
- 7. The Austrian states of Lower Austria, Styria and Upper Austria.
- 8. The Austrian state of Carinthia.
- 9. Southern Slovenia, Croatia, Bosnia & Herzegovina.
- 10. Western Serbia, Montenegro, northern Albania.
- 11. Eastern Albania, FYR Macedonia, northern and central Greece.
- 12. Central Poland and Slovakia.
- 13. Eastern Poland, eastern Slovakia, Ukraine, Romanian Carpathians and eastern Serbia.

4.4 Natural characteristics of bear habitats in Croatia

4.4.1 Orographic and hydrographic environmental factors

The bear habitat is largely located in the high karst area. The surface has a broken up appearance with all typical karst elements and phenomena: potholes, sinkholes, dolines, grikes, shafts, blind valleys and residual hills. All these elements are intertwined and interconnected. Altitudes range from 0 m (sea coast) up to 1750 m of the highest peaks of Velebit. Since the habitat is preserved to a great extent, the karst elements are present in their typical form.



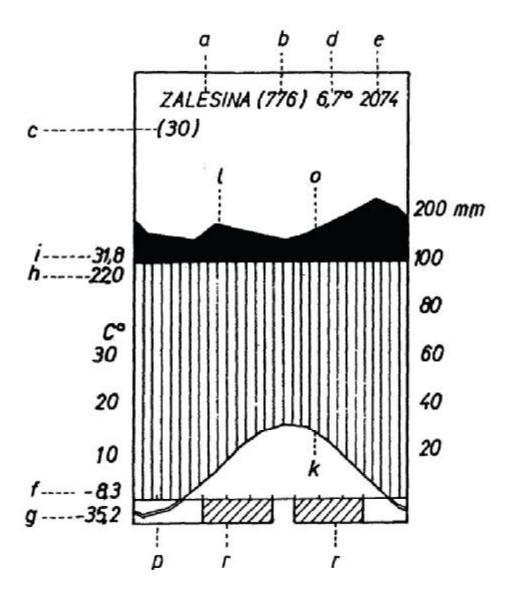
Larger watercourses existing within the bear habitat are the following: Rečina, Kupa, Dobra, Mrežnica, Korana, Zrmanja, Krupa, Gacka, Lika, and Una, along with the following lakes: Lokvarsko, Bajer, Lepenice, Sabljaci, Krušičko and Plitvice lakes. Apart from these watercourses and lakes bears also drink water from streams, creeks, puddles and forest ponds. Unlike many other animal species, bears crawl into caves and caverns in search for water.

4.4.2 Climate

Bear habitats are located in the Central European climate zone strongly influenced by the Mediterranean climate. The basic characteristics of climate in bear habitats are the following: long, snowy winters, sudden changes of weather, short vegetation period, low average annual temperature, high air humidity, early and late freezes and fogs, abundant rainfall and snowfall and strong winds from the north-east (Bura) and the south-east (Jugo).

There are more than 120 cold days (temperature below 0 $^{\circ}$ C) and more than 40 very cold days (temperature below -5 $^{\circ}$ C). The number of freezing days (temperature below -10 $^{\circ}$ C) exceeds 20. The average number of days with snow cover exceeds 85.

Winter starts in November and lasts until mid April. The snow cover can be as much as 2 m thick. Spring starts late and is short with abundant rainfall, interrupted by several revisits of winter. Summer is short and relatively hot. It starts in mid June and lasts until mid September. Autumn is pleasant and longer than spring, but it gets chilly, rainy and foggy as it approaches winter.



- a station
- b altitude
- c years of monitoring (period)
- d annual temperature in °C (several years' average)
- e annual precipitation in mm (several years' average)
- f average minimum temperature of the coldest month
- g absolute minimum temperature during observation
- h average maximum temperature of the warmest month
- i absolute maximum temperature during observation
- j average temperature fluctuation
- k several years' average of air temperature by months
- l several years' average of precipitation by months
- o humid period
- p months with the average minimum air temperature below 0 °C
- r months with the absolute minimum air temperature below 0 °C

Figure 1: Climatograms according to Walter with data from meteorological stations typical for the bear habitat

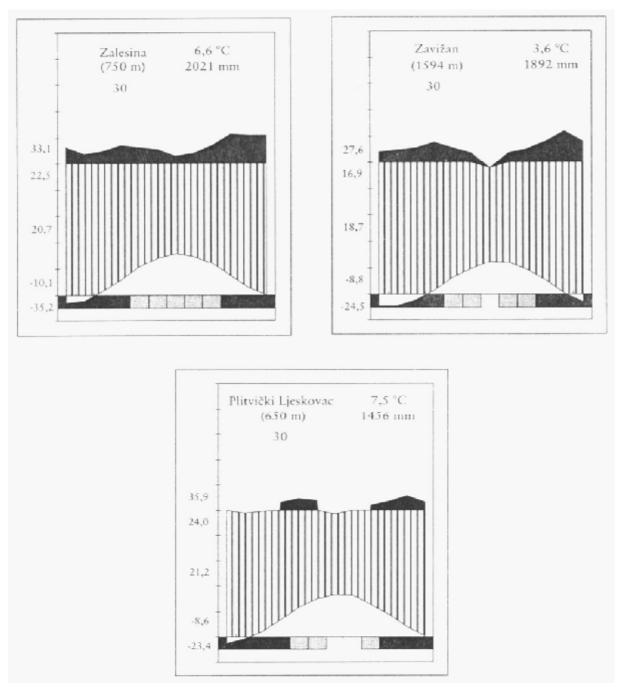


Figure 2: Climatograms for Zalesina, Zavižan and Plitvički Ljeskovac

4.4.3 Forest communities

The life of bears is highly dependant on large, unbroken forests, in which they find food, water, peace and quiet, shelter and dens. The bear habitat in Croatia extends over altitudes of 0-1700 m; bears may be therefore found in forest communities typical for the mountainous-hilly area of the Dinaric mountain range.

The most important forest communities overlapping with the bear home range in Croatia are the following:

• Lonicero borbasianae - Pinetum mugi/Ht. 1938 (Borh. 1963). This community forms the upper boundary of forest vegetation above 1350 m. It may be found on the highest peaks

- of Gorski Kotar and Velebit. Due to temperature inversion this community also appears inside sinkholes at lower altitudes.
- Mountain spruce forest (Aremonio-Piceetum Ht. 1938). This forest is found in cold mountain hollows in which the concentration of cold air is relatively higher. It may be found in Gorski Kotar and on Velebit.
- Pre-alpine beech forest with Homogyne sylvestris (Homogyne sylvestris Fagetum sylvaticae /Ht. 1938/Borh. 1963). It is located on altitudes from 1100 to 1500 m, above the beech-fir forests. It may be found in the areas of Gorski Kotar and Lika and represents an important source of bear food (beechnuts).
- Dinaric beech-fir forest (Omphalodo-Fagetum Marinček et al. 1992). These forests form the largest and the most important complexes inhabited by bears. They are found through most of Lika and Gorski Kotar. They are very important due to vast areas they cover, in which bears can satisfy most of its life requirements.
- Fir forest with ribbed fern (Blechno-Abietetum Ht. 1950). This community is found in Gorski Kotar on silicate rock and on podzol soil in beech-fir forest.s
- Fir forest with feather reed grass (Calamagrostio abietetum Ht. 1956). Located on altitudes of about 1100 m. This community is found on large boulders, in pre-alpine beech forests or in beech-fir forests. Bears often finds cracks in boulders and uses them as a den.
- Illyrian mountain beech forest with dead nettle (Lamio orvale-Fagetum sylvaticae Ht. 1938). This community is found on the continental side of the Dinaric mountain range. It is important since bears feed on beechnuts and may be found on altitudes between 400 and 800 m.
- Beech forest with autumn moor grass (Seslerio Fagetum sylvaticae Ht. 1950 (M.Wraber 1960)). This is a high karst community, found on the sea-oriented slopes of the Dinaric mountain range. It is important because of the beechnuts on which bears feed.
- Forests of downy oak and hop hornbeam (Ostryo-Quercetum pubescentis HT. 1938). This forest community forms the transition from coastal towards continental vegetation. It is found in the coastal region below the thermophilous beech forests and in the areas east of the Zrmanja river. In the coastal region this forest community often represents the boundary of the permanent bear home range.

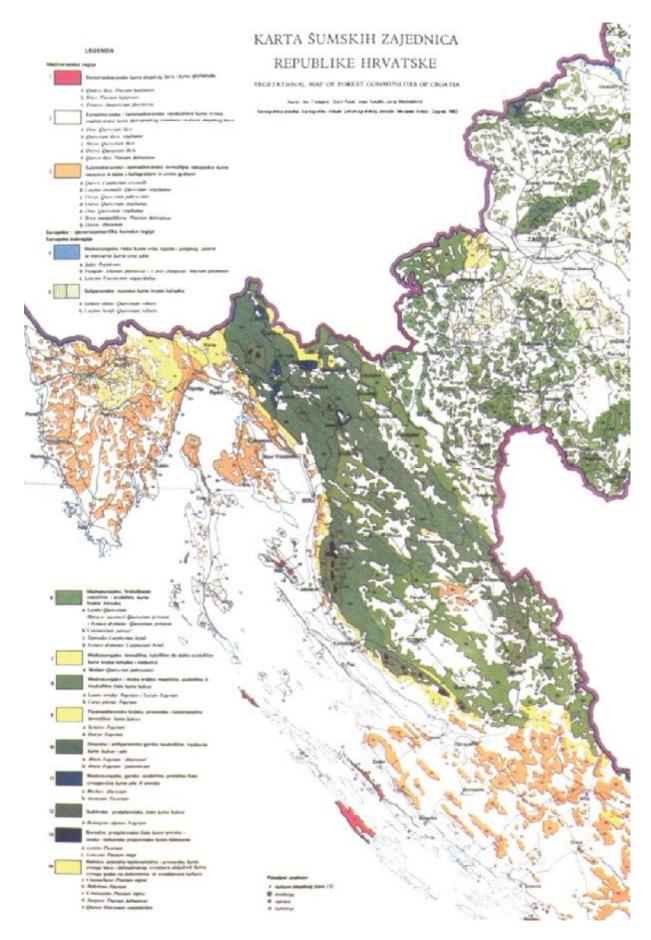


Figure 3: Map of forest communities within the bear range in the Republic of Croatia

4.5 Brown bears and humans

4.5.1 Public attitude towards bears and bear management in Croatia

A survey conducted among the general public, rangers and hunting unit leaseholders (n = 779) in 2003 in areas where bears are permanently (central areas) and occasionally present (peripheral areas) is the first survey of this kind in Croatia.

Overall, all the target groups have shown very positive attitudes towards bears since most of the respondents expressed favourable or very favourable attitudes towards bears. The most positive attitudes were shown by the hunting unit leaseholders (80 % favourable) and the rangers (76 % in favour), followed by the general public in Gorski Kotar and Lika (75 % in both regions). Positive attitudes towards bears were expressed respectively by 72 % in the eastern, 71 % in the western and only 50 % in the northern peripheral area. Accordingly, most of the respondents, especially from the central bear areas (Gorski Kotar and Lika) felt that the brown bear is a valuable resource. No less than 85 % of the respondents from Lika felt that the presence of bears may enhance tourism in the region.

Most of the respondents felt that bears do not cause considerable damage to livestock, nor to agricultural crops and orchards. Nevertheless, most of the respondents agreed that the government and/or the hunting unit leaseholders who manage bears should compensate for damage caused by bears and remove nuisance bears (those that cause damage repeatedly).

No less than 36 % of respondents from Gorski Kotar and 25 % from Lika had experienced damage by bears. In peripheral areas that percentage was much lower, namely 8 % of the respondents from the western peripheral area, 4.5 % from the northern peripheral area and none from the eastern peripheral area have experienced damage by bears. Respondents who had experienced damage had considerably less positive attitudes towards bears than the survey average.

Representatives of the general public have shown a relatively good knowledge of bear biology. On the other hand, their knowledge of the legal status of the species and official estimates of bear population size was very poor. This emphasizes the need for better information of the public by competent authorities.

Most respondents from the general public group believe that bears in Croatia should be entirely protected by law, while rangers and hunting unit leaseholders are against this idea. Furthermore, there was a considerable amount of support among the general public for controlled bear hunting, which suggests that their perception of legal protection does not necessarily exclude hunting as a way of using a protected species. Upon interpretation of these results account must be taken of the fact that the general public has shown a poor knowledge of the current legal status of bears. According to most of the respondents, the bear hunting quota should be determined on the national level and each harvested bear should be registered in a central database.

Most respondents from all areas concerned are willing to tolerate more bears. This attitude was particularly strong among the respondents from Lika. Although they have shown the most positive attitudes towards bears, hunting unit leaseholders and rangers were indecisive on the issue of increasing the size of the bear population.

Detailed results of the survey may be found in Majić, 2003 (Appendix to this Plan).

4.5.2 Damage caused by bears and bear attacks on humans

Damage caused by bears is diverse. According to damaged objects, the damage may be divided into following groups:

- damage to agricultural crops and orchards;
- damage to forest components;
- damage to livestock (including bees):
- damage to buildings;
- damage in traffic;
- danger to humans.

Damage to agricultural crops depends on the location of fields. Since the bear is a wildlife species that mostly inhabits the high karst and large forested areas, damage to agricultural crops are relatively rare and the most common form thereof is grazing on wheat fields during the period of seeds ripening. Bears prefer oats, followed by corn and wheat, and sometimes rye and barley.

Bears damage fruit trees by bending and tearing off branches during periods of fruit ripening. Bears primarily like plums, apples and pears. Other fruit interesting to bears (i.e. raspberries, blackberries, strawberries and so forth) are currently absent from the bear range in Croatia. In the coastal areas in which permanent bear presence has been registered over the past 20-30 years, bears have caused minor damage to fruit crops (i.e. figs, peaches, cherries and so forth).

Damage to agricultural and fruit crops caused by bears in Croatia is limited, in particular in the central part of the bears' habitat, while in the peripheral part such damage is somewhat more pronounced.

Damage to forest components. Since 2001 bear damage has been registered in the area under the competence of the Mrkopalj Forestry Office and the number of damaged trees has increased over the years. The number of damaged trees so far is estimated to 1000. Bears peel off the outer bark (mostly fir) and gnaw with their incisors the sweet cambial tissue. Damaged trees are located all over the forest, not only around the bear feeding stations. It is presumed that the habit of peeling off the bark of the trees is related to the situation in which a larger number of bears feed on the same feeding station, while younger bears (which also have a lower status) cannot access food in the presence or vicinity of a stronger bear. Due to the stress caused by such situations and the lack of natural sources of food, some bears start gnawing the tree bark and the sweet cambial tissue. Afterwards, this habit is maintained (as well as the habit of visiting waste dumps) and the bears continue to peel off the bark everywhere, while females pass the said habit to their young. All those factors render the solution to this problem difficult.

Possible actions:

- 1. Removal of bears damaging trees;
- 2. Reduction of the total number and local density of bears;
- 3. Reduction of the quantity of food on feeding stations. This may not be done be fore the reduction of the number of bears because it would cause their rapid spreading in other forest areas;
- 4. Additional feeding of bears by compound food containing sugar in order to prevent them from damaging trees (on the basis of the experience from the Washington State, USA and Bugojno, Bosnia and Herzegovina).

Damage to livestock and bees occurs more frequently and is the main cause of conflicts between people and bears. Such damage concerns both large and small livestock. As a result of the decrease of seasonal grazing of livestock in bear habitats, damage has occurred less frequently during the past 20 – 30 years. There were cases in which single bear would repeatedly attack large livestock or pigs located within a household or even in the stables. Compensations for bear-related damage on livestock in areas in which grazing is prohibited by law are not paid.

The most frequent damage caused by bears is damage to apiaries. A number of plant species and some of the best bee grazing areas (common heather and pubescent oak) important for honey production are located within the bear habitat, which is the reason of the development of apiculture in those areas. Furthermore, these are ecologically conserved areas where top quality honey is produced and where apiculture is already and shall become in the future in an even larger extent the most important part of local development programmes. It is estimated that more than 70.000 apiaries are present within the bear range in Croatia.

Damage to buildings mostly refers to damage caused by bears to hunting management structures (e.g. feeding stations, salt licks, food storages, etc.) and rarely to parts of households (such as fences, stables, storerooms, dry rooms and so forth). Since bear is a game species, hunting unit leaseholders do not report damage on their hunting management structures.

A research concerning bear damage in Croatia has been conducted by Huber and Morić (1989) in 1987 when 247 cases of damage caused by bears was recorded. Bears killed 13 farm animals, eight of which were of bovine species and three of which were sheep. The most damaged agricultural crops were oats (N = 107) and corn (N = 94).

Until the adoption of the Brown Bear Management Plan in 2005, official recording of bear-related damage in Croatia and data processing and presentation was not compulsory, nor has there been an administrative body in charge of such activities. Data on the number of cases of bear damage and the amount of damage are registered by hunting unit leaseholders, who are also liable for game-related damage and therefore for paying indemnities. All damage is not reported since it is incurred to hunters, too, and due to the fact that persons to whom such damage is incurred are not satisfied by the amount of compensation and the criteria for acknowledging the occurrence of damage (missing livestock does not count as damage and the loss thereof is not compensated). The amount of compensation is negotiated and it is not the same for the entire bear range area; furthermore, no common compensation tariffs exist for damage incurred by bears, as is the case of damage incurred by other protected wildlife species (in particular, wolves).

The implementation of the Brown Bear Management Plan, which began in Croatia in 2005, includes the organised collection of data on damage caused by bears. Within the LIFE COEX project entitled "Improving coexistence of large carnivores and agriculture in Southern Europe" (through which the European Union co-finances the implementation of the Brown Bear Management Plan), all hunting units within the bear habitat have received a questionnaire concerning damage caused by bears in hunting units during the previous year. 37 out of 82 hunting units located within the bear range sent the answer, reporting 26 cases of bear damage on 2004.

The Action plans for brown bear management for the years 2005, 2006 and 2007 provided the hunting unit leaseholders with guidelines on filling the forms and delivering data on damage caused by bears within the hunting units during the current year. In this way the organised collection of data on bear damage began and is jointly conducted by the Directorate for Hunting

of the Ministry of Agriculture, Forestry and Water Management (now Ministry of Regional Development, Forestry and Water Management) and the Biology Institute of the Faculty of Veterinary Medicine of the University of Zagreb.

In 2005 15 hunting units reported bear-related damage for a total of 88 damage cases. Most damage was incurred to the Hunting association Tetrijeb from Čabar in the Crna Gora hunting unit, with almost 40.000 HRK paid indemnities. The said damage was caused by a nuisance two-year-old female, which was killed on 6 April 2006 in accordance with a special permit of the Directorate for Hunting. The compensations paid by hunting units in 2005 amounted to almost 58.000 HRK. In 2006 7 hunting units reported bear-related damage for a total of 16 damage cases amounting to 44.000 HRK. Almost 37.000 HRK were paid as indemnities in two car accidents. Most bear damage is recorded in agriculture, i.e. to corn crops, orchards and vegetable gardens. Farm animals attacked by bears are usually bees (apiaries), fowl and rabbits, while large livestock is rarely attacked (1 cow and 13 sheep in 2005, 1 cow and 10 sheep in 2006). Damage is caused also by bears and motherless cubs attracted by waste dumps near human settlements. These are usually isolated cases accustomed to human smell on dumps, which therefore approach human settlements attracted by an easy source of food. The issues concerning such bears, known as "nuisance bears", are dealt with in the Chapter "Nuisance bears".

Damage in traffic occurs when vehicles collide with bears. In Croatia an average of 3 – 10 such traffic accidents occur each year. Such damage can be substantial (i.e. expensive vehicles, compensations for injuries or even death and so forth) and even though such accidents are rare, the total amount of damage can be greater than all other bear-related damage put together

Up till now official recording of bear-related damage in Croatia and data processing and presentation was not compulsory, nor has there been an administrative body in charge of such activities. Data on the number of cases of bear damage and the amount of damage are registered by hunting unit leaseholders, who are also liable for game-related damage and therefore for paying indemnities. All damage is not reported since it is incurred to hunters, too, and due to the fact that persons to whom such damage is incurred are not satisfied by the amount of compensation and the criteria for acknowledging the occurrence of damage (missing livestock does not count as damage and the loss thereof is not compensated). The amount of compensation is negotiated and it is not the same for the entire bear range area; furthermore, no common compensation tariffs exist for damage incurred by bears.

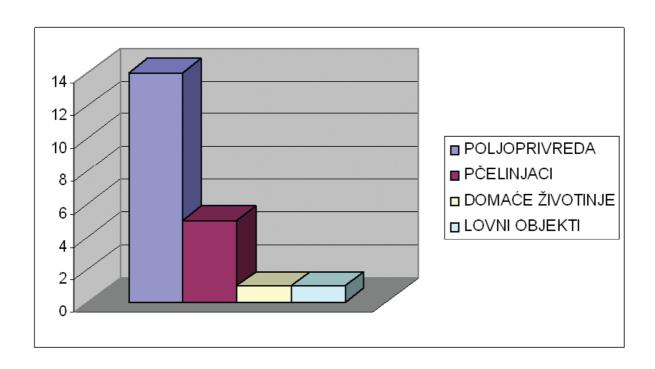


Figure 4: Bear-related damage in Croatia in 2004

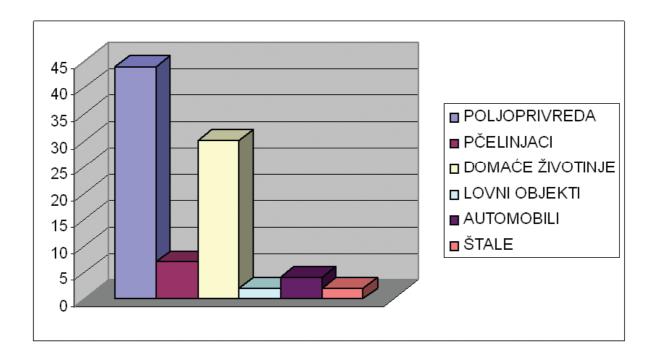


Figure 5: Bear-related damage in Croatia in 2005

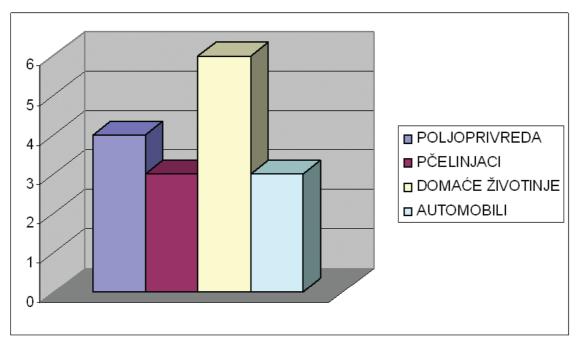


Figure 6: Bear-related damage in Croatia in 2006

Danger to humans. Due to their well-developed senses, bears can avoid people on time and unpleasant encounters with bear attacks on humans are rare.

There has been only one documented case of a fatal bear attack on a person in Croatia in the past 65 years, which occurred in the Plitvice Lakes National Park in March 1988. The man was killed by a female with a cub.

Apart from this case, a number of other unpleasant encounters was recorded, but with no tragic outcome. People got injured as a result of a bear attack, although in some cases persons got injured when running away from the bear and believing to be under attack. Accidental encounters with bear, in particular those with a female with cubs or with younger specimens, may be classified as irresponsible human behaviour in the bear habitat.

There are certain rules of behaviour in the bear habitat:

1. Do not feed the bears

Make sure you do not leave behind any organic waste in the bear habitat and that the food is not accessible to bears. Food leftovers and waste dumps attract bears. Certain bears pay regular visit to waste dumps, but they may also start looking for food nearer to humans and cause damage.

2. Do not surprise the bear

When moving in the bear habitat with thick vegetation you should be loud enough to be heard by a bear on a distance of about 30 m. If you move quietly, you may find yourself within the personal safety space of a bear. A bear may feel threatened and see the direct attack as the only escape, in particular where a female with cubs is concerned.

3. Do not approach the bear and do not run away from it

You may observe bears from a certain distance, cubs in particular. If a bear is moving in your direction, move away from his path. In case of an unexpected encounter, do not run away, but give the bear enough space to retrieve. Running away may provoke the bear to follow you.

4.6 Status of the bear

Within the meaning of the Hunting Act in force, the bear is a large game species.

Due to the biological characteristics of bears (rearing value, dynamics of growth, migrations, breeding) and ecological conditions of its habitat, the Ordinance on Closed Hunting Season (Official Gazette No 123/99 and 65/01) prohibits the hunting of bears between 1 May and 30 September (5 months), and from 16 December to 01 March (2,5 months).

This means that bear hunting season in Croatia lasts from 2 March do 30 April, ad from 1 October to 15 December of a calendar year (4,5 months). During the closed hunting season only injured and sick bears may be killed, as well as nuisance bear upon the issue of a special permit.

With the purpose of moving bears to other hunting units, the capturing of live bears is permitted under the following conditions: males year round and females in periods when they are not in late gravidity nor with cubs. The competent Ministry of Regional Development, Forestry and Water Management may approve bear hunting during the closed season for scientific purposes, protection of people or livestock and so forth.

4.7 Current management

In accordance with legal provisions game hunting within hunting grounds is regulated by the hunting management programme for each hunting unit. The hunting management programmes are basic planning documents which are adopted for each hunting unit and which regulate the entire hunting unit and game management for a period of 10 years. Hunting management programmes must be harmonised with the forest management programmes, agricultural land use conditions and manners, water management programmes, spatial planning and ratified international conventions and agreements concerning hunting, environmental protection and the protection of natural game habitats.

For each game species, bear included, inhabiting the hunting unit the hunting management programme determines the habitat capacity and the optimal number of animals in the hunting unit. As with other large game species, the number of bears is determined by monitoring, tracking and counting of bears during the hunting season in the bear habitat, and it is expressed as the number of specimens divided by sex and age. Therefore, the hunting management programmes plan bear management for a 10-year period.

In comparison to the hunting of other game species, bear hunting is conducted in accordance with the annual Action plan for brown bear management in Croatia, which is adopted and implemented by the Ministry of Regional Development, Forestry and Water Management upon proposal of the National Committee for the creation of the Brown Bear Management Plan of the Republic of Croatia and the Committee for the monitoring of large carnivores populations.

Hunting management programmes continue to be implemented through the use of supporting forms LGO-2, LGO-3, LGO-5 and LGO-6, but only bear management is regulated by the Management Plan and the annual Action plans.

Bears are hunted individually during moonlit nights by waiting on a high hunting stand near a bait at a feeding station. Only persons who have passed a hunting exam and have obtained a written hunting permit from the hunting unit leaseholder (in whose hunting unit bear management is implemented, i.e. who was allowed to harvest bears by the Action plan) may hunt.

Bears may be hunted only with rifled-barrel hunting weapons and hunting ammunition which has a kinetic energy greater than 3.500 joules per 100 m, i.e. 11.5 grams, while the maximum allowed shooting distance is 100 metres.

Because of the moonlight the high stand should face west in order to see well the targeted animal.

Article 64 of the Hunting Act permits the use of baits to attract bears to the hunting site, except in area are up to 300 m from the boundary of a national park or another protected area in which hunting is prohibited.

Harvested bears and their parts may be transported, stored and processed only with a special certificate confirming that the animal and its parts have been obtained in accordance with the legal provisions. Such certificate is issued by the hunting unit leaseholder.

Since bear meat may be intended for human consumption, the Veterinary Act (Official Gazette No 41/07) lays down that the hunting unit leaseholder must notify the local veterinary organization about the harvested bear for the purpose of inspection and control thereof, as well as the evaluation of safety of meat.

Bear meat must be checked in particular for the presence of Trichinella spiralis larvae; for that purpose a sample is taken from the diaphragm muscle.

Bear pelt and skull are hunting trophies and regardless of the age of the specimen or the trophy value, they must be evaluated and a trophy certificate is issued on the basis of the evaluation. In hunting tourism, the evaluation of the bear fur constitutes the basis for the calculation of the hunting duty. Bear fur and skull are evaluated in accordance with the instructions and formulas in force of the International Council for Game and Wildlife Conservation (CIC). The basic evaluation measures are the length and width of the skull, the length and width of the fur as well as the symmetry and beauty of the hair.

Top quality bear trophies (trophies with a higher number of points than the best documented trophy – champion of the Republic of Croatia) may not be exported. In 1996 the CIC decided that bear skulls and furs should no longer be considered official hunting trophies and therefore may not be used in national or international trophy competitions.

The hunting unit leaseholder must keep a register of all trophy certificates issued.

The Hunting Act regulates issues concerning compensation and the prevention of damage caused by game. Measures for the prevention of damage include:

- reduction of the number of game in a hunting unit to a tolerable level;
- providing enough food for game;
- fencing and guarding of crops;
- translocation of the game, and so on.

Both hunting unit leaseholders and land users must carry out certain measures for the prevention of damage. If damage has occurred regardless of preventive measures, the hunting unit leaseholder shall compensate the damage caused by bears that permanently inhabit his

hunting unit. Pursuant to the Hunting Act, the hunting unit leaseholder shall be responsible for damage incurred within his hunting unit by game (bears included) that does not permanently inhabit the given hunting unit, but he shall also be entitled to harvest the game in question. Such entitlement is established on the basis of evidence of paid compensation to the person to whom the damage has been incurred and the approval of the competent administrative body issued in agreement with the Ministry (if the damage was incurred in a state-owned hunting unit).

A detailed description of bear-related damage is laid down in Chapter 4.5.2.

The game harvest authorized in this manner must correspond to the amount of the compensation taking into account the market value of the trophy and the game meat. Compensations for bear-related damage on livestock in areas in which grazing is prohibited by law shall not be paid.

Inspection and surveillance of the implementation of the Hunting Act and hunting management programmes are carried out by the State Hunting Inspectorate of the Ministry of Regional Development, Forestry and Water Management, whilst the administrative control on the implementation of the Hunting Act is carried out by the Ministry of Regional Development, Forestry and Water Management.

Penalty provisions (Article 96-101 of the Hunting Act) lay down the fines for any violation of the law in question.

4.8 Current situation

4.8.1 Distribution and range

The bear distribution areas in Croatia may be categorized into areas with permanent bear presence and areas with occasional (desirable or undesirable) bear presence.

Permanent bear presence habitats are areas in which bears satisfy all their food, water, space, tranquillity, cover, breeding and denning needs and in which bears are present during year round. In those areas all prescribed protective measures are implemented in order to ensure the stability of the population. Local inhabitants accept bears as part of their natural environment.

The current permanent bear presence habitat in Croatia extends over 9.573,36 km2 (957.336 ha).

Occasional bear presence habitats are areas with a sporadic presence of bears or areas in which the number of bears does not guarantee the continued existence of the species in the said area, or bears do not den regularly in the area. In short, these are habitats to which bears are returning and which are connected to permanent bear presence areas in Croatia, Slovenia or Bosnia and Herzegovina. Bears occasionally cause damage in these areas. Within occasional bear presence habitats are there are areas in which bear presence is acceptable and areas in which bear presence is unacceptable. A detailed explanation of these categories is laid down in Chapter 9.

Table 3: Bear distribution areas in Croatia in 2007

AREA	PRESENCE		km2/ha
Gorski Kotar	permanent	desirable	1205,93 (120.593 ha)
Istria	permanent	desirable	289,38 (28.938 ha)

Eastern Lika	permanent	desirable	4631,45 (463.145 ha)
Northern Lika	permanent	desirable	1603,13 (160.313 ha)
Western Lika	permanent	desirable	1843,48 (184.348 ha)
Biokovo and Zagora	occasional	desirable	1311,69 (131.169 ha)
Bosiljevo	occasional	desirable	429,82 (42.982 ha)
Ribnik	occasional	desirable	105,33 (10.533 ha)
Zdihovo	occasional	desirable	53,20 (5.320 ha)
Žumberak	occasional	desirable	159,86 (15.986 ha)
Krk	occasional	undesirable	260,29 (26.029 ha)
Coastal area	occasional	undesirable	478,61 (47 861 ha)
Total			12.372,17 (1.237.217 ha)

Occasional	2.798,80 (279.880 ha)
Permanent	9.573,37 (957.337 ha)
Total	12.372,17 (1.237.217 ha)

Occasional undesirable	738,90 (73.890 ha)
Occasional desirable	2059,90 (205.990 ha)
Total	2.798,80 (279.880 ha)

The total bear distribution area in Croatia extends over 11.824,33 km2 (1.237.217 ha). The permanent bear presence habitat extends over 9.253,47 km2, while the occasional bear presence habitat extends over 2.570,86 km2 . These data were obtained through an on-site drawing of the habitats on maps to the scale of 1:100000 (Figures 8-11) by means of digitalisation of habitat boundaries on maps to the same scale and computer calculation of the surface using the ArcView software.

Bears are distributed over the entire Gorski Kotar and Lika regions, the western and southern part of the Karlovac county, the Učka and Ćićarija mountains in Istria, the central and northern part of the island of Krk, the Žumberak mountains, the coastal part from Bakar to Maslenica and the area surrounded by the Kamešnica, Mosor and Biokovo massifs.

94,2% of the permanent bear presence area are hunting units, while 5,8% thereof are parts of national parks. Bears are permanently protected in national parks (Table 4).

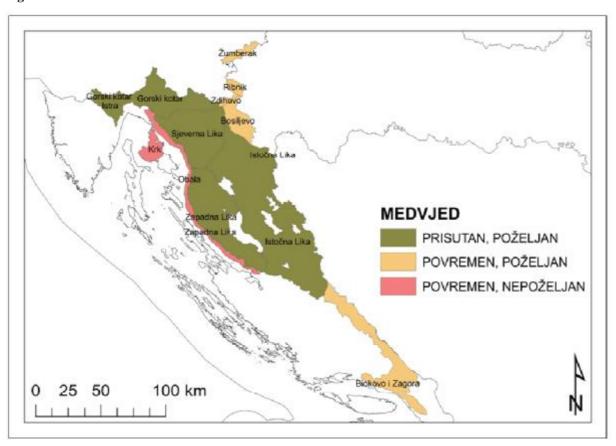
Table 1: National parks' surface in bear habitats

National Park	Surface (km2)
Risnjak	64,00 (6.400 ha)
Northern Velebit	109,00 (10.900 ha)
Plitvice Lakes	295,00 (29.500 ha)
Paklenica (partly)	67,00 (6.700 ha)
Total:	535,00 (53.500 ha)

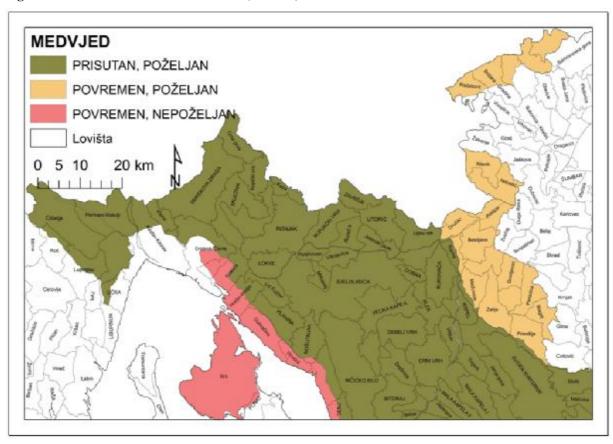
Table 2: Hunting unit and national park portions within the permanent bear presence habitat in Croatia

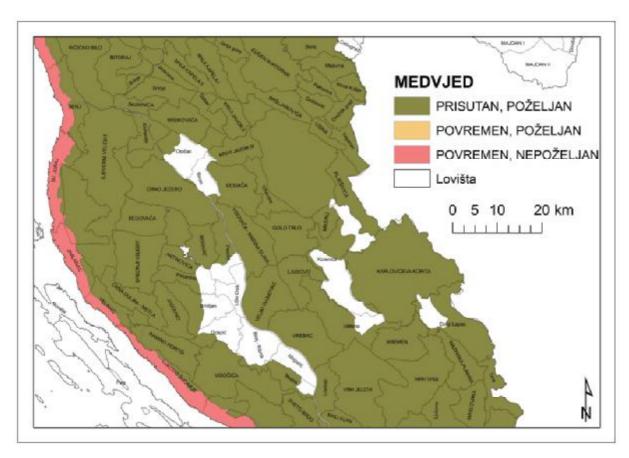
Permanent bear habitat	km2	%
State and shared hunting units	9.038,37	94,2
National Parks	535,00	5,8
Total:	9.573,37	100

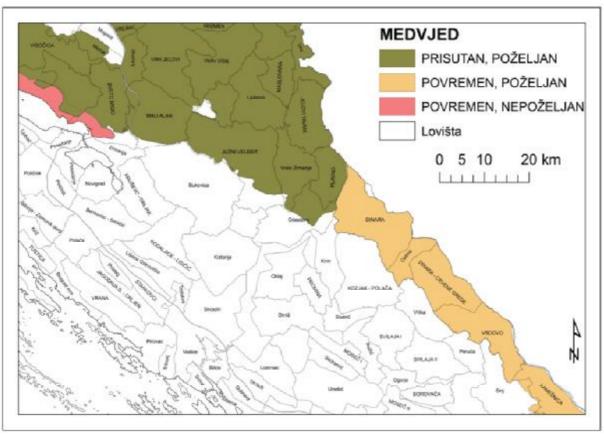
Figure 7: Bear distribution in Croatia

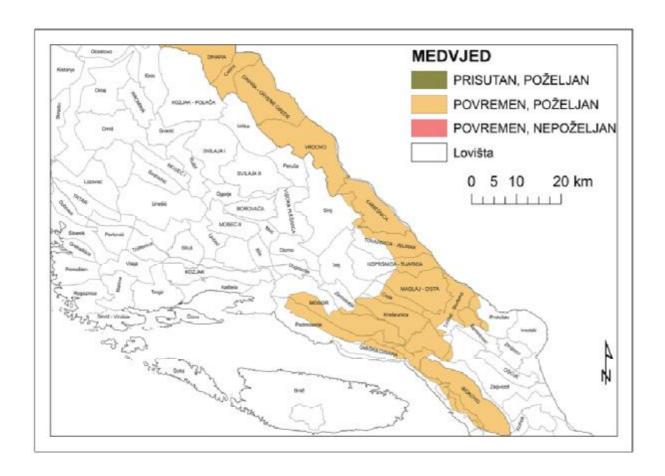


Figures 8-11: Bear distribution in Croatia (detailed)









4.8.1.1 Border areas with Slovenia and Bosnia and Herzegovina

The area along the Slovenian border in which bears are permanently or occasionally present is shown on Figure 4, while the length of the border is shown in the table accompanying the map. It may be concluded that bears do not have any natural or artificial obstacles to cross the border in either direction. That situation is favourable and should be preserved; however, it also emphasizes the importance of coordinated bear management between the two countries.

In the areas bordering the Republic of Bosnia and Herzegovina as well bears do not have any natural or artificial obstacles to cross the border.

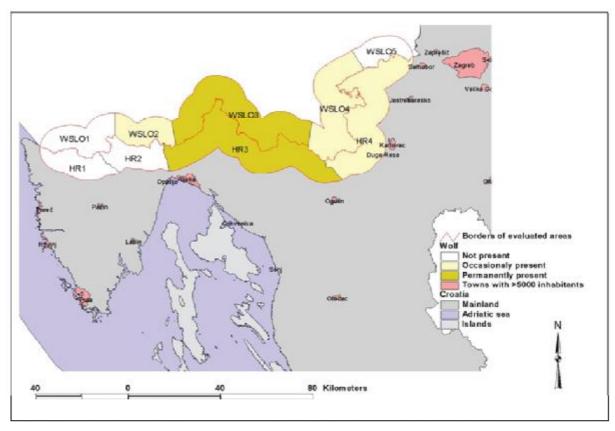


Figure 12: Border area with Slovenia inhabited by bears permanently or occasionally

Table accompanying Figure 4: Length of the border (km) between Croatia and Slovenia where bears, wolves and lynxes are permanently or occasionally present

Present	Bear	Wolf	Lynx
Permanently	131	112	112
Occasionally	196	120	120

4.8.2 Mortality by causes and regions – impact on the population

Known data on bear mortality collected up to the entry into force of the 2005 Plan are shown in the said document, whilst this document contains data obtained during the first three years of the implementation of the Plan.

Systematic monitoring of bear mortality by its causes was not carried out until 2000, except in the region of Gorski Kotar (Table 6), where the quality of bear management is the highest. The implementation of the Hunting Act, the leasing of newly-formed hunting units (at the end of 2000) and the implementation of hunting management programmes, ensured the conditions for collecting and analysing data on bear mortality and other bear-related data.

Table 3: Bear mortality in Gorski Kotar and Hrvatsko Primorje from 1990 to 1999 divided by years and causes (Frković et al. 2000).

Cause	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
Hunting	17	12	11	11	12	9	12	21	16	17	138
Poaching	3	4	4	4	1	1	3	3	0	3	26
Road traffic accident	2	1	2	0	1	0	2	2	3	7	20

Railway traffic accident	3	6	1	1	2	2	2	3	3	2	25
Unknown	0	4	2	0	0	1	2	0	1	0	10
Others	4	1	1	0	5	0	1	2	1	2	17
Mines*	0	11	7	3	5	4	6	0	1	0	37
Total	26	28	17	14	20	13	19	24	17	23	273

^{*} Includes war related mortality: mine fields, bomb shells, shooting at the combat frontline, traffic, deliberate illegal killing (Frković, 1999)

Table 6 contains data on causes of bear mortality from 1990 to 1999 for the areas of Gorski Kotar and Hrvatsko primorje, which account for 25% of the total surface inhabited by bears in Croatia. The reasons for the partial collection of data for the given period are the temporary occupation of large portions of the bear range in Croatia and warfare activities during the Homeland war, which made the collection of data in the entire bear distribution area impossible. After the end of the war (1996), the Hunting Act was implemented on areas previously under temporary occupation as well, hunting units were formed and leased, hunting management programmes were developed and approved for each hunting unit and systematic hunting management began on the given territory. The process of forming and leasing hunting units lasted from 1996 to 2001, when the last hunting units were formed and leased, and the last hunting management plans were developed to cover all game, bears included. This is reason why bear mortality data for the total bear range in Croatia could be collected only from the year 2000.

Table 4: Bear mortality in Croatia from 2000 to 2007 divided by years and causes.

Cause of death	Sex	2000/01	2001/02	2002/03	2004	2005	2006	2007
	M	31	57	52	31	22	38	42
Hunting	F	7	9	10	9	7	11	7
	Unknown					3		
	M		1			2		
Poaching	F			2		1		
	Unknown						1	
	M	1	4	4		1	5	2
Road traffic	F	1	1	1		3	7	
	Unknown				2	1	3	
	M	1	2	2	1	2	2	3
Railway traffic	F	3	1	4	3	2	5	
	Unknown				2	1	2	
Unknown	M	1	2	3				1
Ulikilowii	F		1	3				
	M	1		1	1		1	
Other causes	F	3	2		1	1	2	
	Unknown					1	1	
Intervention culling	M						4	
Intervention culling	F						3	
TOTAL		49	80	82	50	47	78	55

Table 7 shows mortality in the entire bear range in Croatia. Data for the period 2000 – 2003 are divided by hunting years, whilst the collection of mortality data on the basis of the academic year began in 2004 after the adoption of the first brown bear management Action plan.

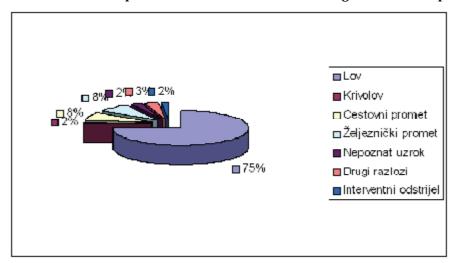


Figure 13: Causes of death of bears in the period 2000 – 2007

Death of 448 bears was recorded during the period 2000-2007, 320 of which were males (71%), 111 females (25%) and 17 specimens of unknown sex (4%). The most important cause of death (336 bears) was hunting (75%), followed by road and railway traffic accidents (16%, i.e. 32 bears). In the period 1990-1999 legal hunting was the cause of death of 50% of bears and poaching almost 10% thereof. In the said period traffic accidents were the second cause of death (16%) as well.

It must be underlined that the total bear mortality is not known and was probably higher than presumed for different reasons. Certain hunting units have not declared hunting activities nor any other cause of death of bears out of negligence, ignorance with respect to new regulations or for the purpose of hiding the real situation. This became evident in 2005 with the entry into force of new identification tags and the Module for harvested bears, that the hunting unit leaseholders must use in order to notify bear harvest to the Hunting Administration within 24 hours. Even though poaching has been reported, in most cases it is impossible to produce evidence thereof. Poaching is therefore likely to be the cause of death in more than 2% of cases. Nevertheless, due to the fact that all hunting units have a manager and are managed in accordance with hunting management programmes in force, poaching represents a very small percentage in the total bear mortality and does not threaten the bear population.

On the basis of the presented data the following conclusions may be drawn:

- poisoning is no longer a cause of death of bears;
- warfare activities (mine fields, bomb shells, shooting at the combat frontline, etc.) are no longer a cause of death of bears;
- mortality caused by road and railway traffic is considerable and it is expected to remain such in the future since road and railway traffic is constantly increasing in the bear range in Croatia (tourism is one of the most important economic activities in Croatia, as well as the transport of goods from northern to southern Europe through corridors passing through Croatia);
- bear mortality related to diseases or lack of food or water was not recorded.

The question of the possible influence of the 75% mortality of male bears on the entire bear population may be raised. The most important cause of death of males is hunting – 85%

(273 males, 60 females and 3 specimens of unknown gender were shot in the period 2000 - 2007), while other causes of death evenly apply to both males and females.

4.8.3 Number of bears and habitat capacity

Habitat capacity

Bears in Croatia inhabit an area of 12.000 km2 (1.200.000 ha) with diverse, more or less favourable habitat characteristics. Consequently, the density of bears is different in different areas, i.e. from 0.5 up to 2, whilst in certain smaller areas and during shorter periods more specimens may be present in an area of 10 km2 (1.000 ha). The best habitats in Gorski Kotar, Velika Kapela, Mala Kapela and Velebit, have an average density of 1 or more bears per 10 km2. Due to such population density, migration of younger males to neighbouring peripheral areas of the bear range (Učka, Ćićarija, Pokuplje, Priobalje, etc.) occurs.

This indicates that generally no further increase of the number of bears is necessary since it would further increase the bear migration to neighbouring peripheral areas, which are more densely inhabited by humans and where their activities are more intense, which may substantially lead to more conflicts between man and bear.

Until the adoption of the first Plan, bear management in Croatia was regulated by hunting management programmes developed pursuant to the Ordinance on the Contents, Methods of Adoption, Development and Approval of Hunting Management Programmes. Hunting management programmes are developed in accordance with the recommendation of the Ministry of Agriculture, Forestry and Water Management (Expert guidelines for the determination of the quality category of the hunting unit and the hunting grounds) and plan an increase of the number of bears of 15% as to the number of specimens before the mating season, i.e. in the base game stock.

It is difficult to calculate with precision the absolute bear habitat capacity in Croatia; however, approximate habitat capacity figures have been obtained by three methods.

The possible base game stock was defined by the hunting management programmes as the possible number of animals per 10 km2 (1.000 ha) of the hunting productive surface (with respect to the habitat quality category) and corresponds to the meaning of the term "habitat capacity". The hunting management programmes take into account the density of the population (the number of animals per 1.000 ha) amounting to 0,5 to 2,5 specimens, depending upon the habitat quality category in single hunting units. In this way possible base game stocks were calculated for 85 Croatian hunting units in which bears are managed pursuant to hunting management programmes and are considered as one of the main large game species. The said 85 hunting units extend over a total surface of 6.600 km2 (660.000 ha), which is approximately 85% of the permanent bear range. This method has allowed the calculation of the total possible base bear stock in the 85 hunting units amounting to 808 bears. This figure should be added to the estimated habitat capacity of the current or the possible bear range, where bears are not managed nor hunted. It includes an area of over 500 km2 of national parks and most of the 2.570 km2 of the areas described in the previous chapter in which bears are not permanently present. Assuming that bear population density in national parks amounts to 1 bear per 10 km2 (50 bears) and in areas with occasional bear presence amounts to 0.5 per 10 km2 (128 bears), the total base bear stock capacity in Croatia would be 986 bears. With the expected natural increase of 15% (148 bears) for the year, the total capacity could amount to 1.134 bears.

Another method for calculating the total bear habitat capacity is based on the bear distribution in Croatia on a surface of approximately 12.000 km2 (1.200.000 ha) and bear population density of 1,5 bears per 10 km2. According to this method bear habitat capacity in Croatia amount to 1.050 bears. Even though certain areas have a larger capacity, a more significant increase of the population density of 2 bears per 10 km2 (1.000 ha) is not recommended due to other factors, such as social relations within the population (expected rivalry and persecution of weaker bears, increased cannibalism and possible negative consequences for local inhabitants), presence of other large carnivores on the same territory and the conservation of the habitat, food and tranquillity for other animal species.

The third method for calculating the total bear habitat capacity is the estimation of the portions of areas with different possible bear population densities. An analysis of the habitat quality shows that approximately 20% of the entire bear range is in the category allowing the highest possible bear population density – 1,5 per 10 km2 (i.e. 1.530 km2 (153.000 ha) or 90% of the central 1.700 km2 (170.000 ha) of Gorski Kotar and a further 870 km2 (87.000 ha) of the central part of the Kapela massif and a part of Velebit). 360 bears could live within this area extending over 2.400 km2. Approximately 50% of the habitat is in the category allowing a bear population density of 1 specimen per 10 km2, i.e. 600 bears could live on a surface of 6.300 km2 (630.000 ha). The remaining 30% of the habitat allows possible bear density between 0,1 and 0,9 specimens (0,5 on average) per 10 km2, i.e. 180 bears. The sum thereof is the total possible habitat capacity in Croatia amounting to 1.140 bears.

Since the results obtained by applying those three methods correspond, it may be concluded that bear habitat capacity in Croatia amounts to approximately 1.100 specimens.

The difference between this biological habitat capacity and the so-called "wildlife acceptance capacity" (attitude of the local population towards bears) is a separate issue. As far as all large carnivores, bears included, are concerned, the wildlife acceptance capacity is generally lower than the biological capacity of the habitat. The goal is to keep the Croatian bear population as close as possible to the biological capacity of the habitat, whilst reducing conflicts with locals inhabitants to a minimum.

For the purpose of comparison, in northern forests and taigas of Scandinavia, Siberia, Canada and Alaska bear population density amounts to only 0,1 specimens per 10 km2. It is interesting that the largest brown bear populations are present exactly in those areas, while the populations in southern and more productive habitats are smaller and more endangered with a low reproduction rate (the Apennines in Italy, Cantabria in Spain and the Pyrenees in France and Spain). The present and future bear reproduction rate and the survival of bears in Croatia highly depends on the conservation of the size and the quality of their habitat.

Number of bears

Currently there are different estimates of the number of bears in Croatia although none were made using strict scientific criteria. Similar methods of estimating the size of the bear population are used in other countries as well.

According to the data from the hunting management programmes of hunting unit leaseholders in charge of bear management, the following estimates of the number of bears were made for previous hunting years: 2000/2001 = 813 bears and 2001/2002 = 854 bears. In 2006 716 bears were present in state hunting units (data concerning state hunting units were entirely collected and processed). By adding this number to approximately 150 specimens living in

common hunting units, a total of 866 bears is obtained. These data have been collected pursuant to laws in force and are the only official source. It is in the hunting unit leaseholders' interest that the estimated number of bears in their hunting unit is as close as possible to the real situation since the hunting unit leasing fee depends on the number of bears; therefore, overestimating the number of bears reduces profit. A hunting unit leaseholder failing to carry out or exceeding the planned harvest of bears is penalised. Furthermore, after the expiry of the lease, a hunting unit leaseholder must ensure that the game stock corresponds to the provisions of the hunting management programme.

In 1997 and 1999 attempts were made to estimate the number of bears in Croatia. On the basis of the assessments and data collected from local hunting management experts and bear biologists for different parts of the bear range, in 1997 the number of bears was estimated approximately to 378 (340 to 415). This estimate was made after the end of the Homeland war (1991-1995) and the return of parts of the bear range under state supervision after 5 years of occupation. The conclusion was that there the reduction of the bear population due to war and post-war activities amounted to 10% and that the survival of the population was not threatened.

In 1999 similar methods were used for another estimate and the resulting number was 623 bears without corrections. Afterwards this figure was corrected to 400-600 bears due to the possibility that certain bears might have been counted twice. The conclusion was that the reduction of the bear population due to war and post-war activities was recovered and that the number of bears was steadily increasing.

It may be concluded that the precise number of bears in Croatia is unknown; however, an increasing trend has been visible from the estimates. According to the latest estimates there are currently 600 to 1.000 bears in Croatia. The lower limit (600) of this range corresponds to the upper limit of the 1999 estimate with the expected positive trend. The upper limit (1.000) corresponds to 850 bears recorded within the hunting management programmes plus about 50 bears in national parks and at least 100 bears in areas for which no hunting management programmes exist. Furthermore, it seems that the number of bears is slightly increasing. It should be added that according to certain sources, the number of bears is rather lower than the number laid down in hunting management programmes and the trend is negative. On the other hand, other sources claim that the actual number of bears is higher. A slight decrease is assumed to have occurred in the western part of the bear habitat along the border with the Republic of Slovenia, in particular after the considerable increase of bear hunting quotas introduced in Slovenia over the past years.

DNA analysis of scat samples is currently being implemented and the first results should be available in 2008. The given estimates shall be subsequently narrowed down and the results shall be supported by statistical and scientific evidence.

Samples for genetic analysis are being collected in Croatia since 2003, while from 2008 the number of bears shall be estimated by the use of the DNA analysis method in order to determine single genetic markers for each specimen. Scat samples found within the bear habitat are stored in alcohol and marked according to the place and the time of finding. Bear DNA, originating from the mucosa epithelial cells of the digestive system, is isolated in the laboratory from the scat samples. The order of nucleotide bases (genetic code) of a certain number of gene parts is analysed in the bear DNA and it is sufficient to distinguish one bear from another. With a sufficient number of samples the statistical number of bears in a certain area may be calculated quite accurately. The larger the sample, the lower the possibility to make a mistake, with an

accuracy of 90%. Such accuracy may be obtained if the number of samples is three times higher than the number of specimens of the local population.

Bear counting, envisaged by the Action plan during certain days in spring and autumn, is done by observation from a high stand positioned on a feeding site for the purpose of establishing the population growing trend.

4.8.4 Trends and demography

The natural increase by reproduction includes all newborn animals that survive their first year of life. Since female bears give birth in January in their dens, yearlings too are counted among cubs and are taken into account as bears contributing to the increase of the population after their separation from the mother, usually when they are 1,5 years old.

The counting of females with cubs was carried out over a 6-year period (Table 8). The counting was carried out during autumn (cubs aged 9-10 months) and during spring (yearlings, aged 14-15 months). The bears were counted at feeding sites from high stands (Majnarić, 2002).

Year	Number of observed females	Number of cubs / yearlings	Number of cubs or yearlings/number of females
1996/1997	27	57	2,11
1997/1998	32	65	2,03
1998/1999	36	76	2,11
1999/2000	29	67	2,31
2000/2001	34	74	2,18
2001/2002	33	71	2,15
Total:	191	410	2,15

Table 6: Distribution of females with No cubs / yearlings (1996/1997-2001/2002).

Female with 1 cub	Female with 2 cubs	Female with 3 cubs	Female with 4 cubs	Total:
28 (14,7 %)	104 (54,4 %)	57 (29,8 %)	2 (1,0 %)	191 (100 %)

The tables show that the average number of cubs or yearlings per female was 2,15. Since adult females usually give birth every two years, the average reproductive increase per year is 2,15:2 or 1,075 per adult female.

More than 50% of females had two cubs, twice as many females had three rather than one cub, but females with four cubs were rare (Table 9).

From a published scientific article on the same subject "Brown bear litter sizes in Croatia", Frković et al. (2000) (abstract):

Mean litter sizes and maximum survival of cubs of brown bears (Ursus arctos) in Croatia were calculated based on 116 observations of 106 brown bear family groups. In addition to the number of cubs, each record contained the age of cubs (cubs-of-the-year [COY] or yearlings), date and location of observation. The mean litter size was 2,39 (n=56, range 1-4) for COY and 1,96 (n=50, range 1-4) for yearlings. The difference of 0,43 (18%) was statistically significant.

No significant difference in COY and yearling litter sizes was determined between spring and autumn of the same year. Significantly larger litters of all ages were observed with mothers away from feeding stations (=2,36, n=47), than at feeding stations (=2,05, n=59). This suggests that feeding bears in Croatia for management purposes has not influenced bear reproduction.



The high reproductive rates of bears in Croatia may be attributed to the following factors:

- Favourable climatic conditions during most of the year. Bears hibernate in their dens during the least favourable part of the year. A radio telemetry observation of 6 tagged bears has shown significant differences in the duration of denning, i.e. from 6 to 189 days, or 86 days on average.
- Bears find enough food in nature, a large portion of which is constituted by beech nuts. Most of the forests in the bear range are mixed coniferous and decidu ous forests.
- Almost throughout the bear range, bears are additionally fed as a game species. However, studies have not confirmed the positive effects of supplemental feeding on reproduction.
- The existing human activities in the bear habitat do not disturb bears as much as to have a negative impact on their biological needs.

The sex ratio is expected to be natural, i.e. 1:1. Females reach sexual maturity between 3 and 4 years of age. The ratio of sexually mature (4-20 years of age) and sexually immature females (1-3 years of age) is such that sexually mature females account for over 50% of base game stock. The decrease in litter size between the cubs' first and second year is on average around 18%. This percentage was calculated on the basis of litters in which at least one yearling survived. The number of entirely lost litters is unknown, which means that the cubs' survival rate is also lower.

A significant portion of cub mortality is due to the fact that adult males kill the cubs of another bear. The survival rate of yearlings after leaving the mother and until adulthood is unknown as well. However, it is known that bears practice intraspecific killing and cannibalism during the given period. Therefore, it is difficult to estimate the total possible increase by reproduction. Theoretically, it might amount to as much as 25% (20% according to certain calculations) of the total number of bears (older than 1 year) if each sexually mature female gave birth to at least 1 cub. It is unknown how many cubs reach sexual maturity and participate in the new reproduction cycle. In the absence of scientifically confirmed facts, it may be concluded that the total reproduction of bears is sufficient to compensate annual losses up to 15%. The highest annual increase of the brown bear population has been recorded in Sweden in a determined period and amounted to 16% (Swenson 2004). The annual increase of other bear populations in the world accounts for less than 10%, in most cases 7%.

According to different calculations, the current annual increase of the Croatian bear population is estimated between 90 (15% if the bear stock amounts to 600 specimens) and 170 bears (20% if the bear stock amounts to 850 specimens).

Since bear mortality is relatively limited (planned hunting and officially recorded deaths), the question is raised whether the population continues to grow and where the remaining bears "disappear"?

It is a fact that bears continue to extend to new habitats, occupying area in which they have never been present or absent for a long time; furthermore, in certain areas larger density populations have been observed. On the other hand, beside legal hunting and planned harvest of bears, poaching is certainly one of the causes of bear mortality, but is difficult to prove due to the characteristics of the bear habitat. A number of bears cross the state border and is killed in the neighbouring country, which might be assumed as regards the border area with Slovenia, where bear harvest is considerably higher than in Croatia and a where mostly younger bears get killed. It may also be assumed that a number of cubs dies due to natural causes before separating from the mother. The complexity of possible impacts on the bear population and the unrecorded deaths may somewhat explain the difference between the actual reproductive rates of the population and the realised and recorded culling of bears.

4.8.5 Infrastructure and other human influences

4.8.5.1 Roads

4.8.5.1.1 Motorways

The Karlovac – Rijeka and Bosiljevo – Split motorways have divided the bear habitat into four parts. Even though these roads in fluence the habitat quality and the movement of animals, the large number and the length of infrastructure objects on the motorways allow animals to move rather freely. Structures allowing crossing (including one green bridge - Dedin) are present along 25% of the length of the motorway connecting Bosiljevo and Rijeka. Bosiljevo – Sveti Rok motorways presents only a half such structures 80 or more metres wide, but four green bridges have been build on strategic points and along all other structures, enable animal viability.

Table 10: Width of all structures and their number along the Bosiljevo – Grobnik section of the Zagreb – Rijeka motorway

		Number and width of structures according to sections									
	Bosiljevo-	Vrbovsko	Vrbovsko	- Tuhobić	Tuhobić-	Grobnik	Total				
Type of structure	Width	No.	Width	No.	Width	No.	Width	No.			
Bridge	0	0	898	3	0	0	898	3			
Crossing	20	2	40	4	0	0	40	6			
Passage	0	0	40	2	115	3	115	5			
Tunnel	1.638	2	8.129	9	278	1	10.045	12			
Viaduct	2.208	4	1.689	7	1.972	6	5.869	17			
Green bridge	0	0	100	1	0	0	100	1			
All structures	3.866	8	10.896	26	2.365	10	17.127	44			
Length of the section (m)	13.632		43.572		11.330		68.534				
Width of the structure (%)	28,36		25,0		20,9		25,0				

Table 11: Permeability assessment of the Bosiljevo – Sveti Rok motorway including only objects wider than $80\ m$

	Name of the section	Length of the section	No. structure	Width of structures	Percentage of section (%)
1	IIIA1 Bosiljevo - Josipdol	27.168	4	498	1,8
2	IIIA2 Josipdol - Tunnel Mala Kapela	14.500	7	7.706	53,1
3	IIIC1 Tunnel Mala Kapela - Žuta Lokva	26.030	5	3.472	13,3
4	IIIC2 Žuta Lokva - Ličko Lešće	23.983	8	4.678	19,5
5	IIIB1 Likčko Lešće - Lički Osik	24.870	5	1.920	7,7
6	IIIB2 Lički Osik – Junction Sveti Rok	33.052	4	621	1,9
	Total	149.603	33	18.895	12,63

The only possible way of crossing the motorway to access another part of the bear habitat is above tunnels and under bridges and viaducts. The up to date study of animal movement by means of sand patches and infrared sensors established the following animal use of the green bridge Dedin in Gorski Kotar and three out of four green bridges in Lika (Tables 12 and 13):

Table 12: Assessment of the overall number of mammals crossing the structures under observation. The total number of crossings over the Dedin green bridge has been calculated on the basis of the share of tracks of single species in the total number of crossings by the infrared sensor ($N=12\,519$ in 793 days). As far as the remaining three bridges are concerned, the number of crossings has been calculated on the basis of the number of tracks encountered upon visits, increased by the ratio between the number of crossings registered by the infrared sensor and the number of tracks encountered upon visits of the Dedin bridge. The numbers shown in the table below are only approximate.

		Dedin			Golul	Golubinjak Sopač		pač	Sle	me	To	tal
Species	Assess-ment of the total number register-ed by the infrared sensor	No. of days of the assess-ment	No. of tracks per visit	Ratio between no. of crossings registered by the infrared sensor and the no. of tracks upon visits	No. of tracks per visit	No. of days of the assess-ment	No. of tracks per visit	No. of days of the assess-ment	No. of tracks per visit	No. of days of the assess-ment	No. of tracks per visit	No. of days of the assess-ment

Roe deer	5.258	6,63	2,59	2,56	0,87	2,23	1,74	4,45	4,63	11,85	2,23	25,16
Red deer	3.267	4,12	1,61	2,56	0,52	1,33	0,96	2,46	6,50	16,63	1,60	24,54
Wild boar	2.091	2,64	1,03	2,56	0,04	0,10	0,26	0,67	1,88	4,82	0,75	8,23
Brown bear	1.239	1,56	0,61	2,56	0,17	0,43	1,26	3,22	1,25	3,20	0,69	8,41
Wolf	125	0,16	0,06	2,67	0,04	0,11	0,09	0,24	0,13	0,35	0,07	0,85
Lynx	25	0,03	0,02	1,50	0,04	0,06	0,09	0,14	0,13	0,20	0,04	0,42
Man	513	0,65	0,25	2,60	0	0,00	0,00	0,00	0,00	0,00	0,14	0,65
Toral	12.519	15,78	6,17	2,56	1,7	4,26	4,39	11,17	14,50	37,04	5,52	68,27

Table 13: Number of crossings of animals higher than 40 cm and man on green bridges in Lika (data of 24.02.2007)

WOLF	1,72	54	0,15
DOG	9,2	287	0,79
MAN	10,92	341	0,93
Total	100	3.123	12,3
Medina gora			
Species	% share	No. per year	No. per day
WILD BOAR	15,87	572	1,57
ROE DEER	9,52	343	0,94
RED DEER	0	0,00	0,00
BEAR	22,22	801	2,19
WOLF	36,51	1.316	3,60
DOG	4,76	172	0,47
MAN	11,11	400	1,10
Total	100	3.604	9,81
Varošina			
Species	% share	No. per year	No. per day
WILD BOAR	24,32	829	2,27
ROE DEER	18,92	645	1,77
RED DEER	2,7	92	0,25
BEAR	6,76	230	0,63
WOLF	8,11	276	0,76
DOG	5,41	184	0,51
MAN	33,78	1.151	3,15
Total	100	3.408	9,91

The only possible crossings between single habitats above tunnels and under bridges and viaducts. On the Rijeka – Zagreb motorway and the Bosiljevo – Sv. Rok tunnel motorway, bears may cross at the following points (only objects longer than 80m are shown):

Table 14: Rijeka – Karlovac motorway

Structure	Length (m)
Viaduct Severinske drage	700
Viaduct Osojnik	354
Viaduct Veliki Gložac	1.146
Viaduct Zečeve drage	1.103
Viaduct Hambarište	103

Viaduct Dobra	225
Viaduct Kamačnik	225
Viaduct Jablan II	228
Viaduct Jablan I	105
Tunnel Čardak	566
Viaduct Stara Sušica	390
Tunnel Pod Vugleš	564
Tunnel Bajt	249
Tunnel Javorova Kosa	876
Viaduct Zalesina	461
Tunnel Vršek	868
Green bridge Dedin	100
Tunnel Lučice	576
Tunnel Sopač	752
Viaduct Golubinjak	569
Tunnel Sleme	835
Tunnel Vrata	257
Bridge Bajer	485
Tunnel Tuhobić	2.140
Viaduct Hreljin	535
Viaduct Bukovo	395
Viaduct Melnik	140
Viaduct Mali svib	215
Viaduct Veliki svib	385
Viaduct Čićave	300
Total:	15.847

Data were collected from construction project documentations and directly on site.

Table 15: Bosiljevo – Sveti Rok tunnel motorway

Structure	Length (m)
Green bridge Ivačeno brdo	120
Bridge Dobra	171
Bridge Bistrica	171
Green bridge Rasnica	120
Bridge Mrežnica	92
Viaduct Krajine	386
Bridge Miljanica	476
Bridge Bjelobrajdić	276
Viaduct Modruš I	516
Viaduct Modruš II	276
Viaduct Modruš III	156
Tunnel Mala Kapela	5.760
Viaduct Mokro polje	600
Viaduct Jezerane	640
Viaduct Zeleni most	131
Viaduct Borici	476
Tunnel Brinje	1.625
Viaduct Babica bridge	253
Viaduct Grubori	144
Viaduct Oreškovići	340
Tunnel Kompolje	440

Tunnel Brezik	618
Bridge Gacka	443
Viaduct Obilje	251
Viaduct Vrsci	338
Tunnel Plasina	2.300
Viaduct Pećine	340
Tunnel Grič	1.220
Viaduct Duman	120
Green bridge Medina gora	120
Green bridge Varošina	120
Viaduct Lički Osik	81
Bridge Lika	120
Viaduct Vučjak	345
Bridge Suvaja	81
Bridge Grabara	114
Viaduct Krpani	350
Tunnel Krpani	150
Tunnel Sveti Rok	5.670
Total:	25.950

The above data has been obtained from a map to the scale of 1:25.000.

The length of the Karlovac – Rijeka motorway in the bear habitat amounts to 68.534 m.

The length of all crossings on the said motorway is 17.127 m, which accounts for 25% of the length of the motorway in the bear habitat.

The length of the Bosiljevo – Sv. Rok motorway in the bear habitat amounts to 149.603 m. The length of all crossings on the said motorway is 18.895 m, which accounts for 12,6% of the length of the motorway in the bear habitat.

As stated on several occasions, the bear habitat in Croatia is to some extent fragmented by built or planned motorways and their accompanying infrastructure, thus making communication between the single areas somewhat difficult. Scientific research has shown that daily and seasonal movements of bears are irregular, i.e. that the regularity thereof cannot be determined Also the mobility of single bears is related to their age and gender and to a number of factors present in the habitat. Therefore, safety standards on fast motorways passing through the bear habitat aim also at achieving as much permeability by means of natural and artificial passages, tunnels, viaducts and structures specifically built for that purpose. Along with the need to ensure motorway permeability, it is equally required to prevent animals from crossing the motorway by erecting the necessary fences.

In Croatia this issue has been (and is still being) dealt with, including the design of special animal crossings, as well as the development a study entitled "The Permeability of Roads for Animals (Draft design guidelines)" IGH 2002 and the monitoring of the effectiveness of the selected sites based on the frequency of their use by animals.

4.8.5.1.2 Other roads

Other public roads too, either state, county or local, have an important impact on the bear population since each year traffic accidents involving bears occur thereon.

Forest roads, used for the purposes of forest management (e.g. transport of timber, machines and forest workers, fire protection and so forth) are of special importance – both negative and positive.

Since vehicles move at a relatively low speed, the risk of hitting an animal is quite limited. The fact that these roads are not regularly used for the most of the time is a favourable factor, even though presently many of them are open to the public. On the other hand, these roads may be used for the purpose of poaching, different activities such as fruit and mushroom picking, tourism and illegal waste dumping. Furthermore, the total surface of forest roads reduces the forest surface.

Forest roads in large forest complexes may also have positive effects since they represent sunny strips that constitute secondary forest edges and offer additional feeding possibilities. A prerequisite for this function are certain limitations to public access to forest roads.

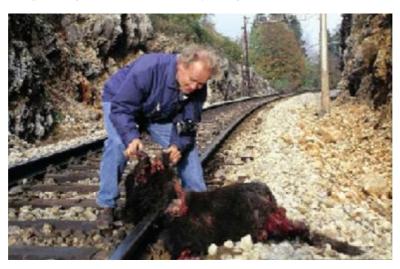
The average density of public roads (i.e. main, regional and local) in Gorski Kotar is $0.83 \, \text{km/km2}$, ranging from $0.59 \, \text{km/km2}$ in the Čabar area, $0.72 \, \text{km/km2}$ in the Delnice and Vrbovsko areas to $1.31 \, \text{km/km2}$ in the coastal areas. Together with forest roads, the total average amounts to $1.91 \, \text{km/km2}$.

The area managed by the Delnice Forest Administration, covering most of Gorski Kotar (state and private-owned forests), has 18 km of forest roads per 10 km2. The area under the competence of the Gospić Forest Administration has 8 km of forest roads per 10 km2.

The current density of forest roads does not have visible negative impacts on the bear population in Croatia

4.8.5.2 Railway lines

Two railway lines cut across the bear range in Croatia: the line connecting Karlovac and Rijeka of 143,4 km length in the bear habitat and the Lika railway line connecting Oštarije and Knin of 213,3 km length in the bear habitat. The tracks are no obstacle to bear movement, but a large number of bears die in railway traffic accidents: 70% of all traffic related deaths (Huber et al. 1996). Tunnel openings and gullies are particularly dangerous for animals.



4.8.5.3 Waste

Waste is an inevitable by-product of the progress of technology and civilization. The waste from larger towns and settlements is mostly disposed of in an adequate way, albeit certain locations, inherited from the times when waste management was an important issue, became a source of food and interest for bears, that visit those locations regularly and present a danger for both bears and humans.

Improperly organised or illegal waste dumps located at easily accessible and scarcely visible points represent a potential danger within or in the proximity of the bear range.

The danger for bears is indirect and with long-lasting consequences. Adult and subadult bears – instinctively following the easiest way of food foraging– are regular visitors of these locations. These bears lose their instinct of foraging for food over large areas, gradually lose their innate fear of human scents, finally becoming a potential danger to people in case of an accidental encounter. Entire families of young subadults with mothers who have grown up near waste dumps represent may be even more dangerous. The possibility of an incident (a fatal incident in particular) as a consequence of the encounter of bear and man is much larger in this context and may have a negative impact to the public attitude, which took a long time to become positive whatsoever.

In the past 4 years (2004 – 2007) the Environmental protection and energy efficiency fund has stipulated agreements with local governments and authorities for the purpose of improving 298 existing waste dumps. Restructuring of 30 local waste dumps has been terminated so far, which is a step forward towards the solution of the said bear-related issue (data contained in this document are based on the Report on the implementation of the Working programme of the Environmental protection and energy efficiency funs, the special edition of Ekorevija (a magazine published by the Fund) and additional orally received information).

Gradual termination of the project of improving waste dumps and the simultaneous implementation of existing regulations shall contribute to the elimination (or a substantial reduction) of one of the greatest dangers that bears encounter in their existing range.

The **2005 Brown Bear Management Plan** identified 8 waste dumps within the bear range in the **Lika-Senj County**, 4 of which (Poljica – Kosmačevo, Vidovac – Karlobag, Rakitovac – Počuća brdo and Korenica – Plitvice Lakes) comply with the laws in force, while the remaining 4 (Klanac-Prokike-Brinje, Dugi dol-Bajino brdo-Vrhovine, Bare-Donji Lapac and Razbojište-Kvatre) should be restructured and closed.

Simultaneously with the drawing up the present document (December 2007) the construction of a county centre for waste management is planned and the necessary documentation is being collected for obtaining the building permit for the restructuring of the above waste dumps.

According to the Plan, all 3 waste dumps located within the bear range in the **Karlovac County** (Pavlovac-Slunj, Kvaternik-Slunj and Sodol-Ogulin) should be restructured and closed. Simultaneously with the drawing up the present document, the necessary documentation is being collected for the purpose of restructuring and transformation of the above waste dumps into an "eco-yard" or primary disposal of waste until the planned county centre for waste management is built.

Upon the creation of the Plan (2005) the environmental protection inspection examined 3 waste dumps in the Primorsko-goranska County (Peterkov laz-Čabar, Sović laz-Delnice and Cetin-Vrbovsko) concluding that Peterkov laz was to be restructured and closed, 1st restructuring stage was successfully completed in Sović laz, while Cetin was to be restructured and remain in use.

Sović laz and Peterkov laz have been restructured by the end of 2007, while the necessary documentation is being collected for obtaining the building permit for the restructuring of the Cetin waste dump.

The implementation of the 2005 Brown Bear Management Plan in Croatia began simultaneously with the implementation of the action "Waste kills bears", aiming at preventing bears from accessing waste and education the general public on the given issue. The action is implemented by the Directorate for Hunting of the Ministry of Agriculture, Forestry and Water Management and the Biology Institute of the Faculty of Veterinary Medicine of the University of Zagreb within the LIFE COEX project entitled "Improving coexistence of large carnivores and agriculture in Southern Europe" (through which the European Union co-finances the implementation of the Brown Bear Management Plan). Part of the Action plan was the development of educational materials and the attempt to raise public awareness concerning the given issue through the media and series of lectures. The goal of the action is to encourage municipal service companies and local governments and authorities to put in place containers and dustbins within the bear range, which are made in such a way to prevent bears from accessing waste. Such containers and dustbins were made and donated within the action during 2006 and 2007. Seven dustbins of 0,70 m3 and two containers of 5 m3 were donated for that purpose.

4.8.5.4 Mines

Along the entire eastern border of the Croatian bear range with the Republic of Bosnia and Herzegovina more or less narrow or wide belts with land mines (remnants from the Homeland war) are still present.

In certain areas the presence of mines (minefields) has been confirmed, while other areas are only suspected for mines. Minefields are relatively small and account for 50 km2 (5.000 ha) of the entire bear range (11 800 km2 or 1.180.00 ha) in Croatia. The areas suspected for mines are considerably larger and extend over at least 500 km2 (500.000 ha) of the bear range. These areas are to be examined and the assumed presence of mines has to be either confirmed or refuted in years to come.

Demining of confirmed minefields and the examination of the suspected minefields require considerable financial resources, which the Republic of Croatia is not able to ensure in a short period of time. Therefore, a long-term demining strategy has been adopted, followed by short-term demining plans. In any case, the entire demining project shall not terminate in less than 10 years.

With regard to bear management, it is important to note that the bear range (large forest complexes, abandoned agricultural fields and depopulated areas) is the last demining priority.

Therefore, landmines in the bear habitats shall remain a problem for a number of years.

III BEAR MANAGEMENT

5 GOALS

The general goal of this Plan is the conservation of a stable brown bear population in Croatia in numbers ensuring its viability and coexistence with man.

Special objectives for achieving the general goal include (not in order of priority):

- 1. Conservation of the habitat
- 2. Application of international regulations
- 3. Avoiding the danger for humans and their property
- 4. Defining and subsequently achieving the desirable number of bears
- 5. Realization of economic profit for local inhabitants through tourism and hunting
- 6. Raising public awareness and involvement of stakeholders in decision-making related to bear management.

6 DESIRABLE NUMBER (CAPACITY)

6.1 Capacity

A comprehensive analysis of the bear habitat in Croatia extending over more than 12.000 km2 (1.200.000 ha) indicates that the possible size of the bear population (biological capacity) is around 1.100 bears. The desirable capacity (social capacity, public attitude) for bears in Croatia is around 900 bears. This number is based on current knowledge, but it is possible that new monitoring results (DNA analysis) and future experiences in bear-man coexistence will change this desirable capacity for bear population in Croatia.

If additional feeding of bears is practised, habitats of poorer quality could also sustain higher bear population density, while good quality habitats could sustain a density of 2 or more bears per 10 km2.

7 ZONING (AND POSSIBILITIES OF EXPANSION)

Bears inhabit areas in which they can satisfy most of their vital needs. With regards to habitat quality and possibilities for coexistence with people, the bear range in Croatia may be divided into 4 types of areas:

AREAS OF PERMANENT BEAR PRESENCE
AREAS OF OCCASIONAL BEAR PRESENCE where bears are acceptable
AREAS OF OCCASIONAL BEAR PRESENCE where bears are undesirable
ACCIDENTAL PRESENCE OF BEARS

A map showing these 4 zones is in the Appendix to this Plan. It should be noted that the bear habitat in Croatia is not fragmented since areas of permanent and occasional bear presence are connected to the corresponding areas in the neighbouring countries, Slovenia and Bosnia and Herzegovina, thus constituting a shared and continuous bear population of the Dinarides.

7.1 Areas of permanent bear presence

It is an area of high karst and in most of its part managed forests. The permanent bear presence area extends over 9.253 km2 (925.300 ha). Since the area in question has a low human population density the number of conflict between bears and people is tolerable.

With regards to bear management, this area may be divided into zones in which bears are managed or are intended to be and zones in which bears are not managed and are not intended to be managed. The central bear management areas, national parks excluded, extends over 9.038.37 km2 (903.837 ha).

The largest portion of hunting quotas should be planned in this area and harvesting should be carried out as planned in order to prevent major bear dispersion towards peripheral areas, which could increase the number of conflicts with people. In order to keep bears in the desirable area, additional feeding should be practised.

The central area includes four national parks extending over 535 km2 (53.500 ha) or 5.8% of the total central area. No economic activities have been planned in national parks nor additional feeding of bears, with the exception of scientific research and ecotourism activities.

7.2 Areas of occasional bear presence

The areas of occasional bear presence are the continuation of the permanent bear presence (central) areas, but are less favourable for bears. They include areas of managed and other forests and the density human population is higher than in the central part of the bear range. Due to possible conflicts with people, this area may be divided into zones where the presence of bears is desirable and as such it might be reclassified as an area of permanent bear presence in the future, and zones where the presence of bears is undesirable. Areas of occasional bear presence extend over a total of 2.798,80 km2 (279.880 ha).

7.2.1 The area of occasional and desirable bear presence extends over 2.059,90 km2 (205.990 ha) and includes parts of Bosiljevo, the upper streams of Mrežnica and Korana rivers, Zdihovo, Vukova Gorica, Lipnik, the Kamešnica mountain, Mosor, Biokovo and Žumberak (Figure 5).

Bear harvesting is planned in this area, though at considerably lower rates than in the area of permanent bear presence.

7.2.2 The area of undesirable bear presence extends over 738,90 km2 (73.890 ha) and includes the coastal areas from Bakar and the Vinodol valley to Maslenica (boundary defined on map) and the island of Krk and certain other Adriatic islands. In order to prevent bears from population the coastal area and swim across the Vinodol channel to the island of Krk, the entire Vinodol valley from Bakar to Novi Vinodolski has been classified as an area of undesirable bear presence. The boundary of this area is the regional road Bakar – Krasica – Praputnjak – Križišće, passing along the peak of the cliff separating the Vinodol valley from the inner mountainous region above the villages Klarić, Drivenik, Tribalj, Belgrad, Grižane, Podgora and Bribir to Novi Vinodolski. Since a large number of smaller settlements, along with a significant number of roads, is present in this area, traffic accidents involving bears occur frequently, which is one of the reasons why bear presence in not desirable at all. Extreme care should be taken to prevent bears from accessing potential food sources (waste dumps, food in the proximity of roads and railways and so forth). The additional feeding of bears is not permitted in this area.

Bear culling in the area of undesirable bear presence may be carried out with special permits only aiming at a complete absence of bears. The culling criteria are described in Chapter 9 – Encroachments upon the bear population.

7.3 Accidental presence of bears

This area includes all other parts of Croatia. Since bears are present here rarely and exceptionally, no activities concerning bears are planned, except in conflict situations.

8 MONITORING – MORTALITY, POPULATION

The status of the bear population is to be constantly monitored through systematic collection of all data regarding live specimens and bear mortality.

8.1 Monitoring of population trends and demography

The monitoring of the bear population is carried out through observation and counting of bears at feeding sites and other sorts of encounters with bears in their habitat. In particular, a record of the number of family groups consisting of the mother and her cubs of one or two years of age is kept. Special forms are used for record keeping, while the Action plan lays down the days intended for observation in each calendar year. Such monitoring provides an insight into the bear population trends.

Genetic identification is used to determine the absolute number of bears. Samples of fresh bear scat are used for DNA extraction for the purpose of genetic identification. From a sample taken from the surface of fresh bear scat, collected, marked and preserved in alcohol in accordance with a standard protocol, such a quantity of DNA may be extracted in the laboratory to identify the bear from which the scat has originated. A large enough sample of scat collected in a specified area and during a limited amount of time enables the assessment of the total size of the bear population with an error margin of less than 10%. Using this data, the index on population trends, obtained by counting sighted bears, may be determined. Genetic assessment of the total size of the population shall be conducted every 3 to 5 years. Beside the total number of bears, genetic methods allow the determination of the size of the effective population (participating in reproduction), the extent of genetic diversity of the population studied, the number of males participating in reproduction as well as the gene flow in the wider area or across borders of neighbouring countries that share the same bear population with Croatia.

Since the genetic method of assessing the size of the population is objective and based on scientific facts, it may be expected to serve as the basis for bear management decision making and to be accepted by all stakeholders.

8.2 Monitoring and bear mortality analysis

The death of each bear is recorded. Measurements and samples are taken in accordance with a standard form. Bear mortality data are forwarded to the competent Ministry within 24 hours.

The said form must contained the date and place of death, the cause of death (whether the bear was culled, information on the hunter and the trophy value) as well as basic measurements (total length and weight), sex and age of the bear. Furthermore, the following basic samples are collected: one rudimentary molar for age determination (preserved dry in a paper bag), a sample of soft tissue for genetic analysis (kept in a freezer) and a sample for the purpose of determination of the presence of the trichina worm. Taking of additional measurements and the collection of other samples are agreed upon where required.

Each bear pelt and skull is individually marked. Marking tags, their distribution and method of application are determined by the competent Ministry.

9 ENCROACHMENTS UPON THE BEAR POPULATION

9.1 Hunting

9.1.1 Hunting season

According to the Ordinance on closed hunting season, the bear hunting season in a calendar year lasts from 2 March to 30 April and from 1 October to 15 December, for a total of 4,5 month per year.

9.1.2 Cull quota

On national level a total annual cull of 10 to 15% of the total estimated number of bears is planned. This percentage is determined with respect to the actual established population trends. A quota of 15% may be prescribed if the trend is positive and needs to be slowed down or stopped. If such action does not affect the trend and objective problems with the local number of bears are present, a major encroachment upon the bear population may be exceptionally carried out over a limited area. If a negative trend is recorded, the quota may be set below 10% or the cull may even be suspended in certain years or areas. The quota (in %) and the total number of bears planned for culling in the following calendar year are determined on the basis of the habitat capacity, the estimated size of the bear population and the population demography. On the basis of the current experience it may be expected that 70% of the total cull is attributable to harvest and 20% to other losses. If the annual quota is exceeded, the surplus cull is subtracted from the next year's quota. Likewise, if deviations appear as to the expected ratio of harvest and other losses in the total cull, the quota shall also be modified.

The cull quota includes legal hunting, poaching, removal of nuisance bears, bear deaths due to traffic and other anthropogenic causes, as well as the removal of live bears from the population.

Young bears following their mother and females leading their young are not culled.

9.1.2.1 Quota distribution and hunting rights

9.1.2.1.1 Criteria for quota distribution

The basic criteria for the distribution of the quota are:

- quality and size of habitat;
- population density.

In the are with the best quality habitat and permanent bear presence the presumed bear population density is 1,5 to 2,0 specimens per 10 km2 (1.000 ha). This density permits an annual harvest of 0,15 bears per 10 km2 (1.000 ha). This applies to the central part of Gorski Kotar, Velika Kapela and Mala Kapela, and Northern and Central Velebit (approximately 2.400 km2 or 240.000 ha).

In the remaining part of the area of permanent bear presence (7173,37 km2 or 717.337 ha) the presumed bear population density is approximately 1,0 specimens per 10 km2 (1.000 ha). This density permits an annual harvest of 0,1 bears per 10 km2 (1.000 ha).

In the area of occasional bear presence (2.798,80 km2 or 279.880 ha) the presumed bear population density is approximately 0,5 specimens per 10 km2 (1.000 ha).

In the part of this area in which bears are in no conflict with the local inhabitants (1.793 km2 or 179.300 ha) the permissible annual harvest is 0,05 bears per 10 km2 (1.000 ha).

The total cull quota is determined by the Action plan for each year, which is adopted not later than on 20 January of the current year. Distribution of the quota to hunting units is carried out in accordance with the above criteria, which depend on the size and quality of the hunting unit, but compliance with obligations prescribed by the Brown Bear Management Plan during the previous years is also an important factor. For each harvested bear a tag with a unique number, accompanying bear hunting trophies and the required documentation, is issued. For the purpose of reaching the total planned harvest, the competent Ministry may issue more such tags than planned, but it may withdraw them in the moment the quota is achieved.

In the areas in which bear presence is undesirable (e.g. islands, coastline, urban areas: 778 km2) bear culling is unlimited due to conflicts with local residents. Culled bears are not deducted from the cull quota, but are registered as other losses. The competent Ministry issues a permit for the removal of each bear after several confirmations of its presence, whether or not that bear had caused any damage and regardless of the bear hunting season. However, the culling of a bear is not permitted if the same specimens does not appear several times in different days in order to avoid the killing of a bear that is just passing through the area in question.

Before issuing the permit for the removal of a bear, the competent body must ascertain that the reasons for the bear to appear in the given area have been entirely or partially eliminated and that the competent organization or person has been warned in writing and instructed regarding the necessary measures. Persons suffering bear-related damage shall not be entitled to compensation if their property was not adequately safeguarded.

Vinodol valley and the island of Krk, as well as all other islands on which bears might appear, are not included in the bear management plan. Fulfilment of the conditions necessary to attain bear culling permits (as in other areas in which bears are not managed) is not required for the islands and the Vinodol valley.

The culling of undesirable bears is the responsibility of the local hunting unit leaseholder and he shall be entitled to use all group and individual hunting methods. If he refuses or is not able to carry out this task within the prescribed time limit, the Ministry shall appoint another subject.

9.1.3 Hunting methods and tools

Bears are hunted individually during moonlit nights by waiting on a high hunting stand near a feeding station in accordance with the provisions of the Hunting Act, as described in the chapter entitled "Current Management". This Plan envisages the continued use of this hunting method.

Advantages of bear hunting from a high hunting stand are the following:

- It provides a good vantage point for observation, determination of age and sex category of the bear and the chosen specimen.
- It reduces the possibility of injuring the bear.
- Minimum disturbance of the habitat.
- Usually a forest road leads to the hunting stand on feeding station, which facilitates access to the stand of the hunter and his assistant, transportation of food to the feeding station and handling of the harvested game.
- It is the safest hunting method for the hunter, the assistant and the surroundings.
- It is the most efficient manner of bear harvesting control.

9.2 Supplemental feeding

Supplemental feeding with food of plant or animal origin is a common bear management measure.

A detailed description of the types of food the bear forages for in the wild is laid down in the previous chapter. Bears are omnivores. Most of the food they take is of plant origin and may account for up to 95% of their diet depending on the season. Beside plant food, bear also need protein-rich food to maintain a normal metabolism. Bears increasingly forage for protein-rich food (mostly) in spring. Protein-rich food includes insects, invertebrates, rodents and carcasses. bears may attack young game and domestic animals.

The reasons for supplemental feeding are the following:

- Keeping bears in the desired part of the habitat to prevent them from moving close to human settlements.
- Reduction of damage to people's property.
- Possibility to observe and monitor bear population trends.
- Possibility of health treatment.
- Increase of the habitat capacity, population growth and increase of the reproduction.
- Eco-tourism (photo-hunting) and education.
- Execution of the planned harvest.

Possible negative effects of artificial feeding of bears are under research and shall be taken into account if and when evidence thereof is produced.

9.2.1 Time of supplemental feeding

Bears may be artificially fed up to 240 days per year in hunting units in which bear harvesting has been approved for the current year, i.e. from 1 January to 30 April and 16 September to 15 December. The removal of the remaining food in not required at the end of the autumn season, i.e. 15 December, but no artificial feeding of bears is to be carried out between 1 May and 15 September.

Supplemental feeding is not permitted in hunting units in which no cull quota has been approved for the current year.

In areas in which significant bear-related damage to trees occurred, supplemental feeding may be carried out until the beginning of June with plant food or special compound food containing sugar.

The aim of limiting supplemental feeding days is to prevent bears from becoming accustomed to or becoming dependent on food from human sources.

9.2.2 Feeding stations

The supplemental feeding of bears is carried out on feeding stations. These structures are built on small forest clearings in the proximity of forest roads in order to allow access thereto during the entire year.

A maximum of one feeding station for the supplemental feeding and hunting of bears may be placed per 40 km2 (4.000 ha). Hunting units smaller than 40 km2 may have one feeding site with a hunting stand, but which may be used (for placing food) only during the year in which the hunting unit has been granted a hunting permit. The feeding station must be at least 2 km away from the closest permanently inhabited human settlement. The minimum distance between the feeding station and a national park boundary must be 300 m. The choice of the location for a feeding station must be such to avoid any possibility of contamination of water springs, waterways, etc.

Bears are not to be artificially fed in protected areas, with the exception of bear observation and filming sites for educational and commercial purposes.

9.2.3 Types of food

Cereals, wet fodder and meat, as well as special annual and perennial crops are used for the supplemental feeding of bears. The cereals used for bear feeding are corn, oats and barley. During the supplemental feeding period (up to 120 days per year) a maximum of 300 kg of cereals per adult bear may be supplied. The wet fodders used bear feeding are sugar or fodder beet and various fruits. A maximum 300 kg of wet fodder per adult bear may be supplied. The meat food should primarily consist of carcasses of dead animals (previously inspected by a veterinarian). If not enough animal carcasses are available, condemned meat from slaughterhouses may be used instead. A maximum of 400 kg of meat per adult bear during may be supplied. Other animal species visit the specially designed bear feeding stations too, for example wild boars, wolves, foxes, martens, birds, etc. Apart from the said supplemental bear feed, annual and perennial crops may be planted, oats in particular, in order to improve the bear diet. These fields are not only used by bears, but by other game species too. They should be located on forest clearings as far as possible from areas inhabited by people.

Likewise, bears visit feeding stations for wild boars and deer. The number of such feeding stations attracting bears should be as low as possible. Within the bear range the number of feeding stations for wild boars and deer should not exceed the number prescribed by hunting management programmes. These feeding stations as well must be placed far enough from areas inhabited by people or national parks' boundaries.

10 CONSERVATION OF THE HABITAT

Bear habitats in Croatia and in the entire Dinaric - Pindos region have the best brown bear habitat quality in Europe. This has been shown in detail in previous chapters. These habitats, as confirmed by several reseraches (Cicnjak et al., 1987; Huber and Roth, 1992, 1993; Huber and Frković, 1993; Kusak and Huber, 1998; Frković, 2001; Frković et al., 2001; Majnarić, 2002), enable positive population trends, population stability and encroachments upon the bear population that would not be possible in many parts of Europe where the bear is still present. By conserving and valorising natural habitats artificial bear feeding should be gradually reduced or even entirely eliminated.

The basic prerequisite for the development and implementation of the Brown Bear Management Action Plan in Croatia is the conservation of the habitat. The bear habitat in Croatia has the following characteristics:

- it is the integral part of the Alps-Dinara-Pindos region of bear distribution in Europe;
- it is homogenous instead of fragmented, meaning that strictly separated areas of bear presence exist;
- it is bound with extensive natural forest ecosystems;
- it is connected with the bear habitat of equal quality in the neighbouring Slovenia and Bosnia and Herzegovina, enabling unrestricted migration of bears.



10.1 Measures for habitat conservation

Constant monitoring of the habitat status and of the possible changes is required for the correct identification and subsequent implementation of the measures for its conservation.

10.1.1 Identification of:

- bear range;
- habitat suitability for bears;
- habitat quality.

10.1.2 Transport infrastructure

- identification of all types of existing infrastructure and their impact on the bear habitat;
- assessment all types of planned infrastructure and their impact on the bear habitat;
- prohibition of construction of new roads and modernization of the existing roads through the bear habitat unless the requirements laid down in the Nature Protection Act are met;
- where construction of roads is inevitable, the following measures should be adopted:
 - avoid intersecting the most vulnerable parts of the habitat (e.g. Greece);

- build crossings for bears and other animals across motorways (tunnels, viaducts, green bridges) (Permeability of Roads to Animals Design Guidelines, 2002);
- roads used for forestry are to be excluded from public use.

10.1.3 Conservation and improvement of forest ecosystems

- identification and evaluation of the current situation;
- implementation of long-term forestry development guidelines (Forestry Strategy), natural regeneration, mixed forest stands, conservation of nut-bearing beech and oak trees, maintenance of selected forest meadows:
- valorisation of specially protected elements of nature;
- planning of enlargement of specially protected elements of nature.

10.1.4 Agricultural development

- identification and valorisation of the existing agricultural activities;
- planning and assessment of future interventions in this field (avoidance of intensive crop production over large areas, of the promotion of intensive livestock production in open spaces).

10.1.5 Sports and tourist facilities

- assessment of the current situation and the impact on the bear population;
- prohibition of construction of such facilities in the central part of the bear range unless the requirements laid down in the Nature Protection Act are met;
- prohibition of tourist and sports activities that disturb the tranquillity of the bear habitat;
- avoidance of all activities that might damage the bear habitat.

10.2 Waste

Every food source that is treated as waste – food scraps, waste deposited in dustbins and containers or on legal or illegal waste dumps – must be inaccessible to bears.

In such places bears start associating the smell of humans with a positive experience, which is opposite to the experience they had in the past. A bear with such experiences might not avoid humans in every situation or may even become accustomed to humans. This does not mean that the bear presents a danger, but such behaviour is certainly very undesirable.

Prevention of bears accessing waste:

1. Waste dumps should not be located in bear habitats. Where it cannot be avoided, the waste dump should be fenced-in in order to prevent bears from accessing it and feeding on waste. The most effective method is the installation of an electric fence. The entrance to the waste dump should be closed.

- 2. Illegal waste dumps should be cleared. Perpetrators should be punished.
- 3. Containers for the collection of waste before transportation to a waste dump should be inaccessible to bears. Furthermore, they should be made of a sturdy metal and always closed in order to prevent bears from opening them. They should be regularly emptied and no waste should be lying around them.



- 4. Household dustbins should be kept inside structures inaccessible to bears. They should be placed in the open only during the daytime immediately before pick-up.
- 5. Dustbins in bear habitats should be made of metal and equipped with lids that can prevent bears from accessing their contents. They should be emptied on a regular basis.
- 6. The dumping of food scraps in bear habitats should be prohibited and people should be educated on this issue.

11 NUISANCE BEARS

Nuisance bears are bears which frequently cause damage, stays in the proximity or within a human settlement, forages for food from human sources and shows no fear from man. Bears that do not flee from men are potentially dangerous. Loss of fear does not imply major aggressiveness, but the actual danger is considerably greater. Certain people might try to move closer to such a bear to get a better look or take a photo, while others might shoot and injure it. In both cases the bear may respond with an active defence. Furthermore, frequent sightings of a single bear accustomed to humans often fuel the belief that bears have multiplied beyond reasonable numbers. Some bears accustomed to humans might regularly cause damage in their search for food from human sources and thus become nuisance bears. Such behaviour is difficult to change. Nuisance bears usually end up killed in traffic accidents, shot in so-called self-defence or killed through planned culling.

Measures to prevent the creation of nuisance bears:

A) Preventing the bears from becoming accustomed to food from human sources.

These measures include all the measures laid down in the chapter on waste management in order to prevent bears from feeding on waste (Chapter 10.2).

All other sources of human food (food stores, orchards and gardens, means of transport, places for reloading of cargo, etc.) which might attract bears should be appropriately fenced, guarded or eliminated.

B) Preventing the appearance of cubs that have lost their mother.

Cubs that have prematurely lost their mother are particularly inclined to forage for food in the proximity of humans. The following actions should be implemented:

- 1. Measures should be taken to decrease the likelihood of cubs becoming orphans:
 a) special care in hunting operations, b) prevention of poaching, c) avoidance of disturbance in habitats during winter months (from December to April), in particular around known bear denning sites.
- 2. Prohibition of feeding motherless cubs.
- 3. A cub that has lost its mother during the first 4 to 5 months of its life cannot survive in the wild. If it is fed artificially, it will have to be kept in an enclosed space for its entire life. Such bears may be adopted by specialised shelters within the limits of their capacities (in Croatia at the time of the development of this plan such bear shelter exists in Kuterevo and the solution of its legal status is under way). If such facilities are not available, no artificial feeding of orphan cubs of that age should be practised. Cubs that were orphaned at the end of May or later on during their first year of life have a possibility to survive in the wild, but shall behave normally only if people do not feed them and if they do feed on waste.

Measures for dealing with nuisance bears

The behaviour of a bear that has become accustomed to humans or has started making problems is difficult to change. The appearance of a nuisance bear should be immediately notified to a member of the intervention team (IT), who shall propose appropriate measures, supervise their implementation and, if necessary, participate in their implementation.

Measures that a member of the intervention team may propose:

- 1. Elimination of the food source that the bear is attracted to (particular attention should be given to waste). If this measure is not implemented, the IT member files a report to the head of the intervention team, who shall forward the notification to the competent body or service (municipal service company, forestry service, hunting service or veterinary inspection).
- 2. In case of damage, installation of an electric fence and use of guard dogs.
- 3. Intimidation by noise (noise, firecrackers) and rubber bullets. Rubber bullets may be used only by a person with a weapon licence. It is recommended than an IT member owning a weapon license, if any, carries out the bear intimidation. All interventions are carried out jointly with the local hunting unit leaseholder.

4. Application for a permit for the removal of the nuisance bear (intervention culling). The permit is issued by the Directorate for Hunting of the MAFRD upon written request of the hunting unit leaseholder. The following documents are to be attached to the application: the exact description of the time and place of appearance of the nuisance bear, description of measures adopted in order to change his behaviour and the opinion of an intervention team member. The culling of the bear is carried out by the legal or natural person managing the hunting unit or areas outside the hunting unit. If the nuisance bear is present within the range of a human settlement, the culling thereof may be carried out only with police permission. The IT member must be present at the culling site or coordinate the intervention in order to ensure the removal of the problem bear.

5. Sick and injured bears

If a bear is temporarily incapable of surviving on its own in the wild due to an injury or sickness, only an on-site one-off medical treatment may be provided without keeping the bear in a clinic or any other form of captivity.

12 BEARS AND TOURISM

This Plan provides for a detailed description of the fundamental factors that define the bear habitat in Croatia. The bear habitat in Croatia extends over a surface of more than 11.800 km2 (1.180.000 ha) of hills and mountains mainly covered with forest vegetation, with low human population density and typical rural characteristics. Beside the conserved biological and ecological values, this area presents little comparative advantage. The gross domestic product pro capite is considerably lower than in other parts of Croatia, the area exhibits strong depopulation trends and the local economy is underdeveloped as to the rest of the country.

This large area is threatened by the construction of large infrastructure connecting the more developed continental part of the country with equally developed coastal area. Furthermore, this area is used for the disposal of different types of waste, but local governments and the local population hardly benefit from any of the said activities, which might give rise to long-term problems.

It is therefore important to valorise and exploit the presence of bears in the area. In Croatia areas of bear presence are also inhabited by the other two large carnivores: the wolf and the lynx. These two species are strictly protected by law and are not considered a game species, but they have a considerable influence on hunting management since they feed on game. Thus it is important to ensure enough financial resources for the conservation of these species and for the benefit of the local population through bear hunting fees and the other ways of exploiting bears, wolves and lynxes.

Brown bears have been both persecuted and prized by people over the centuries. In the beginning, like other large carnivores, they were considered a menace and thus hunted down, which resulted in the disappearance of bear from almost the entire Western Europe. More recently, bears were valued as hunting trophies. In some areas, their numbers have been maintained by hunters, who have eventually helped bear populations to survive and recover.

Today, the presence of a healthy bear population is a sign of high-quality forests and thus the availability of resources such as timber, mushrooms, berries and game.

Bears are a symbol of the richness of nature and it is known that the quality of the environment is one of the main factors in tourism. Local communities can use this symbol to increase the market value of traditional products such as handicrafts. For instance, the creation and use of the "bear label" on local products (bear-friendly products) would mean that they come from well-preserved forests.

Nature lovers' wilderness experience may be considerably enhanced by the presence of bears. Research has shown that most residents in areas of bear presence in Croatia feel that the animal's presence attracts tourists, bringing economic benefits to the local community. Beside the already mentioned "hunting tourism", bears can be used in other ways for tourism purposes and within the concept usually called "ecotourism". According to the International Ecotourism Society, ecotourism may be defined as "responsible travel to natural areas that conserves the environment and improves the well-being of local people" (TIES, 2003). This concept is also known as the "non-consumptive" use of natural resources.

This Chapter mostly deals with the non-consumptive use of bears in producing economic benefits for local residents.

Although this is a bear population management plan, this Chapter shall also analyse and propose activities related to bears in captivity. There are two main reasons for this:

- 1. Some of the bears in captivity were taken from the wild.
- 2. Bears in captivity can be used for achieving certain objectives of this management plan (for example, information and education of the public about bears).

Shackley (1996) has identified four main factors that influence the development of the non-consumptive use of wildlife in tourism:

- The global increase of the variety of tourism products;
- Cheaper and faster journeys to tourist destinations;
- Increased public awareness about the environment;
- The search for sustainable substitutes to mass tourism.

We believe that it is important to plan and develop the use of bears in Croatian tourism in accordance with the above global changes and we propose that the Committee for bear management drafts the guidelines for the non-consumptive inclusion of bears among tourism products offered by Gorski kotar and Lika.

12.1 Bears in the wild

Concerning tourism, bears inhabit three different categories of areas, which may overlap, i.e. protected areas, hunting units and mountaineering destinations. Visitors come in contact with bears, which can have different effects both on the visitors and the bears. The key issues that need to be dealt with regarding the interaction between visitors and bears are the following:

- Disturbance of bears;
- Bears becoming accustomed to people;
- Visitors' safety;

- Visitors' satisfaction:
- Visitor carrying capacity.

For the purposes of this Plan the visitor carrying capacity means the highest possible level of use of an area by the visitors with the highest possible level of visitor satisfaction and the lowest possible level of negative impacts on the bear population. Such approach is particularly important in protected areas; it is thus necessary to carry out scientific research in order to produce objective and quantitative assessments of:

- The level of visitor disturbance of bears;
- Visitor satisfaction during the visit to the protected area.



In order to avoid the bears being disturbed and getting accustomed to people, as well as to ensure the visitors' safety, it is important to educate visitors about the correct behaviour in the bear habitat (through brochures, flyers, signs on hiking trails, lectures and so forth.) and, if necessary, to limit the areas accessible to visitors or to limit the number of visitors in certain areas or periods. The remaining activities related to this issue are laid down in the Chapters "Waste" and "Nuisance bears".

With the aim of increasing their satisfaction, visitors may participate in the following supervised activities:

- enjoying the bear habitat;
- searching for, observing and photographing (filming) signs of bear presence;
- observing and photographing (filming) bears from high stands near bear feeding stations;
- participating in the activities of researchers and/or park rangers;

education about bears.

12.2 Bears in captivity

Institutions that keep bears in captivity should use those bears to educate and entertain visitors, as well as to produce economic profit.

The bears must have:

- Suitable housing with sufficient space for moving, in which the animals will not be bored and which are the best possible copy of their natural habitat;
- Proper nutrition;
- Peace and quiet.

The visitors should obtain:

- Safety;
- Education about bears:
- Entertainment:
- The possibility to spend their money.

13 MINIMISING AND COMPENSATING DAMAGE

13.1 Minimising damage

13.1.1 Measures to be undertaken by hunting unit leaseholders and other legal persons managing bears

- Development and distribution of instructions on the use of protective instruments;
- Supplemental feeding of bears in order to keep bears away from human property;
- Keeping the size of the population under control in order to make the amount of damage tolerable;
- Regular notification of the Directorate for Hunting of the Ministry of Regional Development, Forestry and Water Management concerning the incurred damage.

13.1.2 Measures to be undertaken by land users

- Notification of the hunting unit leaseholders concerning the incurred and possible damage;
- Enabling the proper implementation of protective measures by the hunting unit leaseholders:
- Proper use of protective instruments;
- Harvesting of agricultural products within the agrotechnical deadlines.
- Observance of instructions aimed at preventing the creation of nuisance bears.

13.1.3 Other measures

Includes all other measures laid down in the Chapters 10 "Waste" and 11 "Nuisance bears", mainly related to bears' access to waste and other sources of human food.

13.2 Compensating damage

All damage that can be proven to be caused by a bear must be compensated as quickly as possible. The compensation must cover the entire damage where the person suffering damage has not contributed to the incurred damage by his actions or negligence.

In accordance with the laws in force (the Hunting Act) liabilities for bear-related damage are regulated as follows:

Areas occupied by hunting units:

Article 83, paragraph 1: the hunting unit leaseholder shall be liable for damage caused by game that permanently inhabits his hunting unit in which damage has occurred regardless of preventive measures that he was obliged to undertake in accordance with the Hunting Act.

Paragraph 2: it is presumed that the game in question permanently inhabits the hunting unit in which the damage occurred, unless the hunting unit leaseholder can produce evidence to the contrary.

Paragraph 3: the hunting unit leaseholder shall be liable for damage caused by game that does not permanently inhabit his hunting unit, but he shall also be entitled to harvest the game in question. Such entitlement is established on the basis of evidence of paid compensation to the person to whom the damage has been incurred and the approval of the competent administrative body issued in agreement with the Ministry (if the damage was incurred in a state-owned hunting unit).

Paragraph 4: the game harvest authorized under paragraph 3 must correspond to the amount of the compensation taking into account the value of the game meat and the hunting trophy in accordance with the compensation tariff.

Paragraph 5: compensations for bear-related damage on livestock in areas in which livestock access and grazing is prohibited by law shall not be paid.

Article 84: Where game related damage on the same agricultural crops is repeated, the value of single damages may not exceed the value of the expected crop yield.

Article 85: The jurisdiction for disputes concerning the compensation of game related damage shall be that of the local court competent for the territory in which the hunting unit has been established.

Where bear-related damage occurs within the hunting unit, the hunting unit leaseholder shall inspect the scene, draw up a damage report and evaluate the amount of compensation, while the owner shall sign the form if he agrees with the compensation. The amount of compensation depends on the use of protective instruments (electric fences, guard dogs) and the observance of other measures aimed at preventing the creation of nuisance bears, as well as measures for the prevention of the occurrence of damage. The hunting unit leaseholder shall forward the copies of the damage report to the Directorate for Hunting of the Ministry of Regional Development, Forestry and Water Management not later than on 31 December of the current year.

Areas not occupied by hunting units:

Article 19: In areas in which hunting units are not established the game shall be protected by the owner or the user (legal or natural person) of the land.

The hunting unit leaseholder shall notify unusual or frequent damage to a member of the intervention team, who shall inspect the scene and propose appropriate measures. Where the proposed measures do not stop the occurrence of damage, the hunting unit leaseholder may apply for a permit for the removal of the nuisance bear (intervention culling) (the description of the procedure is laid down in Chapter 11 "Nuisance bears").

The continued application of the existing manner of dealing with bear-related damage is proposed, i.e.:

- implementation of measures to avoid the occurrence of damage;
- appropriate record-keeping and notification of damage;
- timely and appropriate compensation;
- possible procedure for culling bears that repeatedly cause damage.

14 PUBLIC INFORMATION AND INVOLVEMENT IN DECISION-MAKING

In order to improve the quality of brown bear management in Croatia and to avoid conflicts among different stakeholders, the following activities have been planned in accordance with the recommendations for Croatia laid down in the Action plan for the conservation of the brown bear in Europe:

A) Systematic education and information of target groups and implementation of educational and information campaigns.

In order to ensure public support for bear management and to prepare the public for a constructive participation in decision-making, the public has to be informed timely and in an appropriate manner. It is required to use various educational tools and use the media in order to embrace a wide variety of target groups.

The committee shall initiate, coordinate and direct the activities of systematic education and information of target groups and the general public. By means of an action plan the committee shall annually determine the public information priorities for the following year and direct thereby its educational and information campaigns; it shall also begin the implementation of such campaigns.

1. Inhabitants in areas of permanent bear presence

The current level of acceptance of bears must be maintained and, if necessary, improved. Special attention should be given to the education of the public regarding measures for the minimisation of damage and direct dangers to humans, as well as to avoid the behaviour which may lead to the creation of nuisance bears. The public should be informed about the status of the local bear population and the possibilities to use bears as part of eco-tourism.

2. Inhabitants in areas of occasional bear presence

Importance should be given to education concerning bear biology in order to avoid panic reactions if a bear is encountered. Special attention should be given to the education of the public regarding measures for the minimisation of damage and direct dangers to humans and avoid the behaviour which may encourage bears to approach human settle ment and lead to the creation of nuisance bears.

3. General public in Croatia

All citizens should be familiar with the basics of bear biology and accept and appreciate the presence of bears in Croatia. The general public should also understand all the elements of bear management, including encroachments upon the bear population through hunting. Systematic education and information on the national level should lead to the popularisation of bears as species.

4. Pupils

Elementary and secondary schools should provide for a clear picture of bears and other large carnivores in Croatia as valuable elements of our natural heritage with a special ecological status with respect to their habitat, feeding and relationship with man. The Committee should devise programmes and activities in order to involve schools in the protection and the popularisation of the brown bear.

5. Visitors of areas inhabited by bears

Each visitor, Croatian or foreign, of an area inhabited by bears should be able to obtain basic information about the visited bear habitat and the recommended behaviour therein. Such information should be provided by administrations of protected areas, tourist boards, non-governmental organisations, hunting associations, forestry employers and bear experts. The goal is not to generate fear from bears, but to avoid dangerous situations as well as to supply enough information for recognising signs of bear presence. The proper information of visitor shall also reduce the liability of the organisation managing the area in question in case of a bear-man conflict situation.

B) Identification and involvement of public opinion leaders and stakeholders in brown bear management through consultations and joined planning.

Main stakeholders in bear management are: local inhabitants of the area or permanent and occasional bear presence, general public, livestock owners, farmers, hunters and hunting associations, forestry workers, subjects in charge of environmental protections (public institutions, non-governmental organisations dedicated to environmental protection, animal lovers, etc.), scientists and experts, visitors of areas inhabited by bears (mountaineers and other tourists), tourist workers of the mountainous Croatia, institutions that keep bears in captivity and so forth.

The Brown Bear Management Plan for the Republic of Croatia and the annual Action Plans should be public documents that stakeholders can comment and that should lay down the strategy to relate to different stakeholders. A public conference should be organized on an annual basis in order to present the status of the bear population, the results of the previous year's management and plans for the following year. Meetings with opposing stakeholders should be organised as well, if necessary, in order to involve them

in the decision-making process.

C) Establishment of permanent consultation protocol with locals

Local population should be regularly informed about the status of the bear population and in particular about any extraordinary situation (e.g. sighting of a nuisance bear or motherless cub). The local inhabitants should also be familiar with the procedure for reporting bear-related damage or dangerous situations, as well as with general attitude towards bears.

D) Monitoring of public attitudes towards bears and bear management

Understanding public attitudes towards bears and different bear management goals shall facilitate public involvement in the decision-making process. To that purpose public attitudes and possible changes of attitudes should be monitored by means of expert-conducted surveys.

E) Role of public institutions managing protected areas and institutions keeping brown bears in captivity in informing the general public

Public institutions in areas inhabited by bears should have the key role in the protection and popularisation of the brown bear, as well as in the education concerning the brown bear. Each visitor of a protected area should be notified about the presence of bears, receive basic information about the species and the approprite behaviour in case of an encounter with a bear. Institutions that keep bears in captivity may significantly contribute to the education of people about bears and the popularisation of the species. Information offered by such institutions should be updated and refer to bear-related issues in Croatia.



15 INTERNATIONAL COOPERATION

By signing the international treaties laid down in Chapter 3.1 Croatia has committed to comply with their provisions and this Plan confirms that commitment regarding the conservation of the brown bear population. This Plan complies with another document, "Guidelines for Population Level Management Plans for Large Carnivores", drawn up in 2007 by the Large Carnivore Initiative for Europe (LCIE) by contract for the European Commission.

On the global and/or European level this implies the harmonization with the guidelines for the conservation of the species in a "favourable conservation status", in as high numbers as possible and over as large areas as possible in coexistence with the local inhabitants. The Plan shall also comply with the provisions related to habitat conservation and international trade in live bears and parts of their bodies.

The Croatian brown bear population is part of the population shared with neighbouring countries: the Republic of Slovenia and the Republic of Bosnia and Herzegovina. There are no obstacles to the free movement of bears between the countries and such a situation shall be maintained in the future as well. By understanding that bear population management in Croatia may influence bear populations in neighbouring countries, Croatia manages bears in a way to ensure a balanced population, which is the reason why an even number of bears crossing the state border back and forth may be envisaged. Croatia expects the neighbouring countries to adopt a similar approach to bear management.

Scientific knowledge on bears in Croatia shall be available to experts from the neighbouring countries. This Plan encourages cooperation between researchers in order to align research methods and enable comparisons and complete results. This is especially important for genetic and radio telemetry research. Tagged animals found outside the state border shall be reported without delay.

Meetings of experts in charge of bear management shall be organised on an annual basis for the purpose of exchanging experiences and developed joint management programmes for the following year.

16 INTERVENTION TEAM

The bear intervention team (hereinafter the "IT") has been established pursuant to the Decision of the Ministry of Regional Development, Forestry and Water Management, classification: 323-01/08-01/59, registry number: 538-13-08-01 of 4 February 2008. The team has 9 members (the list thereof in Annex) selected on the basis of their occupation field, who act in accordance with the Brown Bear Management Plan for the Republic of Croatia. The Decision on the establishment of the Intervention team was accompanied by the adoption of the Protocol on the Intervention team members' actions. IT members are selected in accordance with the above Decision and meet once a year (more often, if necessary) for the purpose of training, education and exchanging experience.

The Intervention team members are trained and equipped experts, who must be ready to inspect any location on which exceptional bear-related damage, an accident or the death of a bear occurred and, in particular, investigate the occurrence of nuisance bears. All questions regarding issues related to nuisance bears are to be directed to the intervention team. It is important to let

the local population know that they are not alone in case of extraordinary and dangerous situations involving bears.

The intervention team is equipped with dart guns, rubber-bullet firing guns and noise producing bullets, and traps for capturing live bears.

Intervention team members shall arrive as quickly as possible to the location where a bear is caught in a trap set by a poacher or a natural trap, or where a bear is in conflict with people.

Nuisance bears shall be in the first place intimidated in order to change their behaviour. If no result is obtained, the bear shall be captured, equipped with a radio transmitter (for the purpose of monitoring), relocated or placed in captivity (if possible); the culling of the bear is used only as the last resort if all other actions fail.

The members of the intervention team are appointed by the competent Ministry, which shall act as a mediator where the team's assistance is required. The members of the team evaluate situations in cooperation with hunting unit leaseholders and make a decision about the appropriate intervention.

17 FUNDING OF THE IMPLEMENTATION OF THE PLAN

17.1 Domestic sources

- the part of the state budget of the Republic of Croatia intended for financing the competent ministries;
- funds deposited to the special accounts of the competent Ministry and the counties pur suant to the Hunting Act and intended for the implementation of the said Act;
- hunting unit leaseholders' resources;
- local and regional governments' resources;
- scientific and academic institutions' resources;
- hunting federations' resources;
- other sources.

17.2 Foreign sources

- the European Commission through programmes such as LIFE for certain years and for certain projects;
- foreign donations;
- other sources.

18 IMPLEMENTATION AND REVISION OF THE PLAN

The Ministry of Agriculture and Forestry (currently the Ministry of Regional Development, Forestry and Water Management – Directorate for Hunting) and the Ministry of

Environmental Protection and Physical Planning (currently the Ministry of Culture - Directorate for the Protection of Nature) have formed the National committee for the creation of the Brown Bear Management Plan for the Republic of Croatia and the annual Brown Bear Management Action Plan.

This committee shall carry out revisions of the management plan and the action plans, as well as amend it and draw up all necessary reports. The revisions of the plan and the action plans shall be available to all stakeholders and the general public, who shall be able to express their proposals and remarks.

The Ministry of Regional Development, Forestry and Water Management – Directorate for Hunting and the Ministry of Culture – Directorate for the Protection of Nature shall be jointly responsible for the implementation of the Plan. However, the practical implementation shall be the responsibility of the Ministry of Regional Development, Forestry and Water Management. The implementation of the Plan includes the information and involvement of the general public in the decision-making process.



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ANNEXES:

- 1. Ordinance on crossings for wild animals
- 2. Protocol on the Intervention team members' actions
- 3. List of members of the Intervention team



11. srpanj 2007

- ≫ POČETNA
- NOVOSTI
- » VIJESTI
- » IZ MEDIJA
- » NAJAVE
- » REPORTAŽE
- » INTERVIEW
- M KOMENTARI
- » LITERATURA
- » LINKOVI
- > IMPRESSUM
- » FORUM
- ANKETA

Klimatske promjene me

- jer mi je □ao svih bića koje pate od promjena
- zbog mog zdravlja bojim se katastrofe
- jer se bojim novih
- O bad me briga!



PRETRAGA

Vijesti » 10. srpanj 2007 Nizozemska donacija za CITES u Hrvatskoj

TRAN



Bilateralni hrvatsko-nizozemski projekt «Implementacija okolišnog acquisa vezanog za zaštitu divljih svojti reguliranjem trgovine», provodit će tijekom 2007. i 2008 godine Ministarstvo kulture uz nizozemsku potporu od 300 tisuća eura.

Kako je rekao državni tajnik Ministarstva kulture Jadranko Antolović u ovom projektu će se provoditi edukacija granične i kriminalističke policije, a manji projekti koji će proizaći iz ovoga odnositi će se i na aktivnosti dodatne edukacije lokalnih samouprava u graničnim područjima Hrvatske. Međutim, sudjelovanje pravosuđa, kao «trećeg stupa» izvan je domene ovog bilatelarnog projekta, no Antolović vjeruje da će «sudbena vlast u svom segmentu nastaviti na aktivnostima koje su obradile inspekcije, te će se ti procesi paraleno odvijati kroz projekt» Antolović je naglasio da je u provedbi CITES-a i sprečavanju čestih pokušaja ilegalne trgovine divljim svotama izuzetno važna komunikacija s medijima i nevladinim organizacijama.

Zoran Šikić je prigodom predstavljanja javnosti projekta vezanog za provedbu CITES-a u Hrvatskoj podsjetio kako je od 2000. godine, kada je Hrvatska postala punopravna stranka CITES konvencije, organiziran veliki broj aktivnosti kontrole i zaustavljanja trgovine zaštićenim vrstama, te njihovog transporta kroz Hrvatsku u treće zemlje. Posebno su zapažene zaplijene nekoliko tisuća ubijenih ptica iz Srbije, živih kornjača iz Makedonije, te nekolio vrsta akvarijskih i terarijskih životinja namjenjenih trgovinama kućnim ljubimcima, ali i gastronomskim tvrtkama i ugostiteljstvu.

Jačanje kapaciteta unutar Uprave za zaštitu prirode Ministarstva kulture, koje je pokrenuto na temelju mjerila za Poglavlje Okoliš preporučenog od strane EU komisije, provest će se i kroz novi Zakon o zaštiti prirode, čija je izrada u tijeku, ali i kroz edukaciju djelatnika, te uključivanju drugih sektora koji svojim radom utječu na zaštitu prirode, bioraznolikost i očuvanje vrsta. Posebno je za provedbu projekta «Implementacija okolišnog acquisa vezanog za zaštitu divljih svojti reguliranjem trgovine» važna izrada baze podataka koja će obuhvatiti sve podatke i propise o provedbi CITES-a u Hrvatskoj.

Nepoznato da se tjedno ubije 390 slonova radi slonovače

Nakon dva tjedna rada završila je radom 14. konferencija 141 države potpisnica CITES-a, održana u Haagu, u organizaciji nizozemskog ministarstva poljoprivrede. Odlučivalo se o budućnosti opstanka vrsta koje su zaista najugroženije eksploatacijom i trgovinom, poput azijskih i afričkih slonova, kitova, jegulja i biljnih vrsta ekosustava južne Amerike. Hrvatsku, koja je članica CITES-a od 1999. godine, zastupali su Zoran Šikić, Ana Kolbašić i Ivana Jelenić iz Ministarstva kulture i Davorko Fell iz nevladine organizacije za zaštitu životinja «Život» iz Osijeka.

Glavni rezultat konferencije je usvajanje zajedničke strategije, kojom će se u slijedećih 5 godina jačati kontrola provodbe zakonskih nacionalnih propisa o zaštiti prirode, vrsta i bioraznolkosti, uvođenjem propisa utvrđenih u CITES konvenciji. Osim toga, članice ove konvencije predložile su usklađivanje ostalih međunarodnih i nacionalnih dokumenata i zakona koji se odnose na zaštitu prirode i bioraznolikosti sa CITES konvencijom, smatrajući da bi to «okrupnjavanje» propisa svakako bio veliki napredak u spašavanju ugroženih vrtsa od eksplatacije i bezgranične i nekontrolirane trgovine.

Raspravljalo se o 12 životinjskih vrsta (slonovi, kitovi, morski psi, divlje mačke, neke vrste majmuna, koralji, ribe i rakovi) i dvije biljne (cedar i palisander), jer njihova eksploatacija u azijskim i afričkim zemljama dovela je u pitanje opstanak

Davorko Feil je rekao da je polemike izazvao moratorij na trgovinu afričkim slonom i slonovačom. «Većini ljudi u razvijenim zapadnim državama nije poznat podatak da se tjedno ubija i do 390 slonova radi slonovače. Afričke države Botsvana i Nabimija tražile su ukinuće moratorija na izvoz slonavače, a za to su im potporu dali Japan i Kina, jer su oni najveći uvoznici slonovskog mesa i slonovače. No, koncezusom se ipak postiglo dosta rezultata, neke su vrste kao (europska jegulja) uvrštene u vrste kojima se više neće trgovati, dok su najnesretnije prošli kitovi-glavna vrsta za eksploatciju u Japanu «, rekao je Feil.

Autor: Ljiljanka Mitoš-Svoboda





KOMENTARI:

Ime

E-mail

SWITCH TO ENGLISH

projekt financira Ministerstvo zaštite okoliša, prostornog uređenja i graditeljstva

Tragovima pavlina do održivog razvoja "Global Shining Light Award" za ... Karlovački ginko

Obnova šuma hrasta lužnjaka



Kako potrošiti svijet-6, dio Priča o bjeloglavim supovima otoka C.. Izazov težak 1 tonu Rječnik prostornog uređenja



Priča o dvije kune Zelena akcija: Primjedbe na Prijedlog... Hrvatsko društvo za zaštitu ptica o... O kanalu Dunav-Sava sa šumarskog sta.



Provedba EU mjerila za poglavlje Okol... Stvoriti registar 30 tisuća kemikalija Savjetima protiv upotrebe žive, pres... TRAJNI NALOG ZA CIVILNO DRUŠTVO

- NOVO NA FORUMU
- ONLINE BILTEN

Upišite e-mail adresu

Registriraj Obriši

SALJI

www.VJESNIK.hr www.VJESNIK.hr 10 Petak, 8. lipnja 2007. Petak, 8. lipnja 2007.

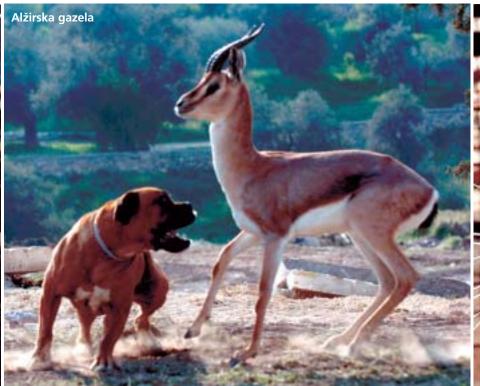
VJESNIKOVA TIMA

HAAG - 14. KONFERENCIJA STRANAKA KONVENCIJE O MEĐUNARODNOJ TRGOVINI UGROŽENIM VRSTAMA DIVLJE FLORE I FAUNE











PRIJEDLOZI

Haag je domaćin 14. Konferencije stranaka Konvencije o međunarodnoj trgovini ugroženim vrstama divlje flore i faune (CITES) Konferenciji prisustvuju delegacije 170 država stranaka te predstavnici brojnih međuvladinih i nevladinih organizacija, ukupno oko 2000 sudionika



NOVI PRIJEDLOZI ()

emačka i EU:

etierani izlov

jemačka i EU:

Njemačka i EU:

retjerani izlov

CRYENI KORALJI

SAD: Zoog pretjeranog

vadenja kolonije koralja

SABLJASTI MORSKI PAS

Riba je pretjerano izlovljena

vistom kroz program CITES-a

Njemečka i EU: Traže zaštitu tri

vrste palisandra, koje se koriste

za izradu muzičkih instrumenata

Niemačka i EU: Cedar iz

Središnie i Južne Amerika

ugrožen je zbog pretjeranog

BODILHKAVI JASTOG

Brazil: Također pretjerano

Kenija, Nikaragva, SAD:

RIBA KARDINAL

iziovijen

PALISANDER

MORSKI PAS KUČINA

EUROPSKA JEGULJA

PAS KOSTELJ PIKNJAVAC

CITES kategorije po dodacima Međunarodna zabrana tigovanja. 530 živatinjskih / 300 biljeih vrsta.

Ograničena međunarodna trgovina ontrolirana CITES-om 4.480 životinjekih i 28.000 biljnih erste Vrste zaštićene unutar granica država potpianica

SPORI LORI Kembodža: Dvije vrste polumejmuna ugroženih potražnjom u tradicionalno medicini i kao kučnih ljubimaca



SLONOVI Bocvana i Namibija ele očuvatí populaciju. Južna Afrika i Zimbabve če tražití lakše uviete za buduću Kenija i Mali:

Traže 20-godišnju zabranu

trgovine slonovačom iz Boovane.

Namibije, Južnostričke Republike i Zimbebvea kalio bi se smanjio nedozvoljeni lov slonovs

(II) **(**-) (II KRATKOREPA DIVLJA MAČKA SAD: trade da se ukine kratkorepom divljom mačkom, jer, -nije više ugrožena-



Uganda: Traži dozvolu ograničene tropvine sportskim tratelima i kob leoparda za osobnu upotrebu CRNI KAJMAN Brazil: Traži dozvolu

ograničene trgovine

evor. CITES

GAZELA zabranu trgovanja

krčenja šuma

NOVI PRIJEDLOZI ()

Alžir: Traži međunarodnu

REUTERS ()

»ZOV DIVLJINE« i nade za opstanak 37.000 vrsta

Ugrožene vrste divljih životinja i biljaka, čiju trgovinu nadzire CITES, svrstane su u tri Dodatka Konvenciji



Morski pas kučina polako nestaje iz europskih mora

Gordana PETROVČIĆ

- Haagu je u tijeku 14. konferencija stranaka Konvencije o međunarodnoj trgovini ugroženim vrstama divlje flore i faune (CITES), pod motom »Zov divljine«. Konvencija ima za cilj u cijelome svijetu uspostaviti nadzor nad trgovinom ugroženim vrstama životinja i biljaka, njihovim dijelovima i derivatima, budući da neograničeno komercijalno iskorištavanje znači jednu od glavnih prijetnji opstanku više od 37.000 vrsta. Konvencija posredno štiti ugrožene vrste time što zabranjuje ili uvelike otežava međunarodnu trgovinu tim vrstama

Slonovača i krzno Prema najavama glavne rasprave u Haagu bi se trebale voditi oko međunarodne trgovine slonovačom, krznom velikih mačaka, te nekim vrstama kitova, morskih pasa i tropskim vrstama drveća koje se masovno koriste u drvnoj industriji. Pojedine zemlje članice Konvencije lobirat će da se na popis CITES-a stave ili s njega uklone pojedine vrste. Tako će Kambodža tražiti da se potpuno zabrani međunarodna trgovina dvjema vrstama polumajmuna sporih lorija ugroženih potražnjom u tradicionalnoj medicini i kao kuć-

Apsolutna zabrana međunarodne trgovine obuhvaća 530 vrsta životinja i 300 vrsta biljaka, a ograničenja se uvode za još 4460 vrsta životinja i 28.000 biljaka

nih ljubimaca. Sada je za te vrste trgovina ograničena. Naime, ugrožene vrste divljih zivotinja i biljaka ciju trgovi nu nadzire CITES syrstane su u tri Dodatka Konvenciji. U prvome su Dodatku vrste kojima prijeti izumiranje i čije je sakupljanje iz prirode zabranieno. Međunarodna trgovina tim vrstama, koje uključuju 530 vrsta životinja i 300 vrsta biljaka, se zabranjuje. U drugome Dodatku su vrste kojima za sada ne prijeti izumiranje, ali bi ih nekontrolirana trgovina mogla ugroziti pa se trgovina njima ograničava i strogo nadzire. Na tom je dodatku 4460 vrsta životinja i 28.000 biljaka. U trećemu su Dodatku vrste rijetke u pojedinim zemljama, koje traže od drugih zemalja članica Konvencije da im pomognu u na-

dzoru trgovine tim vrstama. Nadalje Botsvana i Namibija u Haagu će tražiti lakše uvjete za buduću trgovinu slo-





Sporim lorijem često se trguje zbog tradicionalne medicine

nija i Mali traže dvadesetogodišnju zabranu trgovine slonovačom iz Botsvane, Namibije, Južnoafričke Republike i Zimbabvea kako bi se smanjio nedozvoljeni lov slonova. SAD traže da se ukine ograničena međunarodna trgovina kratkorepom divljom mačkom, jer, »nije više ugrožena«. Dozvolu ograničene trgovine sportskim trofejima i kožom leonarda za osobnu upotrebu traži Uganda, a Brazil za crnog kajmana. Tim je zivotinjama sada zabranjena međunarodna trgovina. Među prijedlozima životiniskih i biljnih vrsta, koje se žele uvrstiti u CITES, tri su vrste gazela za koje Alžir smatra da su ugrožene trgovinom pa traži potpunu zabranu međunarodne trgovine. Njemačka i EU traže da se ograniči i strogo kontrolira međunarodna trgovina pojedinim vrstama riba, a to su pas kostelj piknjavac (spiny dogfish), morski pas kučina (porbeagle shark) i europska jegulja (european

novačom. S druge strane Ke-

Ugroženi i crveni koralji

SAD to isto traži za ribu kardinal (banggai cardinelfish), crvene koralje, koji su ugroženi pretjeranim vađenjem, a kolonije im se uništavaju mrežama potegačama, za sabljastog morskog psa

(sawfish) kao i Kenija i Nikaragva. Zbog prelova bodljikavog jastoga Brazil traži ograničenu i strogo kontroliranu trgovinu tom vrstom. Što se tiče biljaka, Njemačka i EU traže da se na CITES popis uvrste tri vrste palisandra, koje se koriste za izradu muzičkih instrumenata, i cedar iz centralne i južne Amerike, kao vrste kojima se ograničava i strogo kontrolira međunarodna trgovina.

Na konferenciji, koja će trajati do 15. lipnja, očekuje se i usvajanje nove Strateske vizije CITES-a za predstojeće petogodišnje razdoblje, koja ukazuje na ulogu CITES-a u ostvarivanju ciljeva Samita o održivom razvoju, a osobito strateškog cilja smanjivanja gubitka bioraznolikosti do 2010. godine. Prvi puta od početka djelovanja Konvencije, 1973., u Hagu će se 13. lipnja organizirati Ministarski okrugli stol.

Konferenciji prisustvuju delegacije 170 država stranaka te predstavnici brojnih međuvladinih i nevladinih organizacija, ukupno oko 2000 sudionika. Konferenciji iz Hrvatske prisustvuju tri predstavnice, dvije iz Ministarstva kulture, Uprave za zaštitu prirode i jednu iz Carinske uprave Ministarstva financija. Hrvatska je punopravna članica CITES-a



Europsku jegulju često love jer je prava delicija u Nor-

NAJVEĆE ZAPLJENE KORNJAČA, PTICA I PRSTACA

Prve veće zaplijene životinja, uglavnom ptica pjevica, na hrvatskim graničnim prijelazima počele su 2002. nakon održavanja edukativnih seminara za graničnu policiju, graničnu veterinarsku inspekciju i carinu. Kaže Katica Bezuh, načelnica Odjela za pravne i inspekcijske poslove záštite prirode ú Upravi za zaštitu prirode Ministarstva kulture. Od 2004. u porastu je broj zaplijenjenih kornjača, a i nedozvoljena trgovina prstacima raste iz godine u godinu. Tijékom 2004. osim kornjača zaplijenjeno je i 50 varaná iz Indonezije koji su vraćeni u prirodu u zemlju porijekla. Tijekom 2005. zaplijenjeno je 736 kornjača čančara. U 2006. u pokušajima krijumčarenja otkriveno je 25 kornjača, 1963 ptice, uglavnom pjevice i devet papagaja, zatim 20.710 komada prstaca ili 375,1 kilograma. »Od pokušaja krijumčarenja prstaca naplaćeno je 31.000 kuna, a ostali postupci su u tijeku. Odštete bi trebale biti velike uzne li se u obzir da se po komadu prstaca plaća 50 kuna«, kaže Katica Bezuh. Ove je godine zaplijenjeno 10 kornjača i 171 kameleon koji su švercani iz Tajlanda, a nastanjuju, inače, Madagaskar gdje su vraćeni krajem svibnja. Zaplijenjeno je i 25 kornjača, 16 živih češljugara, 178 komáda ili tri kilograma prstaca, zatim dva sokola i ljušture zaštićenih školjaka.



Slonovi su često na meti zbog cijenjenih kljovi



IUCN South-Eastern European e-Bulletin

Issue 20 □ March 2009



Editorial

Dear Readers,

Welcome to the 20th issue of the IUCN South-Eastern European e-Bulletin. We are presenting many new activities and projects implemented in the region. Hopefully you will find the reading interesting and informative. As always, you sent us a lot of news articles and updates on passed and future events, and we are thanking you for your continuous interest in the IUCN SEE e-bulletin.

The guidelines for submitting articles for the IUCN SEE e-bulletin can be found at the last page of this issue, while all issues of this publication are available under www.iucn.org/southeasterneurope.

IUCN SEE staff news



Our colleague, Andrea Strauss moves back to Germany and ends her assignment at the IUCN SEE/ Green Belt Coordination Office. She has been constantly contributing to the initiative and, on behalf of the team, we are thanking her for all the support and great team work!

We wish Andrea all the success and hope to cooperate again in the region!

With best regards, IUCN Programme Office for South-Eastern Europe

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- Data shell *Lithophaga lithophaga* smugglling
 Cooperation in the Sava River basin
- 9. Winter counting of great bustards (Otis tarda)
- 10. Study trip Upper Horizons in RS
- 11. Partnerships for sustainable tourism development in PAs
- 12. Transboundary Monitoring System (TMS) for Prespa Park
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- 14. "Inheritage for the Future" movie
- 15. Management of the Treeless Zone
- 16. Bohini International Wild Flower Festival
- 17. Training programme for the environmental education
- 18. Protected Areas system assessment in Albania
- 19. New habitat of Umbra krameri
- 20. Energy project in Protected Areas
- 21. Protection of the Vrbas area

EARTH HOUR 2009 IN SEE

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- 2. Guide to the Coastal Wetlands of Albania

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- 2. Workshop on assessing the values and benefits of protected areas
- 3. ELBARN European Livestock Breeds Ark & Rescue Net
- 4. English Language for Environmentalists training
- 5. Czech Greenways Biking summer camp for youth





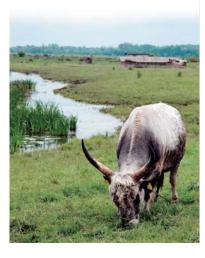
7. Data shell – *Lithophaga lithophaga* smuggling

Croatia: In the last 3 months in the Croatian region of Istria, the Nature Protection Inspection recorded three cases of confiscation of the data shell (*Lithophaga lithophaga*) by the Customs and Police. It is a strictly protected shellfish that is illegally harvested and served in restaurants as a delicacy.

A total of 204.95 kilograms or 12 917 specimens of those shells were seized. According to the nature protection legislation, the compensation for each specimen is 6.7 €, so these illegal actions caused the damage to the nature in the amount of 86 500 €. The court procedures against 3 Croatian citizens who committed these smugglings are ongoing. The data shells and the equipment and vehicles with which the offences were committed were seized. Data shell is a strictly protected species in the Republic of Croatia. It is strictly forbidden to remove the shells form the see, damage their habitat, or trade in them. The import and export are also prohibited, especially since data shells are also a CITES Appendix II species. These shells are also protected by the sea fishing legislation, so the control is also being carried out by the fishing inspection, police and maritime police.

To remove the shell from the natural habitat, it is necessary to break up the rock in which it drills its home. This is causing a serious destruction of littoral over a large marine areas and a loss of habitat for many other marine organisms. Therefore, the prevention of these harmful illegal activities is a priority in inspection planning.

For more information please contact Ms Katica Bezuh, Ministry of Culture, Nature Protection Inspection, katica.bezuh@min-kulture.hr



8. Cooperation in the Sava River basin

Running for already two years, the *Protection of Biodiversity of the Sava River Basin Floodplains* project is implemented by IUCN in close cooperation with its partners: Wageningen International, Orbicon, Institute for Nature Conservation of Serbia, State Institute for Nature Protection in Croatia, CEPRES, and Agricultural Institute from BiH. Unique by its complexity, the project covers the entire Sava River floodplain stretching over four countries and its main goal is to create trans-boundary partnerships to protect the area's outstanding biological and landscape diversity. It brings together international organizations and local partners and provides a platform for the knowledge exchange, above all the experience from the EU-member country that the Institute of the Republic of Slovenia for Nature Conservation brings on the EU environmental legislation and Natura 2000.

This year partners will focus on the study of the data gathered and GIS analysis elaboration, the awareness raising campaign will be implemented and landscape and biodiversity values analysed. Cooperation with the International Sava River Basin Commission might result in inclusion of project outcomes to the Sava River Basin management plan.

For more information, please contact Lubomira Vavrova at lubomira.vavrova@iucn.org or visit www.savariver.com.



IUCN South-Eastern European e-Bulletin

Issue 13 · June 2007



Editorial

Dear Readers,

Welcome to the 13th issue of the IUCN South-Eastern European e-Bulletin. Many interesting activities took place this spring and some new projects were implemented in the region.

For IUCN, some main topics these past months were marine biodiversity – the ecological stability of the oceans being increasingly threatened by over-fishing, coastal development and global warming, the World Environment Day 2007 – which provided us with an occasion to reflect on some issues that will shape the future of our planet, and the Conference of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which started on Sunday 3rd June in The Hague.

Many of your articles reflect these topics in this issue of the SEE bulletin, strongly focusing on awareness raising and environmental education in the region, while also pointing out the threats to some of the regions most valuable areas. We are happy to see that the news and events cover a broad variety of themes and topics - as always.

Many thanks to all of you who have contributed with articles and pictures. The guidelines for submitting articles for the IUCN SEE e-bulletin can be found on the last page of this issue.

With best wishes,

Aleksandra Nesic and Katharina Diehl IUCN Programme Office for South-Eastern Europe

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- 3 CD2010 Poster Competition
- 4 Attention: Brown Bear
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- 6 Balkans Peace Park Coalition
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- 2 Europarc Conference and General Assembly of the EUROPARC Federation

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- 1 Swiss Cohesion Contribution: Framework Agreements to be negotiated now
- 2 Successful NatuRegio project in Romania and Bulgaria starts its next round

COMMUNICATION & PUBLICATIONS

- 1 One in six European mammals threatened with extinction
- 2 Countdown 2010 for Marine Ecosystems

1 Radiated tortoises and chameleons confiscated in Croatia returned to Madagascar

Croatia: On 1st April 2007, at Zagreb Airport, Custom officers stopped a Croatian citizen coming back from Bangkok, Thailand, via Budapest, Hungary carrying in his luggage 10 tortoises and 175 chameleons. The animals were confiscated and placed in quarantine.

The species have been identified as: Radiated Tortoises *Geochelone radiata* (CITES I species); Flat-casqued Chameleon *Calumma globifer* and Parson's Giant Chameleon *Calumma parsonii* (CITES II species). The value of this shipment on the international market is 150.000 €.

Because of inadequate transport conditions in cargo space seven chameleons died on the way, and due to the fact that they are very submissive to stress, we had continuous mortality of chameleons. They are extremely sensitive animals that are hard to be kept in captivity, so Croatia had to ensure their permanent placement as soon as possible.

It was determined that there is no registered breeding of these species in captivity and that they are native only to Madagascar. Madagascan government agreed to take the animals back, so after almost two months the radiated tortoises and chameleons returned to Madagascar and are currently placed in a rescue centre. Altogether 77 chameleons and 10 radiated tortoises returned home safely.

Because the perpetrator did not declare the goods and had no veterinary and CITES documents, the court procedure is in progress according to several laws.

Contact details:

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Seized Geochelone radiata



Seized Calumma



Calumma

2 Macedonian Minister for Environment visits Lower Austria

FYR Macedonia: In spring 2007, the Macedonian Minister for Environment, Mr. Imer Aliu, visited Lower Austria to discuss environmental issues and possibilities for a closer cooperation with his Lower Austrian colleague Josef Plank. Besides waste treatment and waste disposal, the main issues focused on the implementation of the EU water framework directive and national parks and protected areas. Both parties agreed on a closer and intensive cooperation. Lower Austria offered assistance in the legislation, planning and management of waste water treatment and water supply.

As an example for (transboundary) protected areas, Lower Austria presented the National Park Thayatal, located at the Austrian-Czech border. The National Park Thayatal offered to establish a close cooperation with Macedonian protected areas regarding visitors infrastructure and management strategies.



Josef Plank, member of the provincial government of Lower Austria, Immer Aliu, Minister fror Environment, FYR Macedonia, Photo © NÖ Landesregierung.

A bilateral expert meeting on waste management, water and protected areas shall be organised later this year in FYR Macedonia. For more information, please contact Robert Brunner at the Nationalpark Thayatal, office@np-thayatal.at.

3 CD2010 Poster Competition

Countdown 2010: Countdown 2010 offers a poster competition for schools of the South-East European and the Black Sea area, as part of the SEENET programme for partners from Bulgaria, Romania, Serbia, Montenegro, Turkey, Croatia, the Russian Federation and Ukraine. The SEENET program works for the practical implementation of the so called ecological networks. The theme of this poster competition is therefore connectivity.

This is an excellent opportunity for children between 7 and 12 to learn more about the importance of connectivity of nature areas, to take part in a high profile international initiative and to win a cash prize for your school/class and for the winner to be present at the giving prize ceremony at the European Ministerial Conference on Environment (Belgrade, October, 2007).

Entries are accepted until 25 June 2007. To learn more, please go to http://poster.seenet.info or contact Wiebke Herding, wiebke.herding@countdown2010.net.