

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



Twenty-third meeting of the Animals Committee
Geneva, (Switzerland), 19-24 April 2008

Periodic review of animal species included in the CITES Appendices

PERIODIC REVIEW OF SPECIES SELECTED PRIOR TO COP 13

1. This document has been prepared by the Secretariat.
2. Resolution Conf. 11.1 (Rev. CoP14) on Establishment of committees recognizes that an effective method of evaluating whether a species is appropriately listed in the CITES Appendices requires a periodic review of its biological and trade status, and resolves that the Animals Committee shall undertake such reviews by:
 - i) *establishing a schedule for reviewing the biological and trade status of these species;*
 - ii) *identifying problems or potential problems concerning the biological status of species being traded;*
 - iii) *consulting the Parties on the need to review specific species, working directly with the range States in the selection process, and seeking their assistance in such reviews; and*
 - iv) *preparing and submitting amendment proposals resulting from the review, through the Depositary Government, for consideration at meetings of the Conference of the Parties.*
3. The Secretariat reported to the Animals Committee at its 22nd meeting (AC22, Lima, July 2006) on the status of the periodic review of 33 animal taxa included in the CITES Appendices that had been selected at the 15th and 16th meetings of the Committee (Antananarivo, July 1999; Shepherdstown, December 2000) [see document AC22 Doc. 11.3 (Rev. 1)]. The Animals Committee revised and corrected the list of species, concluding that seven species remained to be reviewed; this includes four species that were undergoing review by the Parties that volunteered to conduct them, and three species for which no Party had yet volunteered or been able to conduct species reviews.
5. On behalf of the Animals Committee, the Secretariat issued Notification to the Parties No. 2006/062 of 14 November 2006 to inform Parties about the status of the periodic review of animal species, and invite Parties to conduct the remaining reviews or to provide assistance or funding to conduct one or more of them.
6. The table in Annex 1 to the present document summarizes the status, at the time of writing (November 2007), of all 33 species selected before CoP13. Those species for which reviews are still outstanding are indicated in ***bold italics***.
7. The CITES Management Authority of Spain submitted reports for the reviews of *Rhea americana* and *Tupinambis merianae* (previously *T. teguixin*). These can be found in Annexes 2 and 3 of the present document.

Issues for consideration

8. The Animals Committee is invited to consider the reports submitted by Spain and decide on how to treat the outstanding reviews of species that were selected before CoP13, taking into consideration the process for selection of species for periodic reviews discussed under agenda item 11.1.

Status of the periodic review of species selected prior to CoP13 (Bangkok, 2004)

Species	AC meeting	Conclusion	Lead reviewer
MAMMALIA			
<i>Callithrix jacchus</i> (I)	AC22 (2006)	Pending review by Brazil	Brazil
<i>Cephalophus sylvicultor</i> (II)	AC22 (2006)	Notification to the Parties No. 2006/062 sent on 14 November 2006 requesting reviewers	No volunteers
<i>Macaca fascicularis</i> (II)	AC16 (2000)	Completed (retain in Appendix II)	Indonesia
<i>Mirounga leonina</i> (II)	AC22 (2006)	Notification to the Parties sent on November 2006 requesting reviewers	No volunteers
<i>Panthera pardus</i> (I)	AC21 (2005)	Excluded because the status of this species was considered implicitly at CoP12 and CoP13 in the context of quota proposals [see document AC21 WG3 Doc. 1 (Rev. 1)]	Kenya
<i>Pteropus macrotis</i> (II)	AC22 (2006)	Notification to the Parties No. 2006/062 sent on 14 November 2006 requesting reviewers	No volunteers
<i>Saiga tatarica</i> (II)	AC16 (2000)	Completed (retain in Appendix II)	United States
AVES			
<i>Anas aucklandica</i> (I)	AC18 (2002)	Completed (retain in Appendix I)	Australia; New Zealand
<i>Agapornis fischeri</i> (II)	AC22 (2006)	Completed (retain in Appendix II)	Switzerland; United Republic of Tanzania
<i>Ara macao</i> (I)	AC17 (2001)	Completed (retain in Appendix I)	Guatemala; Mexico
<i>Caloenas nicobarica</i> (I)	AC22 (2006)	Completed (retain in Appendix I)	United States
<i>Falco peregrinus</i> (I)	AC17 (2001)	Completed (retain in Appendix I)	United States
<i>Macrocephalon maleo</i> (I)	AC16 (2000)	Completed (retain in Appendix I)	Indonesia
<i>Rhea americana</i> (II)	AC22 (2006)	See Annex 3	Spain
REPTILIA			
<i>Boa constrictor</i> (II)	AC21 (2005)	Excluded following working group recommendation [see document AC21 WG3 Doc. 1 (Rev. 1)]	-
<i>Cnemidophorus hyperythrus</i> (II)	AC18 (2002)	Completed (remove from Appendix II)	United States

Species	AC meeting	Conclusion	Lead reviewer
REPTILIA			
<i>Crocodilurus lacertinus</i> (II)	AC22 (2006)	<i>Pending review by the United States of America</i>	<i>United States</i>
<i>Dermatemys mawii</i> (II)	AC22 (2006)	Completed (retain in Appendix II)	Guatemala; Mexico
<i>Dermochelys coriacea</i> (I)	AC16 (2000)	Completed (retain in Appendix I)	United States
<i>Python anchietae</i> (II)	AC16 (2000)	Completed (retain in Appendix II)	Namibia
<i>Tupinambis teguixin</i> (II)	AC22 (2006)	See Annex 2	Spain
AMPHIBIA			
<i>Ambystoma mexicanum</i> (II)	AC22 (2006)	Completed (retain in Appendix II)	Mexico; United States
<i>Bufo superciliaris</i> (I)	AC21 (2005)	Postponed pending UNEP-WCMC analysis of Amphibia	-
<i>Dyscophus antongilii</i> (I)	AC21 (2005)	Postponed pending UNEP-WCMC analysis of Amphibia	-
<i>Hoplobatrachus tigerinus</i> (II)	AC17 (2001)	Removed from the periodic review due to its inclusion in the Review of Significant Trade	-
ACTINOPTERYGII			
<i>Probarbus jullieni</i> (I)	AC16 (2000)	Completed (retain in Appendix I)	United Kingdom
<i>Scleropages formosus</i> (I)	AC16 (2000)	Completed (retain in Appendix I)	Indonesia
<i>Totoaba macdonaldi</i> (I) [formerly <i>Cynoscion macdonaldi</i>]	AC17 (2001)	Completed (retain in Appendix I).	Mexico
ANTHOZOA			
Antipatharia (II)	AC16 (2000)	Completed (retain in Appendix II)	United States
<i>Goniopora</i> spp. (II)	AC21 (2005)	Removed from the periodic review	-
<i>Hirudo medicinalis</i> (II)	AC22 (2006)	Completed (retain in Appendix II)	Spain; United States
<i>Ornithoptera alexandrae</i> (I)	AC22 (2006)	Completed (Spain and Papua New Guinea to prepare proposal to transfer from Appendix I to Appendix II)	Spain
<i>Parnassius apollo</i> (II)	AC18 (2002)	Completed (retain in Appendix II)	Spain

**Review of *Tupinambis teguixin* Linnaeus, 1758 (currently *T. merianae* Duméril & Bibron, 1839)
in the periodic review of species included in the CITES Appendices
Resolution Conf. 11.1 (Rev. CoP14) and Resolution Conf. 14.8**

INTRODUCTION

At the 22nd meeting of the Animals Committee (Lima, July 2006), Spain undertook to assist with the evaluation of *Tupinambis teguixin* as part of the Periodic review of the species included in the CITES Appendices.

It should be noted that in the period between the inclusion of this species in this process (15th meeting of the Animals Committee, Antananarivo, July 1999) and the meeting in Lima, the taxonomy and nomenclature of the genus *Tupinambis* changed, with the result that what in 1999 was referred to as *T. teguixin* is currently considered, almost universally and in particular in the trade context, to be *T. merianae*. Consequently, the present evaluation has been carried out covering what is now *T. merianae*, and for the same reason both names appear in the information on trade.

Information was requested from the range States of the species on the following factors:

- Current population status
- Population trends
- Habitat preferences
- Legislation covering the species at national level
- Legislation covering the species at international level
- National trade (legal and illegal)
- Existing management measures
- Threats
- Tracking programmes or research projects
- Captive breeding

Paraguay and Uruguay responded to the above questionnaire. The information concerning Argentina is drawn from Bolkovic and Ramadori (2006), and in consequence this source is not mentioned in the text under "National information provided by". Subsequently Argentina made comments and suggestions on the text as drafted, as well as providing some further data, which were included in the final version.

DRAFT PROPOSAL TO AMEND THE APPENDICES (in accordance with Annex 6 to Resolution Conf. 9.24 (Rev. CoP14), amended)

A. Proposal

It is proposed that *Tupinambis merianae* (formerly *T. teguixin*) be kept in Appendix II pursuant to Criterion B of Annex 2 a – Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2 (a), of the Convention – of Resolution Conf. 9.24 (Rev. CoP14), according to which:

A species should be included in Appendix II when, on the basis of available trade data and information on the status and trends of the wild population(s), at least one of the following criteria is met:

...

B. It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

Justification: The species is the subject of significant international trade and at the present time there is no reason to suppose that this is going to lessen.

B. Proponent

The proposal has been drawn up by Spain. Thanks are due to Argentina, and especially its expert Gustavo Porini, for the comments made. Thanks are also due to John Caldwell of UNEP-WCMC for the trade data provided.

C. Supporting statement

1. TAXONOMY

- 1.1 Class: Reptilia
- 1.2 Order: Sauria
- 1.3 Family: Teiidae
- 1.4 Genus and species: *Tupinambis merianae* (Duméril & Bibron, 1839)
- 1.5 Common names:
 - Spanish: Argentina: iguana, lagarto overo; Bolivia: peni; Paraguay: teju huasu hu; Uruguay: lagarto overo
 - English: Argentine black and white tegu

2. BIOLOGICAL CHARACTERISTICS

2.1 DISTRIBUTION

According to UNEP-WCMC (<http://www.unep-wcmc.org/>), *Tupinambis merianae* is considered to be distributed across Argentina, (?) Bolivia, Brazil, Paraguay and Uruguay.

The question mark indicates that it is not certain that the species does live in the country in question.



Range States (in green) of *Tupinambis merianae*, according to UNEP-WCMC 2007.

2.2 HABITAT PREFERENCES

Wide variety of habitat: primary and secondary forests, scrubland, pastureland, edges of wetlands and areas occupied by humans provided that there are hiding-places.

2.3 POPULATION: CURRENT SITUATION AND TRENDS

Argentina: the species is generally abundant in its range and may fluctuate locally as a result of habitat destruction or if specimens are caught.

Paraguay: listed as "of Least Concern" in the national legislation. Trends are locally variable, with some populations that are stable, others decreasing, others increasing.

Uruguay: it is considered abundant.

2.4 THREATS

The main threat is the destruction of habitat, principally owing to land use changes, with agricultural and forestry crops taking on a considerable scale in certain areas. Urbanization has also been noted as a factor in habitat destruction on a local scale, as well as a degree of illicit hunting (which in any event is fairly rare). IUCN (IUCN 2007) does not consider this species as globally endangered.

3. UTILIZATION AND TRADE

3.1 NATIONAL UTILIZATION AND TRADE

The species is barely or not at all in national trade; in **Argentina**, for example, between 1 % and 5 % of total trade is domestic. However, use of the species may be significant, since the flesh of the specimens whose skins are sent into international trade is used for food and their fat as a medicine. There is no domestic trade in **Uruguay**. In **Paraguay** trade has not been permitted since the voluntary moratorium on international trade adopted in 2003, but it is conceded that there may be a degree of illegal domestic trade.

3.2 INTERNATIONAL TRADE

The species is in international trade to a significant extent. A summary of the trade data provided by UNEP-WCMC is given at the end of this review.

4. LEGISLATION

4.1 NATIONAL LEGISLATION

Argentina: regulated by a strict management and sustainable use plan.

Paraguay: the species is covered directly and indirectly by various laws. Under the voluntary moratorium established in 2003, international trade is prohibited.

Uruguay: strictly protected.

4.2 INTERNATIONAL LEGISLATION

- CITES, Appendix II.
- Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, Annex B. European Union.

5. CAPTIVE BREEDING

In Argentina there is some captive breeding for sale of live specimens as pets. The country reports exports of 894 specimens in 2005, 845 in 2006 and 1,150 in 2007, from two hatcheries. There are some breeding initiatives in Paraguay, related for example to protected natural spaces and not having any commercial purpose.

6. MANAGEMENT

Argentina: there is a wide-ranging and complete plan for management and sustainable use of the species, the skins of which are sold in considerable numbers on the basis of local hunting supervised by the competent administrative authority, with quotas established on the basis of the information provided from the catches and other sources.

Uruguay: management comprises only the application of the prohibition on catching, owning or selling.

7. TRACKING AND RESEARCH

Argentina: there is ongoing tracking and research related to the management and sustainable use plan for the species.

Paraguay: the population is monitored in all protected natural areas.

8. INFORMATION ON SIMILAR SPECIES

All of the species of the genus *Tupinambis* are relatively similar and some are really difficult to distinguish. It appears that there is a proposal for a new species for Paraguay, of restricted distribution, the identification of which is expected to be equally difficult.

9. REFERENCES

Bolkovic, M. L. y D. Ramadori (eds.). 2006. *Manejo de fauna silvestre en la Argentina. Programas de uso sustentable.* Dirección de Fauna Silvestre, Secretaría de Ambiente y Desarrollo Sustentable, Buenos Aires. 168 pages + 8 illustrations.

IUCN 2007. 2007 *IUCN Red List of Threatened Species.* <www.iucnredlist.org>. Downloaded on 26 December 2007.

10. NATIONAL INFORMATION PROVIDED BY

Paraguay

Person responding to this inquiry, or responsible for the information

Lic. Nélide Rivarola de Palacios, CITES Scientific Authority, Paraguay.

Lic. Isabel Gamarra de Fox, Director-General of the Directorate-General for Environmental Management (*Dirección General de Gestión Ambiental*).

Institution from which the information originates

Dirección de Investigación Biológica and Museo Nacional de Historia Natural del Paraguay; Dir. Gral. de Protección y Conservación de la Biodiversidad; Centro de Datos para la Conservación; Entidad Binacional Yacyreta; Itaipu Binacional; municipality of Asunción.

Uruguay

Person responding to this inquiry, or responsible for the information

Marcel Calvar, DMV, (Technical Advisor – Head of the *Medio Silvestre* Section of the Wildlife Department)

Institution from which the information originates

Wildlife Department (*Departamento de Fauna*), Directorate-General for Renewable Natural Resources, Ministry of Livestock, Agriculture and Fisheries.

Contact data of the above

Postal address: Cerrito 318, Montevideo 11.000, Uruguay. Tel.: (+598-2) 916-58-74; 915-64-52/53. Fax (+598-2) 915-64-56. E-mail: macalvar@mgap.gub.uy.

Gross exports of *Tupinambis merianae/teguixin*

Taxon	Term	Unit	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>Tupinambis teguixin</i>	belts		AR	150										
<i>Tupinambis teguixin</i>	belts	kg	AR		4									
<i>Tupinambis merianae</i>	garments		AR										14	
<i>Tupinambis merianae</i>	live		AR							28	148	275	902	
<i>Tupinambis teguixin</i>	live		AR		6	20								
<i>Tupinambis merianae</i>	skin pieces		AR						84833			91771	176274	
<i>Tupinambis merianae</i>	skin pieces	kg	AR						0,85	7,411				
<i>Tupinambis merianae</i>	skin pieces	skins	AR							67734	76855			
<i>Tupinambis teguixin</i>	skin pieces		AR	79634										
<i>Tupinambis teguixin</i>	skin pieces	g	AR				150							
<i>Tupinambis teguixin</i>	skin pieces	kg	AR			100	200,57							
<i>Tupinambis teguixin</i>	skin pieces	m	AR	311,39										
<i>Tupinambis teguixin</i>	skin pieces	sets	AR	12360										
<i>Tupinambis teguixin</i>	skin pieces	skins	AR		146011	106876	106106							
<i>Tupinambis merianae</i>	skin scraps	kg	AR									40,1		
<i>Tupinambis merianae</i>	skins		AR											
<i>Tupinambis teguixin</i>	skins		AR	156258	173416	332541	117559	139638	233254	145719	223019	225722	259106	
<i>Tupinambis merianae</i>	small leather products		AR							88	180	7786	5445	
<i>Tupinambis merianae</i>	small leather products	kg	AR								10,552			
<i>Tupinambis merianae</i>	small leather products	pairs	AR							3366		1237	804	
<i>Tupinambis merianae</i>	small leather products	skins	AR							150	1626			
<i>Tupinambis teguixin</i>	wallets	skins	AR			250								
<i>Tupinambis merianae</i>	bodies		BR					25						
<i>Tupinambis teguixin</i>	bodies		BR	1		3	1							
<i>Tupinambis merianae</i>	live		BR					20	40					
<i>Tupinambis teguixin</i>	live		BR						2					
<i>Tupinambis merianae</i>	specimens		BR							1				
<i>Tupinambis merianae</i>	specimens	flasks	BR				10			120				
<i>Tupinambis teguixin</i>	specimens		BR			3	1			1				
<i>Tupinambis teguixin</i>	live		CO											
<i>Tupinambis teguixin</i>	live		GY						33	2155	2028	1437	2046	3392 2457
<i>Tupinambis teguixin</i>	live		PE			315	47							
<i>Tupinambis merianae</i>	live		PY					116	270	568	961			
<i>Tupinambis teguixin</i>	live		PY		2		87	299						
<i>Tupinambis merianae</i>	skins		PY						89751	34679	30223			
<i>Tupinambis teguixin</i>	skins		PY	115010		4	600							

Taxon	Term	Unit	Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>Tupinambis teguixin</i>	skins	kg	PY	120										
<i>Tupinambis merrianae</i>	small leather products		PY								100			
<i>Tupinambis teguixin</i>	specimens		PY	12		60								
<i>Tupinambis teguixin</i>	bodies		SR									1		
<i>Tupinambis teguixin</i>	live		SR							516	61	9	36	8
<i>Tupinambis teguixin</i>	live		UY							1				
<i>Tupinambis merrianae</i>	specimens		UY								1			

Information provided by UNEP-WCMC

**Review of *Rhea americana* (Linnaeus, 1758) in the periodic review
of species included in the CITES Appendices
Resolution Conf. 11.1 (Rev. CoP14) and Resolution Conf. 14.8**

INTRODUCTION

At the 22nd meeting of the Animals Committee (Lima, July 2006), Spain undertook to assist with the evaluation of *Rhea americana* as part of the periodic review of the species included in the CITES Appendices.

Information was requested from the range States of the species on the following factors:

- Current population status
- Population trends
- Habitat preferences
- Legislation covering the species at national level
- Legislation covering the species at international level
- National trade (legal and illegal)
- Existing management measures
- Threats
- Tracking programmes or research projects
- Captive breeding

Paraguay and Uruguay responded to the above questionnaire. The information concerning Argentina is drawn from Bolkovic and Ramadori (2006), and in consequence this source is not mentioned in the text under "National information provided by".

DRAFT PROPOSAL TO AMEND THE APPENDICES (in accordance with Annex 6 to Resolution Conf. 9.24 (Rev. CoP14), amended)

A. Proposal

It is proposed that *Tupinambis merianae* (formerly *T. teguixin*) be kept in Appendix II pursuant to Criterion B of Annex 2 a – Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2 (a), of the Convention – of Resolution Conf. 9.24 (Rev. CoP14), according to which:

A species should be included in Appendix II when, on the basis of available trade data and information on the status and trends of the wild population(s), at least one of the following criteria is met:

...

B. It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

Justification: Although trade in specimens from captive breeding is gradually increasing, the wild populations are still the object of a certain amount of international trade. Furthermore, and according to evidence provided at national level, it seems that the overall population may be in decline, and consequently it does not appear prudent at the present time to propose removing the species from the CITES Appendices.

B. Proponent

The proposal has been drawn up by Spain. Thanks are due to John Caldwell of UNEP-WCMC for the trade data provided.

C. Supporting statement

2. TAXONOMY

- 1.1 Class: Aves
- 1.2 Order: Rheiformes
- 1.3 Family: Rheidae
- 1.4 Genus and species: *Rhea americana* (Linnaeus, 1758)
- 1.5 Scientific synonyms: *Struthio americanus*
- 1.6 Common names:
 - German: Nandu; Pampasstrauss
 - Danish: Stor nandu
 - Finnish: Nandu
 - French: Nandou américain; nandou commun; nandou gris
 - Spanish: Ñandú; ñandú común; ñandú moro (Argentina)
 - Dutch: Nandoe
 - English: Common rhea; greater rhea
 - Italian: Nandau d'Argentina
 - Portuguese: Ema
 - Swedish: Nandu; rhea
- 1.7 Identification Manual code number: A-202.001.002.001

2. BIOLOGICAL PARAMETERS

2.1 DISTRIBUTION

According to UNEP-WCMC (<http://www.unep-wcmc.org/>), *Rhea americana* is distributed across Argentina, Bolivia, Brazil, Paraguay and Uruguay.



Range States (in green) of *Rhea americana*, according to UNEP-WCMC 2007



Distribution of *Rhea Americana*, according to the CITES Identification Manual (www.cites.org)

2.2 HABITAT PREFERENCES

Natural and artificial grasslands and pastures, pampas, savannahs, scrubland and dry woods, palm groves, salt flats, dunes and agricultural areas.

2.3 POPULATION: CURRENT SITUATION AND TRENDS

Argentina: in decline. The populations have been fragmented and reduced by factors arising principally from human activity, as described under "Threats". The fragmentation has isolated populations, within which it is considered that there may be a loss of genetic variability.

Paraguay: depending on the source of the information, the species is considered to be between Near Threatened and Endangered, the latter category mainly in the eastern region. However, it is not listed in Resolution SEAM 524/06 which established the list of endangered species of flora and fauna in Paraguay. Locally, its status ranges from Extinct to Frequent. *Trend:* overall, in decline, having become extinct in some localities; stable or increasing in protected areas.

Uruguay: common; locally abundant. May be suffering a certain decline.

IUCN (IUCN 2007) classifies it as 'Near Threatened'.

2.4 THREATS

Habitat loss resulting from land use change (sowing of crops and pastureland for cattle, single-crop forestry – pines and eucalyptus trees), intensification of agriculture (rice and soya) and stock-breeding, forest fires, contamination by agricultural chemicals, illicit hunting and egg collection. The fact that the species is flightless, plus the fragmentation of the populations and the establishment of physical barriers, have been identified as causes of isolation and loss of genetic variability.

3. UTILIZATION AND TRADE

3.1 NATIONAL UTILIZATION AND TRADE

Argentina: widespread hunting and utilization of the products of the species in the past; much less today. There is currently some taking of eggs, which is legal where special permits have been granted (in some cases to set up hatcheries). Small quantities of eggs are also taken illegally in certain local areas.

Paraguay: little interest; there is minor trade in feathers, eggs and skins, and some trade in live birds for decorative purposes.

Uruguay: some illegal trade in feathers for making feather dusters and eggs for bakery and confectionery. (Legal trade, in birds and products from hatcheries, appears to be exclusively international).

3.2 INTERNATIONAL TRADE

Paraguay has established a voluntary moratorium on all CITES species since 2003 and therefore does not currently allow export. **Uruguay** is the main exporter, and it appears that all exports are from captive breeding. The main specimens in trade are live birds, tanned skins, eggs and their shells and feathers. A summary of the trade data provided by UNEP-WCMC is given at the end of this review.

4. LEGISLATION

4.1 NATIONAL LEGISLATION

Argentina: hunting, inter-province transit, selling and export of specimens and products of the common rhea are all prohibited by law.

Paraguay: the species is covered directly and indirectly by various laws. Under the voluntary moratorium established in 2003, international trade is prohibited.

Uruguay: hunting, possession, transport, sale or processing are all prohibited, with the exception of specimens from hatcheries.

4.2 INTERNATIONAL LEGISLATION

- CITES, Appendix II.
- Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein, Annex B. European Union.

5. CAPTIVE BREEDING

Argentina: has increased steadily to reach some 70 breeding facilities in 2005-2006. Small flocks (the majority between 10 and 30 individuals, with some exceeding 50 and only two having more than 100). It is recognized that there is a need for planning and a development strategy for the sector.

Paraguay: practised relatively successfully in the Itaipu twin-country entity, but has failed where incubators are used. Semi-captive breeding is pursued at the Atinguy wildlife refuge. In any event, these activities do not appear to be for commercial purposes.

Uruguay: started in 1991 and reached a peak in 1999-2001, with 167 hatcheries. At present, although some 143 establishments are registered, there is no breeding activity since there is no market for the main product, the meat. However, since the breeding operations do have some stocks (skins, feathers, egg shells and live birds) they continue to be registered with the Wildlife Department.

6. MANAGEMENT

Argentina: there is the *Proyecto Ñandú* (Rhea Project), the aim of which is the conservation and increase of the natural populations of the two species of rheas (*Rhea americana* and *R. pennata*), as well as the utilization of products thereof in a regulated and controlled manner until sustainability is achieved. The project applies to both wild and captive-bred populations. It contains a very strong research component (referred to below) and its results have been applied, *inter alia*, to the reintroduction of specimens into the wild and to captive breeding (for both commercial and reintroduction purposes).

Paraguay: some activities in protected areas, including semi-captive breeding, with the possibility of releases in the future.

Uruguay: management of the wild populations involves only the application of the prohibition on catching, possessing and selling.

7. TRACKING AND RESEARCH

Argentina: Rhea Project: in *wild populations*: on ecology, demographics and behaviour; in *captive breeding*: production, cost/benefit, reintroduction of birds into the wild and tracking of them, formation of breeding flocks and monitoring thereof.

Paraguay: monitoring of the population in all protected natural areas and of other factors related to the management described in Section 6.

Uruguay: the study "Mortality of *charabones* (the chicks of this species) in captive breeding during the first months of life" was carried out in 2003.

8. SIMILAR SPECIES

According to the CITES Identification Manual (www.cites.org): *Rhea pennata* (code A-202.001.001.001): slightly smaller, whitish marbled feathers and yellowish feet.

9. REFERENCES

Bolkovic, M. L. y D. Ramadori (eds.). 2006. *Manejo de fauna silvestre en la Argentina. Programas de uso sustentable*. Dirección de Fauna Silvestre, Secretaría de Ambiente y Desarrollo Sustentable, Buenos Aires. 168 pages + 8 illustrations.

IUCN 2007. *2007 IUCN Red List of Threatened species*. <www.iucnredlist.org>. Downloaded on 27 December 2007.

www.cites.org: http://www.cites.org/eng/resources/ID/fauna/Volume2/A-202.001.002.001%20Rhea%20americana_E.pdf

10. NATIONAL INFORMATION PROVIDED BY

Paraguay

Person responding to this inquiry, or responsible for the information

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Lic. Isabel Gamarra de Fox, Director-General of the Directorate-General for Environmental Management (*Dirección General de Gestión Ambiental*).

Institution from which the information originates

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Uruguay

Person responding to this inquiry, or responsible for the information

Marcel Calvar, DMV (Technical Advisor – Head of the *Medio Silvestre* Section of the Wildlife Department).

Institution from which the information originates

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Gross exports of *Rhea americana*

Taxon	Term	Unit	Exporter	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>Rhea americana albescens</i>	eggs		AR										4	
<i>Rhea americana</i>	feathers	kg	AR		340									
<i>Rhea americana albescens</i>	feathers	kg	AR			40		40	40		40	60		
<i>Rhea americana</i>	garments	kg	AR				1,1							
<i>Rhea americana</i>	skin pieces	g	AR				500							
<i>Rhea americana</i>	skin pieces	skins	AR		4334									
<i>Rhea americana albescens</i>	skin pieces	skins	AR						4900	15				
<i>Rhea americana albescens</i>	skin pieces	kg	AR							0.396				
<i>Rhea americana albescens</i>	skin pieces	pairs	AR					40300						
<i>Rhea americana</i>	skins	skins	AR	2000	4000		5							
<i>Rhea americana albescens</i>	skins	skins	AR	5050		2000		6					100	
<i>Rhea americana albescens</i>	small leather products	small leather products	AR								2	170	195	
<i>Rhea americana albescens</i>	small leather products	kg	AR								0,007			
<i>Rhea americana albescens</i>	specimens	specimens	AR					77	1		1			
<i>Rhea americana albescens</i>	specimens	ml	AR									569	723	
<i>Rhea americana</i>	garments	garments	BO										22	
<i>Rhea americana</i>	feathers	feathers	BR					1	1		1			
<i>Rhea americana</i>	feathers	feathers	BR								0,08			
<i>Rhea americana</i>	feet	feet	BR								8			
<i>Rhea americana</i>	garments	garments	BR								1			
<i>Rhea americana</i>	skin pieces	skin pieces	BR								18			
<i>Rhea americana</i>	skins	skins	BR								7			
<i>Rhea americana</i>	small leather products	small leather products	BR								4			
<i>Rhea americana</i>	small leather products	pairs	BR								1			
<i>Rhea americana</i>	skins	skins	PY	416			2							
<i>Rhea americana</i>	eggs	eggs	UY	6	50		5			676	529	705	350	250
<i>Rhea americana</i>	feathers	g	UY				47							
<i>Rhea americana</i>	feathers	kg	UY									3,5		
<i>Rhea americana</i>	garments	garments	UY					5				3		
<i>Rhea americana</i>	meat	meat	UY										22	130
<i>Rhea americana</i>	meat	kg	UY	12	600				1483.3		7321,865	1604	6688,82	6150
<i>Rhea americana</i>	skeletons	skeletons	UY								2			
<i>Rhea americana</i>	skin pieces	skin pieces	UY							450	10	57	283	
<i>Rhea americana</i>	skin pieces	skin pieces	UY								125			
<i>Rhea americana</i>	skins	skins	UY							300	1988	169	407	262
<i>Rhea americana</i>	small leather products	small leather products	UY					113				24	251	204

Information provided by UNEP-WCMC