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

Eighth Meeting of the Conference of the Parties Kyoto (Japan), 2 to 13 March 1992

Interpretation and Implementation of the Convention

Significant Trade in Appendix-II Species

## ANIMALS

Report from the Animals Committee

The attached report outlines activities concucted by the World Conservation Monitoring Centre and IUCN/SSC Trade Specialist Group in support of the CITES Significant Trade Project. It is submitted for the consideration of the Parties.

# Review of Significant Trade in Species of Animals Included in CITES Appendix II

1983-1988

Report prepared for the Eighth Meeting of the Conference of the Parties

by

The IUCN/SSC Trade Specialist Group

and

The World Conservation Monitoring Centre

January 1992

# I. Background

Article IV of the Convention requires that specimens of taxa included in Appendix-II be permitted for export only when the Scientific Authority of the Party in question has advised that such trade is not detrimental to the survival of the species. Concerns that Appendix II species are being traded without the benefit of such "non-detriment" findings prompted the CITES Parties, as far back as 1984, to call for a review of trade in Appendix-II species in order to identify those that were or were likely to be impacted by current levels of exploitation for international trade. In response to this call, the CITES Technical Committee initiated a review of trade in all Appendix-II animal species. The results of this Significant Trade Review were reviewed by the Technical Committee in 1986 and published in 1988. They demonstrated that a number of species were being traded at levels detrimental to their survival in the wild, while, for a larger number, the population status, trade levels or ecology were insufficiently known to enable a determination of the impacts of trade on their populations.

The initial Significant Trade review was based on CITES reported trade levels from 1980-1982. Since that review and publication of the results in 1988, there has been no systematic review of levels of trade in CITES Appendix-II animal species. At their seventh meeting, the Conference of the Parties requested assistance from IUCN and the World Conservation Monitoring Centre (WCMC) in continuing the Significant Trade Project through a review of more recent CITES Appendix-II trade data and, in the case of IUCN, development of field projects aimed at providing the necessary status information to allow an assessment of the effect of trade on Appendix-II species that had been identified as "possible problem" species in the initial review. The Parties allocated funds from the CITES budget for these activities.

The fourth meeting of the CITES Animals Committee (Darwin, December 1990) approved a mechanism for continuation of the Significant Trade project, to consist of a review of trade in CITES Appendix-II species subsequent to 1982. This assessment and its preliminary findings were submitted to the fifth meeting of the Animals Committee (Vancouver, August 1991). Further analysis and refinement of these data and their results has continued up to the eighth meeting of the Conference of the Parties.

A summary of the review and its findings is included in this report. The finished documents that formed the basis of the review and the results will be circulated to all Parties subsequent to the eighth meeting by the Secretariat.

# II. 1991 Review of CITES Significant Trade Species

# A. Methodology

The compilation of the annual reports submitted by the Parties to CITES provides a mechanism for monitoring the trade in each species and, in conjunction with data on the status in the wild, enables an assessment of the impact of the trade. It further enables an assessment of the degree to which Article IV of the treaty is implemented by the CITES Parties. The review of Significant Trade in Appendix-II species was initiated in early 1991 and was based on data on trade in all species of animals included in CITES Appendix-II contained in the annual reports of Parties to CITES received by the WCMC before March 1991. At that date, several major reports relating to trade in 1989 had still not been received by WCMC and so it was decided to analyze data from 1983 to 1988 in order to avoid the possibility of the incomplete data for 1989 giving a spurious impression of trends in trade levels.

Minimum net trade in each commodity of all animal species in CITES Appendix II was calculated by WCMC for each of the years 1983 through 1988. These data were examined to determine the major products in trade, and the data on a restricted list of products were recalculated in greater detail to show the countries from which the trade originated. The tabulated data were then distributed by the IUCN/SSC Trade Specialist Group (TSG) to key members of IUCN/SSC and ICBP specialist groups and other experts as outlined below. They were also provided by WCMC to the CITES Secretariat, the CITES Animals Committee, and the TRAFFIC Network. Copies of the full trade data are not included with this report but are expected to be circulated to the Parties subsequent to the eighth meeting.

# B. Priority Species Subject to Detailed Review

As requested by the fourth meeting of the Animals Committee, a small number of species was selected for detailed review on the basis of concern about the trade levels. Additional species were selected by WCMC in consultation with the IUCN/SSC Trade Specialist Group and TRAFFIC International and the final list was approved by the Chairman of the Animals Committee. These species were:

#### Mammalia

Felis bengalensis, Felis lynx, Lama guanicoe, Manis crassicaudata, Manis javanica, Manis pentadactyla

Aves

Agapornis canus, Agapornis fischeri, Amazona aestiva, Aratinga erythrogenys, Brotogeris pyrrhopterus, Cacatua alba, Cacatua goffini, Cacatua haematuropygia, Cacatua sulphurea, Eos reticulata, Psittacus erithacus

## Reptilia

Malacochersus tornieri, Eunectes notaeus, Python regius, Ptyas mucosus

#### Amphibia

#### Rana hexadactyla, Rana tigerina

For each of the species, all available published information on distribution and population status was collected and summarised in standard format. This was augmented with information supplied by the IUCN/SSC and others and interpreted in light of a detailed analysis of the data on trade contained in the CITES annual reports and other available sources.

The detailed species reviews and their recommendations were reviewed by the CITES Animals Committee at their fifth meeting. At this stage, four additional species were selected and literature reviews compiled:

#### Tarsius syrichta, Amazona oratrix, Amazona viridigenalis and Testudo horsfieldii.

All of the reviews were then circulated by the Secretariat to the range States for comment and by TSG to IUCN/SSC and ICBP experts. Comments and additional information have been incorporated into final sheets and the recommendations revised for distribution to the Parties subsequent to the eighth meeting.

### C. Compilation of a Preliminary 1991 List of Significant Trade Species

In order to revise the 1988 list of Significant Trade species, the IUCN/SSC Trade Specialist Group conducted a survey of the IUCN/SSC, ICBP and affiliate networks using standardized questionnaires accompanying appropriate subsets of the trade data as described in section A. Prospective reviewers for individual taxa and groups of taxa were identified through the IUCN/SSC and in consultation with the International Council for Bird Preservation, the specialist groups of which act as the bird specialist groups of IUCN/SSC. Additional contacts were made with the Wildfowl and Wetlands Trust and International Waterfowl and Wetlands Research Bureau and the World Pheasant Association, ICBP affiliates on these taxonomic groups. In some cases, a reviewer was identified for a single species; in other cases, a reviewer was asked to provide expertise on a variety of taxa, either via questionnaires or merely through annotation of the data sheets for species of actual or potential concern.

All reviewers were sent a cover letter with a packet of materials: the two sets of summarized CITES data; a questionnaire with a cover sheet specifying the species to be reviewed; a set of directions explaining the Significant Trade project, the review process, and the purpose of the information. In contrast to the initial Significant Trade review, for which all species reported in trade at fewer than 100 specimens per year were automatically discounted, all Appendix II species were considered as potentially being traded at significant levels for the purposes of the survey. A total of 1286 CITES Appendix-II animal taxa (including orders, families, genera, species, and subspecies) were reported in trade by the CITES Parties during 1983-1988 and, therefore, circulated for review. Reviewers were asked to comment on: a) accuracy and completeness of the reported trade data; b) Significant Trade Category; c) justification of categorization (information on distribution, population, population biology/ecology, and susceptibility to over-exploitation; and d) guideline cut-off trade levels for the purpose of future reviews; and e) other taxa in trade that may be of concern.

Because the results of the review were intended for use in elaborating the list of Significant Trade species, reviewers were asked to categorize the species in one of five categories. An emphasis was placed on species of global conservation concern. As explained in the questionnaire, they were:

- Category A: Current international trade levels are known or strongly suspected to threaten the survival of the taxon on a global basis.
- Category B: Current international trade levels are probably a threat to the survival of the taxon on a global basis.
- Category C: Current trade levels and/or conservation status insufficiently known.
- Category D: Current international trade levels are probably not a threat to the survival of the taxon on a global basis.
- Category E: Current international trade levels are known not to threaten the taxon on a global basis.

These categories differ from those used in the initial Significant Trade review, which had only three categories: List 1, those species for which international trade was thought to pose a threat to the survival of the species; List 3, those species for which current levels of trade were not thought to threaten the survival of the species; and List 2, those species for which there was insufficient information to determine whether the species should be classified in either List 1 or 3. For ease of reference, List 2 was termed "possible problem," and this has been interpreted to indicate that international trade poses a threat to the species. In reality, it was intended to indicate merely that our current state of knowledge was insufficient. The new five-point scale avoids this confusion and allows finer categorisation.

Time and financial constraints precluded a review of each of the 1286 taxa by an IUCN/SSC, ICBP, or other expert. Emphasis was placed on identifying priority taxonomic groups or individual species for consultation and analysis. A major focus was placed on the birds and reptiles, because of the size of the trade in these groups and the very pressing concerns as to its conservation implications.

A preliminary list of significant trade species was compiled by WCMC and this was refined using the results of the IUCN/SSC survey. The resulting categories were reviewed by the IUCN/SSC Trade Specialist Group, WCMC, and TRAFFIC International. All species were assigned to one of the five categories, care being taken to ensure that consistent criteria were applied to all taxa. All species included in Categories A through C were included in a Preliminary 1991 List of Significant Trade Species. A further refinement of the methodology of the initial Significant Trade review was the creation of an additional category in the elaboration of the Preliminary Significant Trade list. This category, D\*, was established to denote species in international trade which were probably not threatened globally but the populations of which might be depleting in certain countries. In addition, this categorization has been used where there was evidence to suggest that a "non-detriment" finding required under Article IV of the treaty was not being made. Taxa included in Category D\* were added to the Preliminary 1991 Significant Trade list.

The Preliminary 1991 Significant Trade list was submitted to the fifth meeting of the Animals Committee and circulated subsequently to IUCN/SSC, ICBP, and other experts for review. A revised list, reflecting changes made on the basis of comments received through December, is attached as an annex to this document. A further revised list will be reviewed at the sixth meeting of the Animals Committee and circulated at the eighth meeting of the Conference of the Parties.

### III. Summary of Preliminary Findings of Significant Trade Review

A total of 150 taxa are included in the Preliminary Significant Trade list. Of these, 69 had been included in Category 1 or 2 as a result of the 1988 review, the remainder having been transferred to Appendix I in the interim period (N=4) or relegated to Category D or E. As was the case with the 1988 review, only a small number of the Appendix-II species were suspected to be threatened by current international trade levels. A considerably larger number of species were believed to be affected by trade at national levels. Approximately two-thirds of the species were determined too little known to enable an assessment of the impact of trade on their populations.

As a direct result of information made available in the Significant Trade review process, two species have been proposed for transfer from CITES Appendix II to Appendix I at the eighth meeting. At the request of the Secretariat, following up on the recommendations reviewed at the Animals Committee meeting, the Government of the Philippines has proposed the transfer of the Philippine tarsier *Tarsius syrichta* and Philippine cockatoo *Cacatua haematuropygia* to Appendix I. Three other species examined in the Significant Trade review have also been

proposed for transfer to Appendix I. The candidacy of additional species, including two parrot species endemic to Mexico, for transfer to Appendix I is currently being reviewed, and proposals may be submitted at a later date.

IV. <u>Proposal for Continuation of the Significant Trade Project: A Mechanism for Continuous review of Levels of Trade</u> in <u>CITES Appendix-II Animal Species</u>

WCMC and the IUCN/SSC Trade Specialist Group propose to review periodically international trade in Appendix II species in the interval between meetings of the Conference of the Parties according to the following *modus operandi*:

- a) Using the new software developed at WCMC, total net trade in each species listed in Appendix II will be calculated each year. Subsets of this information will be provided to Scientific Authorities and IUCN specialist groups on request.
- b) In November, 1992, WCMC will calculate mean annual net trade for each species in Appendix II and tabulate these data with the data from previous years. These will be supplied to the Secretariat for distribution to the Parties. Copies of the data will be supplied to the TRAFFIC Network and by TSG to the IUCN/SSC specialist groups.
- c) Comments from the Parties, IUCN/SSC and TRAFFIC will be compiled by WCMC and TSG to produce a draft list of significant trade species, taking into account information from previous reviews, IUCN/SSC Action Plans, and other readily available sources.
- d) A draft Significant Trade list will be reviewed by the Animals Committee, IUCN and TRAFFIC to select species in need of immediate action or further reviews.
- e) Recommendations for immediate remedial measures will be passed on by the Secretariat to the Parties or developed into field projects by IUCN.
- f) WCMC will compile significant trade information sheets on species subject to more detailed review.
- g) The draft sheets will be reviewed by the range States, the Animals Committee, TRAFFIC and IUCN/SSC, and the comments incorporated by WCMC. Recommendations for action will be passed on by the Secretariat to the Parties.
- h) The final information sheets will be supplied to Parties in a loose-leaf format to supplement the results from previous studies.

The proposed cycle (steps b-h) is envisaged to require two years' work and be synchronised with the meetings of the Conference of the Parties to CITES. Reviews by the Animals Committee (steps d and g) are expected to be conducted at its annual meetings. Recommendations for immediate action (steps e and g) are likely to be produced at more frequent intervals.

# Preliminary 1991 List of Significant Trade Animal Species

Taxon .	1988 Sig. trade cat.	1991 Sig. trade cat.	1980-82 average annual net trade	1983-88 average annual net trade	Main exporter	Comments
MAMMALIA						· ]
Nycticebus coucang	•	С	?	133	LA	1987: 333
Tarsius syrichia	•	В	?	13	РН	1985: 46
Saimiri sciureus	2	D* GY	3741	3509	GY	
Macaca fascicularis	3	D• PH/ID	21107	23940	PH/ID	1983: 27513
Macaca nemestrina	-	С	362	705	D	
Presbytis comata (=aygula)	•	С	?	0.5	ID	3 only 1983-88
Presbytis (=Trachypühecus) francoisi	•	С	?	6	CN	1988: 13
Dusicyon culpaeus/ griseus/gmnocercus	2/-	С	110801	81354	AR	Gruss & Waller (1988) average 1980-82 trade: 582825
Conepatus humboldtii	2	С	15664	2481	AR	
Lutra sumatrana	•	С	110	340	<u>CN</u> /XX	1987: 1000
Ailurus fulgens		С	?	31	CN	1
Felis bengalensis	•	C	5061	77525	CN	1988: 110836
Felis colocolo	2	C	5551	1823	AR	1987: 10931 (old stock)
Felis geoffroyi	2	С	55907	32635	PY/AR	1983: 98370
Felis lynx	2	D* CN	2094	9500	CN, SU	
Felis manul	2	С	1622	2798	MN	1987: 9189
Tayassu pecari	•	С	•	5094	AR	
Tayassu tajacu	-	С	•	72526	AR/PE	1988: 282115
Lama guanicoe	2	D	17708	5006	AR	1987: 11135 Gruss & Waller (1988) 1980-82 average: 46703
Moschus spp.	•	С	?	107 kg musk	SU	
Manis crassicaudata	2	С	1456	118	TH	KR Customs stats indicate high trade
Manis javanica	2	С	33383	16471	TH/SG	from ID Sarawak is likely
Manis pentadactyla	2	С	8087	1987	TH/TW/ <u>SG</u>	to be an important origin
A1/770					-	
AVES Rhea americana albescens	2	с	38460	11479	AR	1988: 5895
					· · ·	(mainly old stocks)
Phoenicopterus chilensis	-	С	326	528	AR	1987: 1059
Goura cristata	•	С	?	95	TW	1987: 326
Agapornis fischeri	2	В	22391	71054	TZ	1987: 108702

Taxon	1988 Sig. trade cat.	1991 Sig. trade cat.	1980-82 average annual net trade	1983-88 average annual net trade	Main exporter	Comments
Agapornis lilianae	-	С	127	1294	<u>TW/ZM/ZA</u>	
Agapornis personata	2	С	7388	6284	TW/NL/TZ	1988: 10580
Alisterus amboinensis	3	C	443	871	D	1984: 1822
Amazona aestiva	2	D• AR	12717	43521	AR	1988: 58465
Amazona auropalliata (= A. ochrocephala auropalliata) <sup>I</sup>	2	С	?	7724	HN/GT	
Amazona finschi	2	С	2449	20	NI	MX endemic
Amazona oratrix (= A. ochrocephala oratrix) <sup>1</sup>	2	В	?	45	<u>NI</u>	BZ/MX endemic
Amazona viridigenalis	2	B	785	55	<u>NI</u> /MX	(RDB: V)
Aprosmictus erythropterus	2	С	248	648	D	1988: 1060
Aprosmictus jonquillaceus	2	С	232	204	ID	1987: 291
Ara ararauna	2	D* GY	3422	3746	GY/BO	
Ara chloropiera	2	D• GY	1021	2045	GY	1983: 2746
Aratinga acuticaudata	2	С	6724	16976	AR	1988: 18803 AR 1991 quota: 15000
Aratinga auricapilla	2	B	305	530	AR	1987: 2503 BR endemic (RDB: K*) AR 1991 quota: 0
Aratinga crythrogenys		D* PE	199	8642	PE	1985: 16019
Aratinga holochlora	3	D* HN	128	537	HN	
Aratinga jandaya	•	C	?	1400	AR	1987: 3602 BR endemic
Aratinga mitrata	2	D* AR	5832	18070	AR	1988: 29108
Brotogeris pyrrhopterus	-	В	?	9887	PE	1985: 20476 (RDB: K*)
Brotogeris versicolorus	2	D* AR	4665	8004	AR	1987: 12681 AR 1991 quota: 0
Cacatua alba	2	В	2828	10749	D	1987: 13123
Cacatua galerita	2	D* ID	275	1382	ID	1988: 5507
Cacatua goffini	2	В	2789	11149	D	1988: 12429
Cacatua haèmaturopygia	•	B	?	225	PH	1983: 426
Cacatua sanguinea	2	D* ID	158	252	ID	1988: 392
Cacatua subphurea	2	В	2567	8047	ID	1988: 11018
Chalcopsina arra	•	С	?	494	ID	1988: 1177
Charmosyna josefinae	-	С	?	204	ID	1986: 697
Coracopsis vasa	•	с	?	477	MG	
Cyanoliseus patagonus	2	С	4323	4623	AR	AR: no 1991 quota
Deroptyus accipitrinus	2	D• GY	126	421	GY	1986: 749
Eos bornea	3	С	2570	7125	ID	1984: 11873
Eos cyanogenia	-	С	?	141	ID	1988: 835
Eos reticulata	1	С	328	3416	ID	1988: 2753

Taxon	1988 Sig. trade cat.	1991 Sig. trade cat.	1980-82 average annual net trade	1983-88 average annual net trade	Main exporter	Comments
Loriculus flosculus	-	С	0	23	ID	1983-84: 140
Loriculus galgulus	3	D• MY	645	4844	MY	
Loriculus philippensis	-	С	?	375	РН	1987: 1187
Lorius garrulus	2	В	645	5361	D	1988: 7379
Nandayus nenday	2	D• AR	11123	23697	AR	1983: 40023
Pionus maximiliani	2*	D• AR	880	9411	AR	1985: 25777
Pionus senilis	•	D* HN	159	1413	HN	1988: 2478
Poicephalus cryptoxanthus	-	D• TZ	?	744	TZ	1988: 1702
Poicephalus meyeri	•	D• TZ	1683	6610	TZ	1987: 11803
Poicephalus rufiventris	•	D* TZ	?	2567	TZ	1986: 4700
Poicephalus senegalus	2	D• SN	10581	21950	SN	1986: 30076
Psittacula longicauda	3	D* MY	268	1261	MY	1986: 2890
Psittacula roseata	2	D* VN	105	827	VN	1987: 3815
Psittaculirostris desmarestii	-	С	?	574	ID	1988: 1372
Psittaculirostris edwardsii	•	С	?	× 424	D	1988: 684
Psittaculirostris salvadorii	-	С	?	118	D	1988: 473
Psittacus erithacus	2	С	19145	55005	CM/GN/LR	1988: 69162 TG av.: 5657
Psittinus cyanurus	•	D* MY	?	529	MY	1987: 1257
Pyrrhura frontalis	2	D* AR	2694	5354	AR	1988: 6047
Pyrrhura perlata (includes rhodogaster)	-	С	?	40	XX	1985: 202 BR endemic
Tanygnathus heterurus	2	С	106	44	D	1990-91: 230+ Known from type specimen only
Tanygnathus megalorynchos	•	С	?	<b>9</b> 58	D	1988: 3386
Trichoglossus iris	•	С	?	221	ID	1983: 685
Tauraco corythaix fischeri	-	D* TZ	?	2	TZ	1987: 15
REPTILIA						
Geochelone carbonaria	-	D• GY	1666	1419	GY	1984: 3654
Geochelone pardalis	2•	D• TZ	570	2426	TZ	1987: 5946
Indotestudo elongata	-	D* MY	259	7 <del>9</del> 6	MY	1988: 1805 (RDB: K)
Kinixys spp.	•	D* TG	?	2568	TG	1985: 7094
Kinixys belliana	-	D• TG	722	1896	TG	1988: 3660
Kinixys erosa	1	D• TG	111	418	TG	1988: 839
Kinixys homeana	-	D• TG	?	772	TG	1988: 1421
Malacochersus tornieri	3•	В	279	887	TZ	1987: 2581
Manouria emys	-	D* MY	?	357	MY	1988: 911
Testudo graeca	2	С	73827	13409	TR	1988: 4599 1987 MA: 10004 1987 YU: 7200 (RDB: V)

Taxon	1988 Sig. trade cat.	1991 Sig. trade cat.	1980-82 average annual net trade	1983-88 average annual net trade	Main exporter	Comments
Tessudo horsfieldii	2	В	105224	24146	SU	1983: 59866
Testudo kleinmanni	•	С	?	6	EG	1990: ca. 10000 LY>EG
Caiman crocodilus	1	С	664789	<b>9</b> 80319	PY/CO/SV/ GT	
Crocodylus niloticus	•	D• MG/ZM	•	15017	ZW	(RDB: V)
Crocodylus n. novaeguineae	3	D* ID	24104	36603	PG	
Crocodylus porosus	2	D* ID	3510	7091	PG	
Phelsuma barbouri	•	С	?	14	MG	
Phelsuma breviceps	•	С	?	8	MG	Known from 3 specimens only
Phelsuma comorensis	2	С	284	107	КМ	
Phelsuma flavigularis	-	С	?	22	MG	1985: 100
Pheisuma quadriocellata	•	С	?	1901	MG	1986: 3556
Phelsuma seippi	-	С	0	0.7	MG	1988: 4 Very restricted range
Phelsuma serraticauda	-	С	?	141	MG	Very restricted range
Phelsuma standingi	•	С	?	231	MG	1988: 1026
Phelsuma v-nigra	3	D* KM	138	76	КМ	
Chamaeleo campani	•	С	?	2	MG	1988: 10
Chamaeleo dilepis		D• TZ	?	1029	TZ	1986: 1938
Chamaeleo furcifer	•	С	?	17	MG	Known from <5 specimens
Chamaeleo globifer	•	С	?	0	(MG)	US imports since 1988
Chamaeleo johnstoni	-	С	?	20	ZR/RW	1000s unreported in trade
Chamaeleo linotus	•	С	?	0	(MG)	US imports since 1988
Chamaeleo malihe	-	С	?	0	(MG)	US imports since 1988
Chamaeleo monoceras	-	С	?	1	MG	Known only from holotype
Chamaeleo senegalensis	2	D* TG	?	10758	TG	1988: 18223
Iguana iguana	2•	С	66871	70034	GT/HN/SV/ SR	
Tupinambis spp.	1	D* AR	2423721	1829362	AR	
Varanus exanthematicus	2	С	99806	57456	NG/ML/SD	
Varanus niloticus	2	С	476731	470488	ML/SD	1988: 724531
Varanus salvator	2	D* ID	419910	1266892	ID/SG/TH	1987: 1886230
Boa constrictor	2	D• PY	64855	38601	PY	
Eryx colubrinus	-	D• EG/TZ	?	455	EG/TZ	1988: 1329

Taxon	1988 Sig. trade cat.	1991 Sig. trade cat.	1980-82 average annual net trade	1983-88 average annual net trade	Main exporter	Comments
Eunecies murinus	2	D* GY/PY	14636	9374	PY/GY	BR is a likely origin for many skins
Eunectes notaeus	2	С	7613	17415	PY/BO/AR	1984: 37861
Morelia spilosa	<u> </u>	D* ID	?	580	ID	1988: 3129
Python curtus	2	С	11873	58129	ID .	1988: 163869
Python molurus bivittatus	2	С	38647	98754	TH	1985: 218546 (RDB: V)
Python regius	•	С	4976	19316	TG	1988: 38156
Python reticulatus	2	D* ID	129834	531865	D	1988: 720768
Python sebae	2	C	3439	15553	NG/ML/GN	1988: 54470
Tropidophis hactianus	-	D• HT	?	497	HT	1987: 1565
Ptyas mucosus	-	с	•	1551965	ID/CN/TH	App III till 1990
AMPHIBIA						
Rana hexadactyla	-	С	•	338477kg 286184 meat	IN	1986: 1278268kg + 796935 meat
Rana tigerina		С	•	2060210kg 1311934 meat 32184 legs	BD/IN	1986: 4654451kg + 2384631 meat + 107685 legs
INSECTA						
Ornithoptera aesacus	3	С	?	2	PG	
Ornithoptera caelestis	-	С	120	811	PG	
Ornithoptera croesus	<b>·</b>	с	?	2	PG	
Ornithoptera priamus	3	С	172	5587	PG	·····
Ornithoptera tithonus		с	?	7	DE	
Ornithoptera urvilleanus		с	?	2092	PG	1987: 5459
Ornithoptera victoriae		с	?	945	SB/PG	1988: 3407
Trogonopiera brookiana	1.1	с	3063	2730	MY	1988: 8020

Taxa in **bold** are those for which detailed sheets have been prepared.

Exporting countries underlined are not range states for the taxa concerned.

<sup>1</sup> = Amazona auropalliata and A. orarix are separated here following AOU (1983) Check-list of North American Birds and Sibley, C.G. and Monroe, B.L. (1990) Distribution and Taxonomy of Birds of the World.

Note that only figures relating to the number of animals have been used in this analysis; the majority of trade in some species is reported in units of length, area or weight but in the absence of suitable conversion factors it has not been feasible to incorporate these data.