

**TAXA IDENTIFIED AS POSSIBLE CANDIDATES FOR
INCLUSION IN THE
REVIEW OF SIGNIFICANT TRADE
IN SPECIMENS OF APPENDIX–II SPECIES**

Prepared by TRAFFIC and the IUCN/SSC Wildlife Trade Programme

for the

**Twentieth Meeting of the CITES Animals Committee
Johannesburg (South Africa), 29 March – 2 April 2004**

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Introduction and Methodology

Resolution Conf. 12.8 directs the Animals and Plants Committees, in co-operation with the Secretariat and experts, and in consultation with range States, to review the biological, trade and other relevant information on Appendix-II species subject to significant levels of trade. An initial and critical step in this process is the selection of species to be subject to review. Resolution Conf. 12.8 calls for the selection process to be based on a review of CITES annual report data and additional information available to the Animals and Plants Committees.

TRAFFIC International and the Wildlife Trade Programme of the IUCN Species Survival Commission were contracted by the CITES Secretariat to undertake a rapid assessment of readily available information on the status and trade of Appendix II species in order to assist the Committees with the selection process. Research for this analysis combined a review of CITES trade data provided by UNEP-WCMC with collection and assessment of information provided by specialists from Specialist Groups of the IUCN Species Survival Commission, the TRAFFIC network, and where possible, published (including web) sources. The final text was written by the staff of the IUCN SSC Wildlife Trade Programme and TRAFFIC International based on information compiled.

The present analysis was undertaken within a very short timeframe, reducing the ability to seek input from specialists. In future, we recommend that such an analysis is initiated shortly after CITES export data summaries are produced by UNEP-WCMC (90 days following the conclusion of a meeting of the Conference of the Parties, in accordance with Resolution Conf. 12.8).

Analyses and accompanying recommendations for each of the major taxonomic groups are arranged within three categories. The first section contains information on taxa that appear to merit inclusion in the next Review of Significant Trade for plants. This is followed by a section on the trade in taxa for which concerns regarding the sustainability of exports may be linked to other issues. These include species for which there are apparent problems of enforcement of national level trade controls, for which the current annotations appear to exclude a major segment of the trade, and where there is confusion regarding taxonomy. The third section includes information on species for which trade data indicated that further review was merited, but for which further information indicated that trade did not appear to exceed sustainable levels.

MAMMALIA

I. Taxa identified as possible candidates for the Review of Significant Trade

FELIDAE

Panthera leo

COMMON NAME: African Lion (E); Lion d'Afrique (F); León (S)
DISTRIBUTION: Algeria (ex), Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti (ex), Egypt (ex), Eritrea, Ethiopia, Gabon, Gambia, Ghana, Greece (ex), Guinea, ? Guinea-Bissau, India, Iran (Islamic Republic of) (ex), Iraq (ex), Israel (ex), Kenya, Lesotho, Malawi, Mali, ? Mauritania (ex?), Morocco (ex), Mozambique, Namibia, Niger, Nigeria, Pakistan (ex), Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Syrian Arab Republic (ex), United Republic of Tanzania, Togo, Tunisia (ex), ? Turkey, Uganda, Western Sahara (ex), Zambia, Zimbabwe

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: VU - A1cd

International trade in the African Lion *Panthera leo* is dominated by hunting trophies and skins. From 1992-2002 the CITES annual reported trade averaged 300 trophies/skins (ranging between 230-322 trophies from 1993 onwards). The majority of exports are reported from the southern African countries of Botswana, Namibia, South Africa, Tanzania, Zambia and Zimbabwe.

African Lion populations are estimated to have declined from around 200 000 in the 1980s to around 20 000 today (Kirby, 2004) with an effective population size as low as 10 000 (Nowell and Jackson, 1996). Causes of decline during the 1990s included increasing pressure from human settlement and diseases such as Canine Distemper Virus (Roelke-Parker *et al.*, 1996) and the Feline Immunodeficiency Virus, the feline equivalent of HIV in Uganda (Wendo ampala, 1999) and Botswana (Hale, 2004). East and Southern Africa are now home to the majority of the continent's lions. Lions are becoming increasingly rare outside protected areas both here and elsewhere, with no subpopulation containing more than 1000 mature breeding individuals (Nowell and Jackson, 1996).

Although trophy hunting is seen a means of providing economic incentives to conserve wild areas and species, there is concern about the sustainability of current rates of trophy hunting of Lions. Targeting of prime males can result in too rapid a turn over of pride males that in turn reduces cub survival (MacDonald, cited in Nolin, 2003; Whitman *et al.*, 2004). Whilst new research suggests that the sustainability of trophy hunting can be increased by targeting males that have completed their reproductive period, such practices are not widespread. Given the threats facing lions and new research findings, a review of the sustainability of trophy exports is recommended.

INTERNATIONAL TRADE

Gross exports of *Panthera leo* for skins, trophies and plates (>30 from 1992-2002)

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Botswana	Skins	8	19	33	94	234	102	64	94	72	0	0
Botswana	Trophies	145	151	49	34	9	18	9	22	30	9	2
Burkina Faso	Trophies	8	3	3	6	5	7	12	12	20	10	2
Central African Republic	Trophies	23	8	9	9	6	6	3	10	12	5	0
Cameroon	Trophies	26	7	5	10	14	12	9	16	20	6	9
Mozambique	Skins	0	0	0	0	1	0	2	21	7	13	0

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Mozambique	Trophies	0	0	11	5	17	14	21	1	29	15	11
Namibia	Skins	7	6	6	8	21	18	11	9	7	1	2
Namibia	Trophies	30	19	22	23	7	8	10	7	11	11	6
Senegal	Skins	1	0	0	0	0	0	0	0	0	0	0
Senegal	Trophies	1	0	0	0	0	0	0	0	0	0	0
South Africa	Plates	2	3	2	1	4	1	4	8	13	4	15
South Africa	Skins	26	37	34	82	32	84	71	60	85	55	32
South Africa	Trophies	168	137	192	105	102	108	110	107	146	134	147
Tanzania	Skins	3	25	26	34	47	35	50	32	25	13	6
Tanzania	Trophies	202	195	282	230	298	276	264	272	316	230	226
Zambia	Skins	9	6	17	19	24	8	15	11	9	4	0
Zambia	Trophies	118	36	51	65	50	45	82	74	47	24	3
Zimbabwe	Skins	13	24	37	82	35	20	31	24	68	20	7
Zimbabwe	Trophies	246	189	102	123	100	93	81	123	91	95	104

Export quotas issued by Ethiopia

Term	2000	2001	2002	2003
Trophies				12
Live and trophies	10	15		

MONODONTIDAE

Monodon monoceros

COMMON NAME: Narwhal (E); Narval (F); Narval (S)

DISTRIBUTION: Circumpolar and virtually confined to limits of Arctic pack ice; vagrants as far south as the United Kingdom; Canada, Greenland, Iceland, Norway, Russian Federation, Svalbard and Jan Mayen

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: Data Deficient

HISTORY OF REVIEW: Reviewed in 1988 and 1995, Phase 3. Recommendations formulated for: Canada; Denmark (Greenland).

Narwhal *Monodon monoceros* are endemic to Arctic marine waters. There is evidence that Narwhal stocks in West Greenland are depleted, and their survival is at risk from continued intensive hunting (R. Reeves, *in litt.* to IUCN/SSC Wildlife Trade Programme, 2004). To the extent that this hunting is stimulated by opportunities to sell the tusk ivory for export, trade would be adversely affecting the population(s). In Canada, the large aggregate population that summers in the High Arctic appears capable of sustaining current exploitation levels but this may not be true of the much smaller population that summers in Repulse Bay and Hudson Bay. Again, the link between hunt intensity and trade is not simple, but the role of trade in stimulating the hunt cannot be ignored (Alvarez-Flores and Heide-Jørgensen, 2004; Stewart, 2003).

Secured catch levels are monitored by government or co-management agencies in both Canada and Greenland, and in Canada programmes are in place to encourage reporting of the struck/lost component of the catch. Canada's quota system has been replaced in some communities by "temporary harvest limits" that are set by community-based organisations and largely self-enforced. No catch limits exist in Greenland. There is a critical need in Greenland and parts of Canada for hunt management to reduce catch levels (Ditz, 2004; Heide-Jørgensen, 2004).

CITES annual report data apparently under-represent the actual volume of international trade in Narwhal ivory, but the magnitude of underreporting is impossible to quantify or estimate with a high degree of confidence. It is possible that some ivory exports that are not specified as being derived from Narwhal teeth would be confused with Walrus and possibly Sperm Whale ivory (Reeves, 1992; Reeves, 1993; Reeves and Heide-Jørgensen, 1994; R. Reeves *in litt.* to IUCN/SSC Wildlife Trade Programme, 2004).

The species was included in the Review of Significant Trade in 1995. Some concerns regarding the species were highlighted in the review. The Animals Committee subsequently made several Primary and Secondary Recommendations directed at Canada and Denmark (Greenland), including the need for a scientifically based survey programme. Although some small scale surveys and other studies have been done since 1995 there has yet to be a comprehensive survey. Further examination by the Animals Committee may be needed to ensure that current levels of trade are not detrimental.

INTERNATIONAL TRADE

Gross exports of *Monodon monoceros*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Canada	Carvings	0	3	0	0	0	0	0	0	0	2	7
Canada	Teeth	0	4	0	0	0	0	0	4	0	4	0
Canada	Tusks	35	45	35	75	76	123	78	77	37	162	94
Canada	Tusks (kg)	0	0	0	0	0	0	0	21	0	0	0
Greenland	Carvings	236	572	499	740	740	544	248	748	34	21	193
Greenland	Ivory pieces	0	4	6	18	16	10	12	41	0	0	0
Greenland	Meat	0	1 052	2	0	0	1 012	0	0	0	0	0
Greenland	Meat (kg)	0	0	353	388	1 023	618	2 558	0	0	0	637
Greenland	Teeth	0	208	85	99	54	28	25	767	675	9	30
Greenland	Teeth (kg)	0	0	0	0	0	0	26	5	0	0	0
Greenland	Tusks	227	267	258	208	240	211	116	106	68	25	45

OTARIIDAE

Arctocephalus pusillus pusillus

COMMON NAME: South African Fur Seal, Cape Fur Seal (E); Arctocéphale d'Afrique du Sud (F)

DISTRIBUTION: Angola, Gabon, Mozambique, Namibia, South Africa

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LR/lc

The majority of exports of *Arctocephalus pusillus* are of the South African subspecies *A. p. pusillus* - consequently only this taxon will be considered. According to information in the 1993 *IUCN SSC Seal Action Plan*, in 1990, the population of this taxon was estimated to be around 2 million animals and increasing at 3% annually (Butterworth and Wickens, 1990), with pup production at over 300 000 per annum. The South African Fur Seal apparently suffered heavy mortality in 1994 when an estimated 200 000 seals (10% of the population) died, reportedly due to a scarcity of fish caused by environmental conditions (Shedden, 2004). Decreases in fish stocks were reported again in 2000 (Steenkamp, 2003). Information was not identified indicating whether these declines resulted in lower natural mortality rates and/or the current population status of the subspecies.

The annual average harvest of 75 000 pups from 1973 to 1982 declined to approximately 25 000 pups and 9000 bulls per year until the 1990s, at which time harvest quotas were established. Harvest quotas in 1998 and 1999 were for 35 000 pups and 5000 bulls. In 2000, when Namibian Pilchard *A. p. pusillus* stocks crashed, the quota was increased to 60 000 pups and 7000 bulls (Wildlife Society of Namibia, 2001).

Exports of sealskins from Namibia dipped to a few thousand skins per year in 1998 and 1999, increased to over 40 000 skins in 2000, dropped to 20 000 in 2001, then quadrupled to over 112 000 skins in 2002. This could reflect the export in 2002 of skins from previous years' harvests. Namibia has not notified the CITES Secretariat of an export quota for this taxon.

An explanation from Namibia regarding the large increase in exports in 2002 would assist the Animals Committee in determining whether or not this species should be selected for the Review of Significant Trade.

INTERNATIONAL TRADE

Gross exports of *Arctocephalus pusillus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Namibia	Skins	13 141	43 478	43 547	37 019	42 611	29 950	5 860	2 124	48 686	20 654	117 409
South Africa	Skins	6 000	0	0	0	5 500	0	0	0	50	409	0

Harvest quotas for *Arctocephalus pusillus* skins for years 1992-1997 as reported by the Wildlife Society of Namibia

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Totals	29 000	42 200	50 850	17 450	20 500	30 000			
Pups							35 000	35 000	60 000
Bulls							5 000	5 000	7 000

Source: Wildlife Society of Namibia (2001).

II. Taxa for which trade levels could be unsustainable, but for which the primary issues of concern appear to be other than Article IV implementation

CERCOPITHECIDAE

Macaca fascicularis

SYNONYMS:	<i>Macaca irus</i> , <i>Macaca cynomolgus</i>
COMMON NAME:	Crab-eating Macaque, Cynomolgus Monkey, Long-tailed Macaque (E); Macaque crabier, Macaque de Buffon (F); Macaca cangrejera (S)
DISTRIBUTION:	Bangladesh, Brunei Darussalam, Cambodia, Hong Kong (int), India, Indonesia, Lao People's Democratic Republic, Malaysia, Mauritius (int), Myanmar, Palau, Philippines, Singapore, Thailand, ? United States (int), Viet Nam
CONSERVATION STATUS:	Listed in the 2003 IUCN Red List: LR/nt
HISTORY OF REVIEW:	Reviewed in 1993, Phase 2. Recommendations formulated for: Indonesia; the Philippines.

The Crab-eating Macaque *Macaca fascicularis* is a widespread and common species that thrives in disturbed habitats. The taxon was included in the Review of Significant Trade in 1993, which concluded that the levels of trade at that time were unlikely to be adversely affecting the species except on a localised scale. However, recommendations were formulated for Indonesia and the Philippines. In the period 1992-2002 trade has averaged 3700 animals exported per year. However, the major exporter was Mauritius, which has an introduced population of the species (WCMC *et al.*, 1993).

TRAFFIC East Asia considers that there could be substantial unreported trade in the species, with 770 Crab-eating Macaques reported as illegally imported from Viet Nam into Guanxi Province, China, during April–May, 2002. Further review of trade being conducted outside of CITES trade controls may be warranted.

INTERNATIONAL TRADE

Gross exports of *Macaca fascicularis*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
India	Bodies	1	0	20	0	0	0	0	0	0	0	0
Indonesia	Bones	0	0	7	0	0	0	200	0	0	0	0
Mauritius	Live	5 437	5 486	5 625	3 830	2 936	3 260	3 501	3 447	2 371	1 897	2 895
Mauritius	Leather products	0	0	0	1	0	0	0	0	0	0	0
Philippines	Skeletons	0	19	0	0	0	0	0	0	0	0	0
Indonesia and Mauritius	Skulls	5	22	0	0	0	0	2	14	0	0	0
Philippines	Trophies	0	1	0	0	0	0	0	0	0	0	0
Viet Nam	Unspecified	0	0	0	0	0	0	0	0	0	0	800

Export quotas

Exporter	Term	1997	1998	1999	2000	2001
Indonesia	Live (non-productive, wild-taken)					200
	Live (non-productive, captive-bred)		650	1080	1080	
Mauritius	Live	4000	4000	4000		

LORIDAE

Nycticebus spp.

This genus comprises two species. The smaller, Pygmy Loris *Nyctibus pygmaeus*, occurs in three countries in Indochina and is classified as Vulnerable by IUCN (IUCN, 2003). The larger, Slow Loris *N. coucang*, is more widely distributed, recorded from 13 range States and classified by IUCN as Lower Risk (IUCN, 2000). Lorises are often overlooked in the wild due to their nocturnal, arboreal, and cryptic nature. Both species are thought to be impacted by the extensive loss of forest habitat in Asia, although the Slow Loris is reputed to do well in degraded habitats.

Lorises are in demand for the pet trade and for use in traditional medicines. Pygmy Lorises are sold in local markets in Viet Nam and Lao P.D.R. (Ratajszczak, 1988). A survey of the Ho Chi Minh City animal market in January 1994 found 43 Pygmy Lorises for sale (Tan, 1994). Although CITES recorded trade in these taxa is low, there are indications that international trade may be under-reported. In January 2003, 117 lorises were confiscated in Jakarta en route to Japan and Dubai; in 2002, six were confiscated at Dubai International Airport en route from East Asia and in 2001, a number of Slow Loris were confiscated on entry to Israel (H. Schulze *in litt.* to IUCN/SSC Wildlife Trade Programme, 2004). Further investigation of what may be a significant volume of illegal trade is warranted.

Nycticebus coucang

COMMON NAME: Slow Loris (E); Loris lent (F); Loris lento (S)
DISTRIBUTION: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, India, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore (ex?), Thailand, Viet Nam
CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LR/lc
HISTORY OF REVIEW: Reviewed in 1993, Phase 2. No recommendations formulated.

INTERNATIONAL TRADE

Gross exports of *Nycticebus coucang*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Cambodia	Bodies	0	0	59	0	0	0	0	0	0	0	0
Malaysia	Live	0	0	10	12	24	4	5	3	0	0	0
Viet Nam	Skins	0	2	0	0	0	0	0	0	0	0	0

Nycticebus pygmaeus

SYNONYM: *Nycticebus intermedius*
COMMON NAME: Pygmy Loris, Lesser Slow Loris (E)
DISTRIBUTION: ? Cambodia, Lao People's Democratic Republic, Viet Nam
CONSERVATION STATUS: Listed in the 2003 IUCN Red List: VU - A1cd

INTERNATIONAL TRADE

Gross exports of *Nycticebus pygmaeus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Viet Nam	Bodies	0	0	0	0	0	2	0	0	0	0	0
Viet Nam	Live	0	1	0	1	0	2	0	1	1	0	0
Cambodia	Skins	1	0	0	0	0	0	0	0	0	0	0

Manidae

Manis spp.

COMMON NAME: Pangolins (E); Pangolins (F); Pangolines, Pangolinos (S)

Pangolins *Manis* spp. are shy nocturnal creatures about which little is known, the Asian species of which are in demand for their skins and scales. Trade in the genus has been reviewed several times in conjunction with the Review of Significant Trade (see table below). The genus was proposed for transfer to Appendix I in 2001, the proposal subsequently amended such that the Appendix II-listing of *Manis crassicaudata*, *M. javanica* and *M. pentadactyla* was annotated with a zero export quota. Since then no legal trade has been reported in these species. However, market surveys and confiscations indicate that unreported trade in these species is significant and merits further attention.

Species	Review by AC (Phase)*	Recommendations formulated
<i>Manis crassicaudata</i>	1988, March 1992 (Ph 1) & July 1999 (Ph 4)	Ph 1: Singapore; CITES Secretariat. Ph 4: No recommendations formulated
<i>M. gigantea</i>	July 1999 (Ph 4)	No recommendations formulated
<i>M. javanica</i>	1988, March 1992 (Ph 1) & July 1999 (Ph 4)	Ph 1: Malaysia; CITES Secretariat. Ph 4: Cambodia; China; Indonesia; Lao PDR; Malaysia; Singapore; Thailand; Viet Nam.
<i>M. pentadactyla</i>	1988, March 1992 (Ph 1) & July 1999 (Ph 4)	Ph 1: China; Singapore; Secretariat. Ph 4: Cambodia; China; Lao PDR; Thailand; Viet Nam.
<i>M. temminckii</i>	July 1999 (Ph 4)	No recommendations formulated
<i>M. tetradactyla</i>	July 1999 (Ph 4)	No recommendations formulated
<i>M. tricuspis</i>	July 1999 (Ph 4)	No recommendations formulated

Manis javanica

COMMON NAME: Malayan Pangolin, Sunda Pangolin (E); Pangolin javanais, Pangolin malais (F); Pangolin malayo (S)

DISTRIBUTION: ? Bangladesh, Brunei Darussalam, Cambodia, ? China, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore (ex?), Thailand, Viet Nam

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LR/nt

HISTORY OF REVIEW: Reviewed in 1992 and in 1999, Phase 1 and 4

INTERNATIONAL TRADE

Gross exports of *Manis javanica* from Lao PDR

Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Skins	19 908	16 303	6 553	9 935	6 704	2 269	11 000	15 405	21 520	0	0
Skins (kg)	1 572	0	0	6	2 500	0	0	870	0	0	0

Export quotas: 2001-2003: 0 for all countries

Manis pentadactyla

COMMON NAME: Chinese Pangolin (E); Pangolin à queue courte, Pangolin de Chine (F); Pangolín chino (S)

DISTRIBUTION: ? Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Lao People's Democratic Republic, Myanmar, Nepal, Taiwan, Thailand, Viet Nam

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LR/nt

HISTORY OF REVIEW: Reviewed in 1992 and 1999, Phase 1 and 4

INTERNATIONAL TRADE

Gross exports of *Manis pentadactyla* from Viet Nam

Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Skins (kg)	5000	0	0	0	0	500	1	400	1000	0	0

Export quotas 2001-2003: 0 for all countries.

III. Taxa traded in significant volumes for which available information indicates that a review by the Animals Committee is not necessary at this time

CANIDAE

Pseudalopex spp.

This genus includes three species of which two are recorded in substantial amounts in international trade, *Pseudalopex culpaeus* and *P. griseus*. Both these taxa were included in the Review of Significant Trade in 1988 and 1993.

In the 1970s, CITES reported export volumes for *P. culpaeus* averaged 12 656 skins per annum, but then declined during the 1980s after the CITES listing came into effect (Broad *et al.*, 1988). In 2002 reported trade in skins jumped to 19 000. According to Navarro (*in litt.* to IUCN/SSC Wildlife Trade Programme, 2004), the status of the species gives no cause for concern in Argentina and it appears that skins that had been stockpiled were exported in 2002, when the decline in value of the Argentinean currency made export worthwhile.

From 1980-1983, CITES-reported exports of *P. griseus* skins averaged over 100 000 skins per annum (Broad *et al.*, 1988); exports from 1992-2001 were much lower (generally under 50 000 skins per year). In 2002 exports jumped to near 125 000 skins. Navarro (*in litt.* to IUCN/SSC Wildlife Trade Programme, 2004) maintains that these were probably stockpiled skins.

Pseudalopex culpaeus

COMMON NAME: Andean Wolf, Colpeo Fox (E); Renard colfeo (F); Culpeo, Zorro andino (S)
DISTRIBUTION: Argentina, Bolivia, Chile, ? Colombia, Ecuador, Peru
CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LR/lc
HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. Recommendations were formulated at genus level for: Argentina.

INTERNATIONAL TRADE

Gross exports of *Pseudalopex culpaeus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Argentina	Garments	80	6	6	0	350	0	0	0	36	16	73
Argentina	Garments (skins)	0	0	0	0	0	70	0	126	0	0	1 962
Argentina	Skins	54	0	13	16	3 982	613	6 703	73	521	7 218	19 009
Argentina	Skins (kg)	0	0	0	0	500	0	2 250	0	0	0	0

Pseudalopex griseus

- COMMON NAME:** Argentine Grey Fox (E); Renard de Chiloé, Renard gris d'Argentine (F); Chilla, Zorro chico, Zorro de la Isla Chiloe, Zorro gris argentino (S)
- DISTRIBUTION:** Argentina, Chile, Falkland Islands, Peru
- CONSERVATION STATUS:** Listed in the 1996 IUCN Red List: LR/ lc
- HISTORY OF REVIEW:** Reviewed in 1988 and 1993, Phase 2. Recommendations were formulated at genus level for: Argentina.

INTERNATIONAL TRADE

Gross exports of *Pseudalopex griseus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Argentina	Garments	2 684	3 271	2 844	1 015	4 775	173	342	0	387	148	387
Argentina	Garments (kg)	0	0	149	88	325	173	0	34	0	0	0
Argentina	Garments (skins)	0	0	0	0	0	22 628	0	2 661	0	0	6 324
Argentina	Plates	51	32 504	95	0	0	56	21	78	897	60	62
Argentina	Plates (kg)	0	0	0	0	0	0	0	0	2 526	890	160
Argentina	Skins	22 975	8 500	15 020	4 016	79 603	22 202	42 334	20 362	23 150	39 368	124 803
Argentina	Skins (kg)	150	0	0	0	657	62	357	92	1 170	23	303
Argentina	Skin pieces	2 290	4 542	1 000	2 928	6 400	30	0	0	903	1	448
Argentina	Skin pieces (kg)	2 131	0	70	178	200	840	625	336	32	80	1 242
Chile	Skins	0	0	0	0	0	0	0	0	0	3 831	1 230

EQUIDAE

Equus zebra hartmannae

- COMMON NAME:** Hartmann's Mountain Zebra (E); Zèbre de Hartmann, Zèbre de montagne de Hartmann (F); Cebra de Hartmann (S)
- DISTRIBUTION:** Angola, Namibia, South Africa.
- CONSERVATION STATUS:** Listed in the 2003 IUCN Red List: EN - A1a
- HISTORY OF REVIEW:** Reviewed in 1988. No recommendations formulated.

Hartmann's Mountain Zebra *Equus zebra hartmannae* is restricted in distribution to Angola, Namibia and South Africa. The Namibian population of this species is estimated to number approximately 25 000 individuals and occurs in a large area and across a variety of land tenure systems. Approximately 7000 animals can be found on freehold farms, 6400 on communal lands and the rest in national parks and other nature reserves. The South African populations are small, probably just under 400 animals in total, and were originally reintroduced from Namibian stock (Moehlman, 2002).

Since 1992, annual exports from Namibia averaged almost 1300 skins and 430 trophies per annum. Exports from South Africa averaged 107 skins and 37 trophies annually. According to the SSC Equid Action Plan (Moehlman, 2002), in times of drought, farms can support fewer heads of livestock and wild species, including zebra, and so the farmers have to cull a higher proportion of stock in times of drought. In 2000, a number equivalent to over 10% of the population was apparently exported as trophies and skins. Although this level of harvest may be high for a natural population, over 50% of the Namibian population is re-stocked on range land (Moehlman, 2002). There is apparently a CITES-related project underway involving population surveys, which should provide additional information regarding the status of this species. The Animals Committee might want to confirm the status of this project.

INTERNATIONAL TRADE

Gross exports of *Equus zebra hartmannae*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Namibia	Skin pieces	1	2	0	0	1	104	77	42	3	1	9
Namibia	Skins	721	858	771	999	1 540	2 498	1 466	1 582	1 763	1 073	935
Namibia	Trophies	503	566	502	439	131	168	238	238	264	887	775
South Africa	Skins	93	95	65	166	10	379	183	38	65	44	37
South Africa	Trophies	12	40	21	17	19	53	48	44	67	44	54

FELIDAE

Prionailurus bengalensis

COMMON NAME: Leopard Cat (E); Chat de Chine, Chat-léopard du Bengale (F); Gato bengalí, Gato de Bengala (E)

DISTRIBUTION: Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea, DPR, Korea, Republic of, Lao People's Democratic Republic, ? Macao, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Russian Federation, Singapore, Taiwan, Thailand, Viet Nam

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LC

HISTORY OF REVIEW: Reviewed in 1992, Phase 1. Recommendations formulated for: China.

Leopard Cat *Prionailurus bengalensis* has a wide distribution throughout Asia and appears to be more tolerant of deforestation and habitat alternation than other members of the Felidae (Nowell and Jackson, 1996). The species is traded throughout Southeast Asia for skins, pets and food and is commonly observed for sale there, according to TRAFFIC Southeast Asia, who also note evidence of illegal trade. *P. bengalensis* was included in the Review of Significant Trade in 1992 and an Animals Committee recommendation made to China to advise the Secretariat of the scientific basis of its management programme for the species and the mechanisms for controlling harvest and trade, and the export quota established. China was also asked to inventory and mark stockpiles of skins currently held by exporting companies in the country (to facilitate the management of the harvest in future). China successfully conducted a field survey of the species and established a management plan in 1995, and developed a means of marking the stockpiled skins in order to be able to export the stockpiles (CITES Notification No. 869 Geneva, 31 August 1995). China does not currently have an export quota for this species, but is the only important reported exporter for this species. Since exports re-opened in 1996, China has reportedly exported on average, 5300 skin plates; 8700 skins per year of *P. bengalensis* and an additional 7800 plates and 12 500 skins of *P. b. chinensis*.

INTERNATIONAL TRADE

Gross exports of *Prionailurus bengalensis* including the subspecies *P. b. chinensis*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
China	Plates	12 506	0	0	10	4 956	23 095	9 180	7 671	16 560	21 855	24 283
China	Plates (m2)	0	0	0	0	0	0	200	0	0	0	0
China	Skin pieces	0	0	0	0	0	0	0	0	400	2 798	0
China	Skins	8 211	0	0	0	4 700	20 499	16 000	28 793	66 415	24 459	24 696

HIPPOPOTAMIDAE

Hippopotamus amphibius

- COMMON NAME:** Hippopotamus, Large Hippo (E); Hippopotame, Hippopotame amphibie (F); Hipopótamo anfibio (S)
- DISTRIBUTION:** Algeria (ex), Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti (ex), Egypt (ex), Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia (ex?), Malawi, Mali, Mauritania (ex?), Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, United Republic of Tanzania, ? Togo, Uganda, Zambia, Zimbabwe
- CONSERVATION STATUS:** Listed in the 2003 IUCN Red List: LR/ lc
- HISTORY OF REVIEW:** Reviewed in 1999, Phase 4. Recommendations formulated for: Botswana; Democratic Republic of the Congo; Malawi; Mozambique; Rwanda; South Africa; United Republic of Tanzania; Zambia, Zimbabwe.

The Hippo *Hippopotamus amphibius* was included in CITES Appendix II in 1995. In 1999 the species was included in the Review of Significant Trade, and recommendations were issued for Botswana, Democratic Republic of the Congo, Malawi, Mozambique, Rwanda, South Africa, United Republic of Tanzania, Zambia and Zimbabwe. The Standing Committee recommended that imports be suspended from the Democratic Republic of the Congo, Malawi and Rwanda in July 2001 owing to their failure to respond adequately to the Animals Committee recommendations; this recommendation remains in effect.

The species, which occurs throughout much of sub-Saharan Africa, was classified by IUCN in 1993 as Lower Risk least concern. Recent concerns have been expressed regarding population declines in Burundi (Nduwimana, 2003) and in the Virunga National Park in the Democratic Republic of the Congo owing to hunting for meat, with the trade in Hippo ivory also mentioned as an incentive for hunting in the latter country (Anon., 2003).

Gross exports of individual teeth peaked in 1995, the year the species was listed in Appendix II, exports of teeth reported by weight peaking during the following year. The number of individual teeth reported in trade has decreased substantially since 1995; teeth exports reported by weight fluctuated between 5250 kg (1995) and 19 631 kg (2000), the main country of exports being Tanzania, Uganda, Zambia and Zimbabwe.

INTERNATIONAL TRADE

Total gross exports of *Hippopotamus amphibius*

Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Exporter*
Carvings	0	0	183	2 543	560	297	187	3 613	2	396	212	Tanzania (South Africa and Zimbabwe)
Leather products	0	0	18	35	10	51	22	67	565	293	190	Zimbabwe (Tanzania and South Africa)
Skin	0	0	1 190	2 028	2 668	6 100	66	6 517	962	384	37	Zimbabwe, Zambia
Skin (m)	0	0	0	427	399	874	0	0	0	0	0	Zimbabwe
Skin pieces	0	0	23	2 071	8	55	91	14	1 034	545	97	Zimbabwe, Zambia
Teeth	4	0	755	41 928	27 958	2 354	3 608	10 726	3 953	3 685	703	Tanzania, Zambia, Zimbabwe
Teeth (kg)	0	0	0	5 250	24 477	14 695	8 642	12 766	19 631	12 500	8 840	Tanzania, Uganda, Zambia

Trophies	0	0	119	248	377	315	196	257	384	186	207	Tanzania, Zimbabwe, Zambia
Tusks	0	0	16	367	88	105	331	335	617	614	334	Zimbabwe, Zambia, South Africa, Tanzania

* Exporters in decreasing order of export volumes

Export quotas

Exporter	Term	1998	1999	2000	2001	2002	2003
Malawi	Teeth and trophies (kg)	4 000		4 000			
Malawi	Skins (kg)	6 000		6 000			
Tanzania	Skin pieces				*4 800	*4 800	
Tanzania	Teeth (kg)				10 598	10 598	**10 598
Ethiopia	Hunting trophies				10	10	
Ethiopia	Ivory (kg)						69
Congo	Teeth				100		

* = from 1200 animals

** = teeth and hunting trophies from 1200 animals

MUSTELIDAE

Conepatus humboldtii

COMMON NAME: Humboldt's Hog-nosed Skunk, Patagonian Hog-nosed Skunk (E); Moufette à nez de cochon, Moufette de Patagonie (F); Anas, Chingue de la Patagonia, Mofeta de Patagonia (S)

DISTRIBUTION: Argentina, Chile, Paraguay

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: LR/ lc

HISTORY OF REVIEW: Reviewed in 1998 and 1993, Phase 2. No recommendations formulated.

The Hog-nosed Skunk *Conepatus humboldtii* is found at low altitudes in southern Chile and Argentina. It has previously been described as 'scarce' or 'locally common' (Broad *et al.*, 1988) and NatureServe (2003) categorises the species as 'apparently secure' (uncommon but not rare; some cause for long-term concern due to declines or other factors).

CITES data indicated that during the 1970s about 155 000 skins of *Conepatus* spp. were traded annually, when the taxon was included in the 1988 Review of Significant Trade (Broad *et al.*, 1988). Reported exports from Argentina averaged 1660 skins per year from 1992-2002 and peaked in 2000, when over 10 000 skins were exported. According to M. Elisetch (Wildlife Traders Federation *in litt.* to IUCN/ SSC Wildlife Trade Programme, 2004), the species is protected in Argentina, with recent exports having been from stockpiles harvested many years ago. Furthermore, populations of the species have increased under legal protection and the National Direction of Fauna is co-ordinating with researches from the University of Buenos Aires to develop of a project that will be funded by the traders, to assess the possibility of re-opening of the skin trade.

INTERNATIONAL TRADE

Gross exports of *Conepatus humboldtii* from Argentina

Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Garments (skins)	0	0	0	0	0	0	0	2 550	0	0	0
Skins	0	0	150	0	3 320	24	900	1 550	10 348	1 980	1

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AVES

I. Taxa identified as possible candidates for the Review of Significant Trade

PSITTACIDAE

Poicephalus senegalus

- COMMON NAME(S):** Senegal Parrot (E); Perroquet à tête grise, Perroquet youyou, Youyou (F); Lorito Senegalés, Papagayo senegalés (S).
- DISTRIBUTION:** Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia (int), Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo.
- CONSERVATION STATUS:** Not listed on the IUCN Red List (2003)
- HISTORY OF REVIEW:** Reviewed in 1988 and 1993, Phase 2. Recommendations formulated for: Senegal.

One of most heavily traded of the parrot species for several decades, *Poicephalus senegalus* is widespread throughout Sub-Saharan and West Africa, though reported by Fry *et al.* (1988) as restricted to a "corridor" in the western part of Africa, from Senegal to northern Cameroon, where the tree scattered savannah is present at altitudes below 1000 m. Information available from the 1970s and 1980s indicates that the species was generally common and could adapt to cultivated areas, Fry *et al.* (1988) proposing that Guinea, Mali and Senegal, the three largest exporting countries during the 1990s, supported a single large population (metapopulation). Breeding had not been confirmed in Guinea at the time of the previous Review of Significant Trade (1993), however was considered likely. CITES-reported trade increased significantly in the mid-1990s, especially from Guinea and Mali, which were not subject to recommendations under the 1993 review given relatively low levels of trade at that time. Togo's export of the species has also increased considerably since the time it was first reviewed. The export quota of 16 000 birds from Senegal established following significant trade recommendations was considered satisfactory by the Secretariat. CITES-reported exports for Senegal exceeded the export quota in 1998 and 2000, and those for Togo for each of the years 1998-2002. The Animals Committee might consider seeking confirmation that the species remains common in the key exporting countries, establishing the basis for non-detriment findings for countries of export, and investigating CITES-reported exports in excess of established quotas.

INTERNATIONAL TRADE

Gross exports of live *Poicephalus senegalus*

Exporter	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Cote d'Ivoire	502	0	1	1	1	0	2	0	4	31	402	944
Cameroon	100	0	0	0	0	800	887	0	0	0	0	1 787
Guinea	10 736	6 477	8 325	11 628	10 700	16 171	40 146	37 325	12 944	11 762	8 144	17 4358
Liberia	0	0	0	0	0	0	0	450	800	1 210	900	3 360
Mali	1 500	0	0	1 038	3 536	2 475	1 269	1 484	6 732	11 352	12 390	40 276
Senegal	19 308	15 559	22 926	25 952	18 262	11 239	17 156	15 434	17 652	12 892	14 801	191 181
Togo	10	15	0	100	60	167	635	728	373	690	402	3 180
TOTAL	30 656	220 51	31 252	38 719	32 559	308 52	60 095	55 421	38 505	37 937	37 039	415 086

Export quotas for *Poicephalus senegalus*

Exporter	Term	1997	1998	1999	2000	2001	2002
Benin	Wild-taken			100	100	181	50
Guinea	Live				15 000	9 000	
Mali	Live					19 000	19 000
Senegal	Live	16 000	16 000	16 000	16 000	16 000	16 000
Togo	Live/wild-taken	300	300	300	300	300	300

Psittacus erithacus

COMMON NAME(S): Grey Parrot (E); Jacko, Jacquot, Perroquet gris, Perroquet jaco (F); Loro yaco, Yaco (S).

DISTRIBUTION: Angola, Benin, Burundi, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Mali, Nigeria, Rwanda, São Tomé and Príncipe, Sierra Leone, United Republic of Tanzania, Togo, Uganda.

CONSERVATION STATUS: Not listed on the IUCN Red List (2003).

HISTORY OF REVIEW: Reviewed in 1988 and 1992, Phase 1. Recommendations formulated for: Cameroon; Ghana; Guinea; Liberia; Togo. Standing Committee recommendations to suspend imports were in effect for Cameroon from 23/11/1993-21/04/1994 and for Guinea from 20/04/1993-21/04/1994.

The Grey Parrot *Psittacus erithacus* is widely distributed in tropical Africa. The species, with three subspecies *P. e. erithacus*, *P. e. princeps* and *P. e. timneh*, has long been popular in the pet trade, with gross exports from 1992 to 2002 ranging from a high of over 50 000 birds in 1992 to a low of approximately 16 000 birds in 1997. Gross exports during each of the years 1999-2001 were on the order of 40 000 birds per year.

Included in Phase 1 of the Review of Significant Trade in 1992, a number of primary and secondary recommendations were formulated as noted above. The process ultimately resulted in the Standing Committee making two recommendations (that are no longer in effect) to suspend imports of this species; for Cameroon from 23 November 1993 to 21 April 1994 and for Guinea from 20 April 1993 to 21 April 1994. Trade has continued in significant quantities, with trade dominated by Cameroon, Congo and the Democratic Republic of the Congo. Gross export figures exceeded export quotas for Cameroon (1998-2002), Congo (2000 and 2001), and the Democratic Republic of the Congo (1997-2001). Given the large quantities in trade and evidence of trade in excess of establish quotas, this species merits consideration for inclusion in the Review of Significant Trade.

INTERNATIONAL TRADE

Gross exports of *Psittacus erithacus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Cameroon	Live	18 572	22 135	17 093	20 796	22 408	4 564	12 717	19 221	17 429	15 065	15 383	185 383
Congo	Live	25	23	35	5	4	1	2 506	1 073	2 101	8 272	8 205	22 250
Côte d'Ivoire	Bodies	0	594	0	0	0	0	0	0	0	0	0	594
Côte d'Ivoire	Live	7 524	1 892	7	12	17	75	38	53	78	1 111	958	11 765
Democratic Republic of the Congo	Live	17 739	8 982	13 478	10 333	10 677	10 820	12 834	14 763	14 292	10 183	0	124 101
Gabon	Live	6	2	23	29	20	29	37	40	44	82	33	345
Guinea	Live	2 945	1	400	203	64	267	63	12	19	308	103	4 385
Kenya	Live	1	1	8	5	1	329	126	6	1	20	6	504
Liberia	Live	0	0	0	0	0	0	0	650	400	475	420	1 945
Togo	Live	3 345	648	15	42	13	3	8	6	3	13	6	4 102
Subtotal		50 157	34 278	31 059	31 425	33 204	16 088	28 329	35 824	34 367	35 529	25 114	355 374

*Other bodies total		0	63	0	0	0	0	0	0	0	0	24	87
*Other live total		69	430	138	237	122	59	566	69	64	234	172	2 160
Total bodies/live		50 226	34 771	31 197	31 662	33 326	16 147	28 895	35 893	34 431	35 763	25 310	357 621
*Other eggs total		0	0	0	0	50	0	0	0	0	0	0	50

* "Other" represents combined data for countries without export quotas and where total gross export volumes for 1992-2002=<500 specimens.

Export quotas for *Psittacus erithacus*

Exporter	Term	1997	1998	1999	2000	2001	2002	2003
Cameroon	Live	0	12 000*	12 000	12 000	12 000	12 000	
Congo	Live				6 000	6 000	6 000	8 000
Democratic Republic of the Congo	Live	10 000	10 000	10 000	10 000	10 000		
Gabon	Live			500	500	200	200	250

* see Notification No. 993; **see Notification No. 1998/05.

There is no record of trade at the subspecies level *P. e. erithacus* in CITES annual report data.

Export quotas for *Psittacus erithacus erithacus*

Exporter	Term	1997	1998	1999	2000	2001	2002	2003
Côte d'Ivoire	Live			*0		500		1 000

* See Notification No. 746 which is no longer valid

Gross exports of *Psittacus erithacus timneh*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Cote d'Ivoire	Live	3 661	0	0	0	0	3	2	2 103	2 676	1 940	2 778	13 163
Guinea	Live	10 900	4 348	443	504	532	748	514	225	856	756	500	20 326
Liberia	Live	0	0	0	0	0	0	2 300	2 200	1 700	1 601	1	7 802
Senegal	Live	0	1	0	3 211	0	0	0	0	0	0	0	3 212
Sierra Leone	Live	0	0	890	0	2 000	500	2 500	1 000	1 100	720	0	8 710
Other*	Live & bodies	0	52	3	126	9	0	6	283	1	0	2	482
Total	Live & bodies	14 562	4 401	1 336	3 841	2 543	1 251	5 323	5 812	6 333	5 020	3 317	53 739

**"Other" represents data combined for countries where total gross export volumes for 1992-2002=<500 specimens.

Export quotas for *Psittacus erithacus timneh*

Exporter	Term	1997	1998	1999	2000	2001	2002	2003
Côte d'Ivoire	Live		2 000	2 000		2 000		2 000
Guinea	Live	450	450	450	450	750		750
Liberia	Live			2 500	2 500	3 000		
Sierra Leone	Live	1 000	1 000	1 000	2 000	2 000		1 000

PYCNONOTIDAE

Pycnonotus zeylanicus

COMMON NAME(S): Straw-crowned Bulbul, Straw-headed Bulbul (E); Bulbul à tête jaune (F); Bulbul bigotudo (S)

DISTRIBUTION: Brunei Darussalam, Indonesia, Malaysia, Myanmar, Singapore, Thailand.

CONSERVATION STATUS: IUCN Red List (2003): VU - A1cd+2cd

Popular as a cage bird in Asia for its melodious song, *Pycnonotus zeylanicus* has declined in the wild owing to habitat destruction and collection for trade, primarily within Asia. The species was listed in CITES Appendix II in 1997, and has been classified as Vulnerable by IUCN. CITES-reported trade is likely to significantly under-reflect actual trade, which involves wild-sourced specimens. According to information collected by TRAFFIC Southeast Asia, dealers in Southeast Asia are finding the species harder to acquire as a result of over-harvest; birds available for sale in Northern Sumatra are reported to be imported from Malaysia, reflecting a decline in the Indonesian population. Populations in Borneo (Malaysia and Indonesia) are believed to be declining, and the population in Thailand possibly extinct. Given concerns regarding the species' status and indications of ongoing trade, the species merits consideration for inclusion in the Review of Significant Trade.

Gross exports of live *Pycnonotus zeylandicus*

Exporter	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Malaysia	0	0	0	0	0	348	90	155	15	0	0

STURNIDAE

Gracula religiosa

COMMON NAME(S): Common Hill Myna; Hill Myna; Mynah (E); Mainate religieux; Merles des Indes (F); Miná de la India; Miná religioso (S).

DISTRIBUTION: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Christmas Island, India, Indonesia, Lao People's Democratic Republic, Malaysia: Peninsular Malaysia, Sabah, Sarawak, Myanmar, Nepal, Philippines, Puerto Rico, Singapore, Sri Lanka, Thailand, Viet Nam.

CONSERVATION STATUS: Not listed on the IUCN Red List (2003)

Listed in Appendix II in 1997, this widespread species is popular in the pet trade both within range States and internationally. At the time of the listing, *Gracula religiosa* was considered common in many countries, with trade-related population declines reported in Indonesia, the Philippines and Thailand at the time of the listing. Status information available in 1997 indicated that the species was common in Malaysia, however, detailed population information is not available. No information was available for Viet Nam, although it was suspected that populations were in decline as a result of habitat destruction. Owing to destruction of its preferred habitat, hill forest, the species has been said to be found in greater numbers in lowland forest, and common at forest edges and cultivated areas (Butterfield, 2003; Feare, 1999). TRAFFIC Southeast Asia is concerned that there is significant unreported trade, surveys and information from traders indicating trade from Viet Nam into Sumatra (Indonesia), reflecting a decline in local populations in Indonesia, and also from Indonesia to Malaysia and Singapore. Further information is required to confirm the status of the species within and basis of non-detriment findings by Malaysia and, should trade resume, from Viet Nam, as well as to investigate levels of unreported trade.

INTERNATIONAL TRADE

Gross exports of *Gracula religiosa*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
China	Live						1 547	560	5	0	0	0
Indonesia	Live						107	171	193	95	161	0
Malaysia	Live						1 058	6 060	3 889	6 203	9 113	3 794
Viet Nam	Live						150	8 611	13 295	19 475	0	0

Export quotas for live *Gracula religiosa*

Exporter	Term	1997	1998	1999	2000	2001	2002
Indonesia	Live	180	190	175	135	135	
Malaysia (Peninsular Malaysia only)	Live						3 000

//. Taxa for which trade levels could be unsustainable, but for which the primary issues of concern appear to be other than Article IV implementation

Based on information received from the TRAFFIC and IUCN/SSC Networks, it is believed that a number of Asian bird species for which CITES-reported trade is low and/or export bans are in place are subject to considerable levels of unreported trade. Brief details of these species are provided below. The Animals Committee might wish to consider how best to resolve these issues and to call for support from other CITES Parties in enforcing any export restrictions.

Asian bird species where the primary issues of concern appear to be other than Article IV implementation

Species, Common name, History in the Review process	IUCN Red List (2003)	Distribution	Total gross exports 1992-2002 & trade notes
PHASIANIDAE			
<i>Pavo muticus</i> Green Peafowl; Green-necked Peafowl (E); Paon spicifère; Paon vert (F); Pavo mudo; Pavo-real cuelliverde; Pavo-real verde (S)	VU - A1cd+2cd, C1+2a	Bangladesh (ex?), Cambodia, China, India, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Thailand, Viet Nam.	9 live birds. TRAFFIC Southeast Asia comments that there is domestic demand for the species in Indonesia, and notes concern regarding trade within Thailand and Cambodia.
PSITTACIDAE			
<i>Cacatua alba</i> (Reviewed in 1988 and 1992, Phase 1. Recommendations formulated for Indonesia) Umbrella Cockatoo; White Cockatoo (E); Cacatoès à huppe blanche; Cacatoès blanc (F); Cacatúa alba; Cacatúa blanca (S)	VU - A2bcd	Indonesia	10 260 live birds (no significant exports since 1998 as exports from Indonesia are now prohibited). TRAFFIC Southeast Asia cites concerns regarding significant level of illegal exports from Indonesia to other Southeast Asian markets.
<i>Cacatua sulphurea</i> (Reviewed in 1988 and 1992, Phase 1. Recommendations formulated for Indonesia) Lesser Sulphur-crested Cockatoo; Yellow-crested Cockatoo (E); Cacatoès soufré; Petit cacatoès à huppe jaune (F)	CR - A1cd+2cd	Hong Kong (int), Indonesia, Singapore (int)	5 588 live birds, mainly from Indonesia (no significant exports since 1993 as export from Indonesia is now prohibited and a Standing Committee recommendation to suspend imports from Indonesia has been in effect since 20/04/1993). Despite export being prohibited, TRAFFIC Southeast Asia has observed that the species continues to be offered for trade in significant numbers in Indonesia, Malaysia, Singapore and Thailand, with wild specimens reported by Indonesian traders to be easier and less expensive to acquire. Confirmation is required regarding the source of specimens in trade reported as captive-bred.
<i>Lorius lory</i> Black-capped Lory; Western Black-capped Lory (E); Lori des Moluques; Lori tricolore (F); Lori tricolor (S)	Not listed	Indonesia, Papua New Guinea	55 live birds, mostly (re-)exported from Singapore. Despite export from Indonesia being prohibited, TRAFFIC Southeast Asia observes that there are relatively significant numbers in trade from Indonesia to Malaysia, Singapore and Thailand indicating larger illegal/unreported trade.

<p><i>Psittacula eupatria</i> Alexandrine Parakeet (E); Perruche alexandre (F); Cotorra alejandrina (S).</p>	<p>Not Listed</p>	<p>Afghanistan, Bangladesh, Bhutan, Cambodia, India, Iran (Islamic Republic of) (int), Kuwait (int), Lao People's Democratic Republic, Myanmar, Nepal, Pakistan, Saudi Arabia (int), Sri Lanka, Thailand, Viet Nam, Yemen (int)</p>	<p>2 953 live birds, mainly from Viet Nam until 1998, but recently also from Pakistan. TRAFFIC Southeast Asia notes that this species is heavily traded, including unreported/illegal trade, with concerns that trade is having a negative impact on wild populations, e.g. in Thailand. Identification problems are an issue for enforcing trade controls.</p>
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REPTILIA AND AMPHIBIA

I. Taxa identified as possible candidates for the Review of Significant Trade

AGAMIDAE

Uromastyx spp.

Spiny-tailed lizards *Uromastyx* spp. are distributed throughout arid regions of northwest India, southwestern Asia, the Middle East and the Sahara region of northern Africa. These animals occur in arid lands where they are territorial and population densities are unlikely to be very high. There is taxonomic uncertainty over some particular taxa within the genus.

The most commonly traded species are Egyptian Spiny Tail *Uromastyx aegyptis*, Ornate Spiny Tail *U. ocellatus ornatus* and Cellate Spiny Tail *U. ocellatus*. Occasionally, Moroccan Spiny-tailed Lizard *U. oacanthinurus*, Indian Spiny Tail *U. hardwickii* and Bent's Spiny Tail *U. benti* are available in trade. In the mid-1990s very few captive-born spiny-tailed lizards were available, the majority of animals available in the pet trade being wild-caught. Over the past decade the trade has apparently targeted one species and then another. *Uromastyx dispar* is currently traded in the largest quantities, with 26 000 reported in trade in 2001 and over 19 000 in 2002 (data for the latter year are incomplete). Given the fluctuating trade levels, the taxonomic uncertainties, and difficulties of captive breeding it would appear that trade in this genus merits further investigation by the Animals Committee.

Gross exports of *Uromastyx* spp. (average per annum >50)

Species	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Uromastyx</i> spp.	Live	0	127	1 408	3 112	348	5 347	4 475	4 477	3 856	6 407	200
<i>Uromastyx acanthinura</i>	Live	149	150	637	1 000	9 475	7 814	1 692	300	50	1 433	500
<i>Uromastyx aegyptius</i>	Live	516	441	3 968	8 752	590	1 300	1 550	975	800	400	500
<i>Uromastyx benti</i>	Live	786	295	0	0	1 686	566	8	1 500	500	1 700	700
<i>Uromastyx dispar</i>	Live	0	0	0	0	2 433	1 077	18 012	13 578	15 103	26 755	19 484
<i>Uromastyx geyri</i>	Live	0	0	0	0	2 400	1 566	0	0	200	2 900	2 677
<i>Uromastyx ocellatus</i>	Live	175	100	5 974	5 234	757	491	1 291	1 351	2 075	1 102	1 890

CHAMAELEONIDAE

Bradypodion tavetanum

COMMON NAME: Taveta Chameleon, Dwarf Fischer's Chameleon, Mt. Kilimanjaro Two-horned Chameleon (E); Caméléon nain de Matschie (F)
DISTRIBUTION: Kenya, United Republic of Tanzania
CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

Bradypodion tavetanum is found in isolated pockets of forest edges, shrubs and in gardens of East-Africa, on the slopes of Mt. Meru and Kilimanjaro (Tanzania) and the Teita Mountains of Kenya. TRAFFIC East/Southern Africa reports that its range is vulnerable to deforestation. In the nine years of recorded trade

(1994-2002), CITES-reported exports averaged 2300 individuals per year, the trend generally increasing. Tanzania established an annual export quota of 3000 wild specimens in 1997; CITES data indicate that exports remained below the quota level with the exception of 2000, when it was exceeded by approximately 20%. In view of the species' distribution and potential vulnerability of its habitat, the Animals Committee might seek information from Tanzania on the basis for non-detriment findings.

INTERNATIONAL TRADE

Gross exports of *Bradypodion tavetanum*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Tanzania	Live	0	0	465	1706	1841	2237	2634	2663	3692	2554	2997

Export quotas for the United Republic of Tanzania

Term	1997	1998	1999	2000	2001	2002	2003
Wild-taken	3000	3000	3000	3000	3000	3000	3000
Ranched		91					
'F1 specimens'			81	170	159		170

Furcifer cephalolepis

COMMON NAME: Comoro Islands Chameleon (E); Caméléon des Comores (F)

DISTRIBUTION: Comoros

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

Furcifer cephalolepis is a small chameleon that is locally abundant but restricted to Grand Comoro Island, where it inhabits the humid, tropical coastal regions. Population turnover may be fairly rapid as sexual maturity is thought to occur as early as three months. Four to nine eggs are laid in a single clutch (James and Pollack, 2002). Gestation has been reported at 33-45 days and egg incubation at 244-320 days by Necas (1999); gestation was reported as closer to 60 days and incubation to range from 255-405 days based on a sample size of six clutches by James and Pollack (2002). This species is said to require specialist attention to thrive in captivity (James and Pollack, 2002).

Exports of *Furcifer cephalolepis* were first recorded in 2000, reaching 3510 in 2001. Given its restricted range and the sudden increase in reported trade, the Animals Committee might consider including *F. cephalolepis* in the Review of Significant Trade in order to confirm that trade volumes will not negatively impact the species.

INTERNATIONAL TRADE

Gross exports of *Furcifer cephalolepis*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Comoros	Live	0	0	0	0	0	0	0	0	2471	3510	2047

EMYDIDAE

Callagur borneoensis

COMMON NAME: Painted Batagur, Painted Terrapin, Saw-jawed Turtle, Three-striped Batagur (E); Émyde peinte de Bornéo (F); Galápago pintado (S)

DISTRIBUTION: ? Brunei Darussalam, Indonesia, Malaysia, Thailand

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: CR - A1bcd

Callagur borneoensis is one of the largest freshwater chelonians and was included in Appendix II in 1997. Its range is restricted to narrow coastal and riverine zones. Data in the supporting statement to the CITES listing proposal indicated a declining trend in population numbers, the IUCN/TRAFFIC analysis of the

proposal concluding that the species met the biological criteria for inclusion in Appendix I (IUCN/SSC and TRAFFIC, 1997). *C. borneoensis* is considered Critically Endangered by IUCN (IUCN, 2003). According to Van Dijk (*in litt.* to IUCN/SSC Wildlife Trade Programme, January 2004) Malaysia's total population of mature individuals is probably in the order of a few thousand animals, with not many eggs incubated to produce hatchlings for international trade. In 1997, it was reported that 100% of eggs recorded were harvested, of which 35-90% were incubated to produce hatchlings to return to the rivers (D. Sharma *in litt.* to IUCN/SSC, 1997). TRAFFIC Southeast Asia cites information from traders and researchers indicating ongoing declines.

Reported exports from Malaysia in 2000 and 2001 totalled 14 409 live specimens, a very high figure given the conservation status and population size of this species. Exports from Indonesia are much lower, and within the quota level established. TRAFFIC Southeast Asia reports that there is also significant illegal trade in the species from both Indonesia and Malaysia to China. *C. borneoensis* would appear to be in urgent need of inclusion in the Review of Significant Trade to ensure that any further exports of this critically endangered species are maintained within sustainable levels.

INTERNATIONAL TRADE

Gross exports of *Callagur borneoensis*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Indonesia	Live	0	0	0	0	0	2	0	245	150	150	18
Malaysia	Live	0	0	0	0	0	0	47	274	7944	6465	428
Thailand	Live	0	0	0	0	0	0	0	0	0	100	0

Export quotas for Indonesia

Term	1999	2000	2001
Wild-taken	450	180	180

Orlitia borneensis

COMMON NAME: Bornean River Turtle, Malaysian Giant Terrapin, Malaysian Giant Turtle (E); Emyde géante de Borneo (F)

DISTRIBUTION: Indonesia, Malaysia

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: EN - A1d+2d

The Malayan Giant Turtle *Orlitia borneensis* is a large omnivorous freshwater turtle that inhabits lowland wetlands of Peninsular Malaysia, Sarawak, Kalimantan and Sumatra. It was included in Appendix II in 2003 and is classified as Endangered by IUCN (2003). The species is totally protected in Indonesia. At the time the species was proposed for inclusion in Appendix II, available information indicated large-scale trade from Malaysia (exports of over 22 000 specimens in 1999) and suspected illegal trade from Indonesia. The main export destination was East Asia where the species is used for food; China issued permits for the import of 99 000 specimens in 2000 alone (IUCN/SSC and TRAFFIC, 2002). According to TRAFFIC Southeast Asia the species continues to be in international trade, however CITES trade data are not yet available to assess recorded trade levels. The Animals Committee might consider seeking information from Malaysia regarding permitted export volumes and associated non-detriment findings. Follow-up of the recommendations of the Kunming workshop¹ could benefit the management of this species, including with regard to helping insure that illegal trade does not undermine Indonesia's efforts to conserve the species.

¹ Technical Workshop on Conservation of and Trade in Freshwater Turtles and Tortoises, held in Kunming, China in March 2002. E.g. at: http://www.traffic.org/cop12/proposal20_34.html. Viewed February 23 2004

GEKKONIDAE

Significant exports from the Comoros of three *Phelsuma* species have been reported beginning in 2000, with trade on the order of 2000-3000 specimens per annum. Each of these species was included in earlier Reviews of Significant Trade (*P. comorensis* in 1988 and 1993; *P. dubia* in 1988; *P. v-nigra* in 1988 and 1993). At the time of those reviews, trade from the Comoros was an order of magnitude lower and very little information on the status and threats to the species was available. The Animals Committee may therefore wish to investigate the basis for the making of non-detriment findings for these species.

Phelsuma comorensis

COMMON NAME: Comoro Day Gecko (E); Gecko diurne des Comores, Phelsume des Comores (F); Geco diurno de las Comores (S)

DISTRIBUTION: Comoros

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. No recommendations formulated.

Phelsuma comorensis is endemic to Grande Comore, where it occurs in the higher altitude regions from 600-1000 m above sea level. In the lower regions (600 m), the species shares its habitat with *P. dubia* and *P. v-nigra*. The species was included in the Review of Significant Trade in 1988 and 1993. Both reviews concluded that the relatively low levels of reported trade in the species (averaging approximately 200 specimens per year from 1980-1985 and 36 per year from 1986-1990) were of potential concern given the restricted range of the species and the lack of information on population and ecology (Luxmoore *et al.*, 1988; WCMC *et al.*, 1993). However, no recommendations were put forward by the Animals Committee at that time. The dramatic increase in trade to several thousand specimens per year would seem to warrant further review to determine the basis of non-detriment findings.

INTERNATIONAL TRADE

Gross exports of *Phelsuma comorensis*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Comoros	Live	15	0	0	0	0	0	0	0	4855	2410	994

Phelsuma dubia

COMMON NAME: Bright-eyed Day Gecko, Dull-green Day Gecko, Zanzibar Day Gecko (E); Gecko diurne de Zanzibar, Gecko diurne sombre, Phelsume de Zanzibar (F); Geco diurno de Zanzibar (S)

DISTRIBUTION: Comoros, Kenya, Madagascar, Mayotte, Mozambique, United Republic of Tanzania

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. Recommendations formulated for: Madagascar (Standing Committee recommended import suspension currently in force).

Phelsuma dubia is a widely distributed species occurring from the Comoros to East Africa. It was included in the Review of Significant Trade of 1988. Little is known of the species' population status or life history, Luxmoore *et al.* (1988) considering in the late 1980s that it might be threatened by habitat destruction in parts of its range, but concluding that international trade was not a problem. Annual exports at that time averaged 146-300 specimens, with the Comoros the only range State reported as exporting the species. Recent trade from the Comoros is an order of magnitude greater, and Tanzania has also begun exporting this species in significant quantities. Based on gross trade data, Tanzania's export quota of 2000 specimens, established in 1997, may have been exceeded in 1998, 1999 and 2002. Given the recent increase in trade volumes, the Animals Committee might wish to seek clarification of the basis for making non-detriment findings.

INTERNATIONAL TRADE

Gross exports of *Phelsuma dubia*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Madagascar	Bodies	0	7	0	4	6	0	0	1	1	0	0
Madagascar	Live	663	1390	2262	4	1	0	0	0	6	0	0
Tanzania	Live	100	3	0	200	374	1385	2976	2132	1854	1994	2510
Comoros	Live	20	0	0	0	0	0	0	0	3030	5805	2375

Export quotas for the United Republic of Tanzania

Term	1997	1998	1999	2000	2001	2002	2003
Wild-taken	2000	2000	2000	2000	2000	2000	2000
'F1 specimens'						50	

Phelsuma v-nigra

COMMON NAME: Boettger's Day Gecko (E); Gecko diurne de Boettger (F)
DISTRIBUTION: Comoros, Mayotte
CONSERVATION STATUS: Not listed in the 2003 IUCN Red List
HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. No recommendations formulated.

Phelsuma v-nigra is found in the coastal regions of the Comoros Islands and Mayotte. Very little is known about its status or natural history. This species was included in the Review of Significant Trade in 1988, which concluded that the species was unlikely to be negatively impacted by trade based on average annual exports from the Comoros of 100 specimens, but might be affected locally (Luxmoore *et al.*, 1988). The maximum CITES net trade during the period was 180 specimens in 1981. The 1993 Review of the species concluded that the Comoros should be asked to clarify the biological basis of exports, which were limited to only 125 live animals in 1986 and 60 in 1988 (WCMC *et al.*, 1993).

Following years of no reported trade for this species, in 2000 reported exports totalled 4300 animals, rising to almost 8000 in 2001. The decline in reported exports to 500 in 2002 may reflect the fact that only 50% of annual reports for 2002 had been received at the time these data were prepared. The recent high levels of trade from the Comoros may be a cause for concern and the Animals Committee may wish to review the basis for making non-detriment findings for this species.

INTERNATIONAL TRADE

Gross exports of *Phelsuma v-nigra*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Comoros	Live	30	0	0	0	0	0	0	0	4295	5749	500

RANIDAE

Mantella spp.

Mantella spp., a genus of small, colourful poison frogs, is endemic to Madagascar. This country is currently the subject of a country-wide Review of Significant Trade. CITES reported trade shows the export of significant numbers of several species, most noticeably *M. aurantiaca*, which has a restricted range and is classified as Vulnerable by IUCN (IUCN, 2003). Experts undertaking the Global Amphibian Assessment have highlighted *Mantella* species as potentially traded in significant numbers. Van Dijk (*in litt.* to IUCN SSC Wildlife Trade Programme, January 2004), draws attention to the trade in *Mantella bernhardi*, *M. crocea*, *M. cowani*, *M. milotympanum*, *M. nigricans*, *M. pulchra*, *M. veronica* and *M. viridis*, which also have restricted ranges. The Animals Committee might wish to call attention to the trade in *Mantella* species in when considering further actions required under the country-wide review.

INTERNATIONAL TRADE

Gross exports of *Mantella* spp. from Madagascar

Taxon	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<i>Mantella</i> spp.	0	0	0	0	0	0	60	5 490	9 853	1 420
<i>Mantella aurantiaca</i>	0	50	12 110	16 767	17 506	32 258	854	11 505	10 355	4 780
<i>Mantella bernhardi</i>	0	0	0	0	0	0	30	490	1 005	650
<i>Mantella betsileo</i>	0	0	0	0	0	0	0	1 332	4 040	1 215
<i>Mantella cowani</i>	0	0	0	0	0	0	0	425	975	1 520
<i>Mantella crocea</i>	0	0	0	0	0	0	0	1 157	1 770	630
<i>Mantella expectata</i>	0	0	0	0	0	0	0	1 280	1 810	2 385
<i>Mantella haraldmeieri</i>	0	0	0	0	0	0	0	240	310	380
<i>Mantella laevigata</i>	0	0	0	0	0	0	0	2 537	2 795	1 170
<i>Mantella madagascariensis</i>	0	0	0	0	0	0	0	6 265	8 825	5 570
<i>Mantella milotympanum</i>	0	0	0	0	0	0	0	0	0	1 270
<i>Mantella nigricans</i>	0	0	0	0	0	0	0	0	5	0
<i>Mantella pulchra</i>	0	0	0	0	0	0	0	3 297	4 450	2 890
<i>Mantella veronica</i>	0	0	0	0	0	0	0	155	490	80
<i>Mantella viridis</i>	0	0	0	0	0	0	0	1 921	3 845	2 370

TESTUDINIDAE

Manouria emys

COMMON NAME: Asian Giant Tortoise, Asian Tortoise, Black Giant Tortoise, Burmese Brown Tortoise, Burmese Mountain Tortoise, Six-legged Tortoise (E); Tortue brune (F)

DISTRIBUTION: Bangladesh, ? Brunei Darussalam, China, India, Indonesia, Malaysia, Myanmar, Thailand

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: EN - A1cd+2cd

HISTORY OF REVIEW: Reviewed in 1993, Phase 2. Recommendations formulated for: Malaysia.

Manouria emys has a wide distribution in Southeast Asia and the Greater Sunda Islands, where it inhabits broad-leaved evergreen forests. The species was included in the 1993 Review of Significant Trade, the Animals Committee subsequently recommending that Malaysia advise the Secretariat of the biological basis of its exports and undertake a field assessment of the status of this species. According to Malaysia's response, the study had not produced conclusive population estimates, owing to insufficient time and manpower. Following a recommendation of the Standing Committee, Malaysia informed the Secretariat that an export quota had been set; reported trade remains within quota levels. Recommendations were not made with regard to Indonesia, reported exports from which are significantly higher from 1992-2002 than they were from 1986-1990, the period covered by the earlier review. Concerns have been raised by TRAFFIC Southeast Asia regarding suspected illegal trade. The Animals Committee might consider seeking further details of the results of field studies in Malaysia and the biological basis of exports from Indonesia.

INTERNATIONAL TRADE

Gross exports of live *Manouria emys*

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Indonesia	65	741	221	4	563	861	480	391	430	407	245
Malaysia	37	225	227	103	174	153	219	48	140	189	164

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Indonesia	Live	900	475	450	450	450	450	500
Malaysia	Live		300	50	200	200		
Peninsular Malaysia	Live						500	500

Taxa for which the primary issues of concern appear to be other than Article IV implementation

PYTHONIDAE

Python curtus

COMMON NAME: Sumatran Short-tailed Python (E)
DISTRIBUTION: Indonesia: *Sumatra*
CONSERVATION STATUS: Listed in the 2003 IUCN Red List: VU-A1cd
HISTORY OF REVIEW: Reviewed in 1993, Phase 2. Recommendations formulated for: Indonesia.

Python curtus is a small python considered by the CITES database to be restricted to Sumatra (Indonesia), although previously also thought to occur in Malaysia, Thailand and possibly Brunei (WCMC *et al.*, 1993). The species was included in the 1993 Review of Significant Trade, which concluded that populations of pythons in Indonesia had been adversely affected by habitat loss and/or exploitation, but that information was insufficient to assess the relative impact of either (WCMC *et al.*, 1993). The species occurs in oil palm plantations, where many specimens are reported collected (L. Prijono, pers. comm. to IUCN/SSC Wildlife Trade Programme, 1998).

Python curtus is traded both as skins and as live specimens for the pet trade. The majority of live trade from 1992-2002 was reported from Indonesia (averaging 3200 per year), Malaysia recorded as exporting 549 live specimens in 2001 and 1156 in 2002. CITES data show significant exports of skins from Indonesia during the late 1980s (annual average approximately 62 000) through to 2002, with Malaysia not reported as the exporter of significant numbers of skins until 1994. Indonesia's annual exports remained between 40 000 and 50 000 skins between 1995 and 2001 (2002 data are incomplete), while skins reported as originating from Malaysia climbed from 20 454 in 1994 to 180 324 in 2002, averaging 93 700 during this period.

Attention was drawn to concerns that trade reported as originating from Malaysia might involve the illegal export of skins from Indonesia in December 2003, during the CITES Technical Workshop on Economic Incentives and Trade Policy (Samedi, 2003). TRAFFIC Southeast Asia comments that there are problems of identification of this species in trade, and also noted concerns regarding illegal trade. Clarification of the status of the species in Malaysia and reported exports from that country would appear to be required, as would confirmation of the sustainability of current trade volumes from both countries. A regional approach to addressing this issue, as recommended by Samedi (2003) would appear desirable.

INTERNATIONAL TRADE

Gross exports of *Python curtus*

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Indonesia	Live	2 485	3 557	1 346	2 838	2 845	3 735	4 485	3 019	3 164	4 388	3 337
Indonesia	Skin	91 743	51 880	39 414	47 861	48 436	46 505	43 740	40 760	40 524	43 396	20 512
Indonesia	Skin (m ²)	0	0	93	62	0	0	0	0	0	0	0
Indonesia	Skin pieces	0	1 453	0	2 000	1 000	0	0	0	0	0	0
Malaysia	Live	85	175	15	0	4	8	5	5	1	549	1 156
Malaysia	Skin	0	0	20 454	24 000	24 000	110 578	76 019	73 358	179 905	154 702	180 324
Malaysia	Skin (m)	0	0	0	0	0	0	0	0	0	422	0

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Indonesia	Live		3 240			3 600	3 600	4 000
	Skins and live			43 200	47 320			
	Skins		40 860			41 400	41 400	
	Skins and skin products							41 000
	Skins ?	45 000						

TESTUDINIDAE

Geochelone elegans

COMMON NAME: Indian Star Tortoise, Star Tortoise (E); Tortue étoilée de l'Inde (F); Tortuga estrellada de la India (S)

DISTRIBUTION: ? Bangladesh, India, ? Myanmar, Pakistan, Sri Lanka

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

The Indian Star Tortoise *Geochelone elegans* is restricted in distribution to South Asia and possibly Myanmar. Reported exports from range States are limited to the export of 451 specimens from Pakistan in 1998. There are indications of a large unreported trade in this species - for years, juveniles have consistently been offered for sale in numerous pet shops and markets in Malaysia, Singapore and Thailand. The species has also been involved in a number of confiscations (P. Van Dijk *in litt.* to IUCN/SSC Wildlife Trade Programme, January 2004).

The recorded export of 500 *G. platynota* from Malaysia in 1992 requires investigation. *G. platynota* can be easily confused with *G. elegans*, but is endemic to Myanmar; trade records therefore seem likely to reflect mis-reporting either of the species in trade or of country of origin.

INTERNATIONAL TRADE

Gross exports of live *Geochelone elegans*

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
United Arab Emirates	200	820	250	0	0	0	0	0	0	0	0
Pakistan	0	0	0	0	0	0	451	0	0	0	0

Geochelone platynota

COMMON NAME: Burmese Starred Tortoise, Flatback Tortoise (E); Tortue étoilée de Birmanie (F); Tortuga estrellada de Burma (S)

DISTRIBUTION: Myanmar

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: CR - A1cd+2cd, C2a

The Burmese Starred Tortoise *Geochelone platynota* is endemic to Myanmar and classified by IUCN as Critically Endangered. Platt (1999, cited in Behler *et al.*, 2003) referred to "rampant illegal harvesting" in protected areas in Myanmar as threatening the viability of remaining populations. TRAFFIC Southeast Asia reports that this valuable species is widely sold in the high end pet trade and raises concerns regarding suspected illegal trade. Van Dijk (*in litt.* to IUCN/SSC Wildlife Trade Programme, January 2004) notes that a record of 500 *G. platynota* exported from Malaysia in 1992, may have been mis-identification with *G. elegans*, which it closely resembles. Concerns regarding unreported and likely illegal trade require further investigation.

INTERNATIONAL TRADE

Gross exports of live *Geochelone platynota*

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
South Africa	0	0	0	0	0	0	0	0	3	0	0
China	0	0	0	0	0	0	0	0	0	6	4
Myanmar	0	0	0	0	0	0	0	0	0	0	6
Malaysia	500	0	0	0	0	0	0	0	0	0	0
Totals	500	0	0	0	0	0	0	0	3	6	10

Indotestudo elongata

COMMON NAME:	Elongated Tortoise, Pineapple Tortoise, Red-nosed Tortoise, Yellow Tortoise, Yellow-headed Tortoise (E); Tortue à tête jaune (F)
DISTRIBUTION:	Bangladesh, Cambodia, China, India, Lao People's Democratic Republic, Malaysia, Myanmar, Nepal, Thailand, Viet Nam
CONSERVATION STATUS:	Listed in the 2003 IUCN Red List: EN – A1cd+2cd
HISTORY OF REVIEW:	Reviewed in 1993, Phase 2. Recommendations formulated for: Malaysia (conduct field studies to assess the status of the species)

Indotestudo elongata is distributed from the Himalayas to southeast Asia and southern China. It is exploited for the pet trade, for food and medicinal use. The species was included in the 1993 Review of Significant Trade, and a secondary recommendation made to Malaysia at that time that a field study be undertaken. In December 1994, Malaysia informed the Secretariat that an export quota of 4300 had been set, and in March 1995 that field studies were underway, to be completed later that year. Malaysia's export quota was reduced to 1000 specimens in 1998 and 500 in 2000. Reported gross exports from Malaysia have exceeded the export quota in a number of years.

According to Van Dijk (*in litt.* to IUCN/SSC Wildlife Trade Programme, January 2004) a single record of 6 t exported from Lao PDR in 2001 is indicative of the Asian trade that often remains unrecorded, but does exist, as evidenced by the thousands of animals consistently offered in East Asian markets. TRAFFIC North America similarly notes concern regarding indications of unreported trade to China, Platt (1999) drawing attention to illegal harvesting for trade in Myanmar. Whilst the reported trade from Malaysia may not be detrimental, indications of a much larger unreported trade that is unlikely to be sustainable merits further attention.

INTERNATIONAL TRADE

Gross exports of *Indotestudo elongata*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Viet Nam	Bodies	0	0	0	0	0	0	20	0	0	0	0
Malaysia	Live	895	2 895	920	440	1 100	680	1 591	1 216	530	550	600
Bangladesh	Live (kg)	28 0000	721 010	0	0	0	0	0	0	0	0	0
Lao PDR	Live (kg)	0	0	0	0	0	0	0	0	0	6 000	0
Cambodia	Shell	0	0	0	0	0	0	0	0	1	0	0

Export quotas for Malaysia

Term	1998	1999	2000	2001	2002	2003
Live	1000	1000	500	500	500	500

Indotestudo forstenii

COMMON NAME: Celebes Tortoise, Forsten's Tortoise, Travancore Tortoise (E); Tortue de Tranvancore, Tortue des Celèbes (F); Tortuga marrón de la India (S)

DISTRIBUTION: India, Indonesia

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: EN – A1cd+2cd

Indotestudo forstenii is a restricted-range tortoise classified as Endangered by IUCN. Van Dijk (*in litt.* to IUCN/SSC, January 2004) refers to information presented at the 2002 Kunming Workshop citing indications that recorded trade includes only pet trade exports, with a larger trade in exports for food declared as 'fish' and not recorded in CITES data. Further review of the trade is required to confirm whether the species is subject to high levels of unreported trade and further, the legal, reported trade is maintained within sustainable levels.

INTERNATIONAL TRADE

Gross exports of *Indotestudo forstenii* from Indonesia

Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Bodies	0	0	0	0	0	0	0	6	0	0	0
Carapaces	0	0	0	0	0	0	0	3	0	0	0
Live (kilos)	20	727	199	8	1172	965	415	443	416	444	136

Export quotas for Indonesia

Term	1997	1998	1999	2000	2001	2002	2003
Live	900	475	450	450	450	400	500

II. Taxa traded in significant volumes for which available information indicates that a review by the Animals Committee is not necessary at this time

PYTHONIDAE

Python regius

COMMON NAME:	Ball Python, Royal Python (E); Python royal (F); Pitón real (S)
DISTRIBUTION:	Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Sudan, Togo, Uganda
CONSERVATION STATUS:	Not listed in the 2003 IUCN Red List
HISTORY OF REVIEW:	Reviewed in 1992, Phase 1. Recommendations formulated for: Ghana; Togo.

Python regius is found in the savanna habitat of West and Central Africa, where it is also found in degraded habitats and agricultural areas. Eggs from nests are routinely collected and the eggs incubated to hatch-out the juveniles, which are raised for some months in captivity before export. This species was included in the 1992 Review of Significant Trade, which documented the increase in annual net imports from 6024 live specimens in 1983 to 41 600 in 1989 (WCMC and IUCN/SSC, 1991). Virtually all exports at that time were from Ghana and Togo, and the Animals Committee requested in 1992 that both countries provide the Secretariat with the information on measures to control exports, and recommended that further exports be based on sustainable use management programmes.

Togo failed to provide information in accordance with the review, with the result that the Standing Committee recommended a temporary suspension of imports from this country. In April 1995 the Secretariat accepted a quota for Togo of 1500 wild-caught specimens and 40 000 captive-bred specimens. This quota was accepted on the provision that the Management Authority demonstrated that the specimens exported as "captive-bred" were bred in captivity in accordance with Resolution Conf. 2.12. The Secretariat subsequently undertook, in May 1995, a mission to examine reptile farms in Togo and found that although some pythons (and other species) were being bred in captivity, the specimens were not bred in accordance with Resolution Conf. 2.12, and many gravid females were being removed from the wild and then giving birth in captivity. The Secretariat advised Togo that the specimens should be described as "ranchered", not "captive-bred". The Secretariat subsequently received further information from the Management Authority relating to their implementation of the Animals Committee recommendations, and were therefore satisfied that Togo had initiated the action necessary to implement those recommendations. Reported exports of other than captive-bred specimens from Togo during 2001 and 2002 were more than double levels from 1997 to 2000, but, remained below quota levels.

Similar to Togo, Ghana initially failed to respond to the Animals Committee's recommendations with the result that trade was suspended temporarily, allowed to resume following the establishment of export quotas, including for exports of ranchered specimens. Benin has more recently emerged as a major exporter of *P. regius*, with trade peaking in the mid-1990s, topping 80 000 live snakes in 1995. Exports were below 20 000 live snakes from 1999 to 2001 (2002 data are incomplete). A workshop among CITES authorities and traders in all three countries was held in 2000 to discuss the trade and agree a sub-regional management strategy (Anon., undated).

CITES data show the decline in exports from a high of over 100 000 live specimens in 1994 and 1995 to around 67 000 from 1999 to 2002. Further detail in the detail of the data provided by UNEP-WCMC is required in order to assess trade levels against export volumes for wild and ranchered specimens. The Animals Committee might consider requesting information on the basis of non-detriment findings for Benin's quotas for ranchered specimens, which are double the quotas of Ghana and Togo.

INTERNATIONAL TRADE

Gross exports of *Python regius*

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Benin	Live	8 370	24 981	67 146	81 186	41 798	20 191	23 744	67 283	18 048	15 942	14 233
Ghana	Live	24 188	32 459	8 115	11 011	14 367	14 645	16 444	12 911	8 612	17 263	18 815
Togo	Live	34 863	24 406	56 529	18 008	28 118	19 085	14 304	12 703	15 422	41 144	40 608

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Benin	Wild-taken			2 100	2 500	5 000	2 500	2 500
Benin	Ranched	139 000	139 000	74 000	70 730	112 170	90 170	80 730
Côte d'Ivoire	Skins and live					100		100
Ghana	Live, wild-taken	7 000	7 000	7 000	7 000	7 000	7 000	7 000
Ghana	Live, ranched	28 500	28 500	28 500	28 500	34 000	38 000	40 000
Sierra Leone	Skins					250		250
Togo	Wild-taken	1 500	1 500	1 500	1 500	1 500	1 500	1 500
Togo	Ranched	40 000	52 500	47 500	47 500	52 500	52 500	52 500

Python reticulatus

COMMON NAME: Java Rock Python, Regal Python, Reticulated Python (E); Python réticulé (F); Pitón reticulada (S)

DISTRIBUTION: Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

HISTORY OF REVIEW: Reviewed in 1988 and 1993 (Phase 2). Recommendations formulated for: Indonesia.

Python reticulatus is widespread and common throughout Southeast Asia. There is some trade in live specimens but the majority of trade is in skins for the leather industry. The species was included in the 1988 and 1993 Reviews of Significant Trade, the latter concluding that many populations had been adversely affected by a combination of habitat loss and collection for international trade (WCMC *et al.*, 1993). In addition to recommending a review of management measures, the 1993 review also noted that quotas set by one of the major exporters, Indonesia, had not been implemented. The 1993 review showed that the major exporters - Malaysia, Indonesia, Thailand and Singapore - together exported on average 527 000 skins per annum. More recent export levels were approximately half this amount, averaging 264 550 skins per annum from 1992-2002. Following concern regarding export levels, Shine (1999) undertook a study of the population biology of the species in Indonesia examining specimens collected for the skin trade and concluded that "Rapid growth rate, early maturation and high fecundity are the only things keeping this snake around." He noted that tropical snakes appear to have very different life history characteristics to temperate species and can thus withstand much higher levels of exploitation than would be expected for temperate species occupying similar niches. Indonesia set export quotas of 157 000 skins, 41 000 "skins and skin products" and 5000 live specimens in 2003. Malaysia's 2002 quota was for 280 000 skins. TRAFFIC Southeast Asia comments that there are problems of identification of this species in trade and concerns regarding illegal trade.

INTERNATIONAL TRADE

Gross exports of *Python reticulatus*

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Indonesia	Live	3 046	3 082	1 565	1 838	2 400	2 426	6 944	2 846	3 076	3 842	1 938
Malaysia	Live	0	0	2 431	627	614	0	2 608	750	222	0	111
Indonesia	Meat (kg)	0	3 000	0	0	6 120	10 505	4 000	3 500	0	3 000	6 000
Malaysia	Meat	0	50	11 440	10 821	16 604	13 270	22 395	26 685	24 490	19 330	6 147

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	(kg)											
Indonesia	Skin	310 693	174 546	226 256	147 773	169 764	192 165	187 593	156 943	160 050	160 012	62 903
Malaysia	Skin	96 029	110 740	115 568	81 228	179 030	232 685	142 004	176 946	340 270	193 078	172 209
Viet Nam	Skin	2 459	16 493	27 172	23 532	17 333	18 955	7 030	1 261	300	1 029	0
Indonesia	Skin (m ²)	8 946	10 194	8 644	7 479	3 775	0	0	0	0	0	0
Viet Nam	Skin (m)	0	10 000	10 000	3 000	0	0	0	0	2 500	0	0

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Indonesia	Live		5 400			4 500	4 500	5 000
	Skins and live			162 000	170 830			
	Skins		138 600			157 500	157 500	157 000
	Skins and skin products							41 000
	Skins ?	162 000						
Malaysia (Peninsula)	Live						1 000	
	Skins						280 000	

TESTUDINIDAE

Testudo graeca

COMMON NAME: Common Tortoise, Greek Tortoise, Moorish Tortoise, Spur-thighed Tortoise (E); Tortue grecque, Tortue grecque, Tortue mauresque (F); Tortuga mora (S)

DISTRIBUTION: Albania, Algeria, Armenia, Azerbaijan, Bulgaria, Cyprus (int), ? Egypt, France (int), Georgia, Greece, Iran (Islamic Republic of), Iraq, Israel, Italy (int), Jordan, ? Lebanon, Libyan Arab Jamahiriya, Macedonia, former Yugoslav Republic of, Moldova, Republic of, Morocco, Romania, Russian Federation, Serbia and Montenegro, Spain (int), Syrian Arab Republic, Tunisia, Turkey, Turkmenistan, Ukraine

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: VU-A1cd

HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. No recommendations formulated.

Testudo graeca has a wide distribution across North Africa, south-eastern Europe and western Asia. It occurs in a wide variety of habitats and bioclimatic zones. In the period 1986-1990, Turkey was the most consistent exporter (annual average of approximately 4000 animals), with a single year of high trade in 1987, with exports of 10 000 animals from Morocco and 7000 from Yugoslavia. The species was included in the 1993 Review of Significant Trade, which concluded that present overall trade levels were unlikely to be a problem, although certain populations had been damaged by heavy collecting pressure during the 1970s (WCMC *et al.*, 1993). The Animals Committee made a secondary recommendation to Turkey requesting an assessment of the conservation status of the species and information on the impact of harvest levels.

Exports remained low from 1992-2002 apart from a single year's export of 3629 animals reported from Lebanon in 2002. Van Dijk (*in litt.* to IUCN/SSC Wildlife Trade Programme, January 2004) comments that recent trade levels do not provide cause for immediate concern, but that monitoring of local tortoise population levels and an indication of the basis of non-detriment findings would be appropriate if trade continues at this level.

INTERNATIONAL TRADE

Gross exports of live *Testudo graeca*

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Egypt	205	6	365	6 118	1 324	0	0	0	0	0	0
Lebanon	0	0	0	0	0	15	0	800	0	200	3 629
Turkey	2 458	6 633	3 120	867	1 350	0	4 500	0	0	0	0

Testudo horsfieldii

COMMON NAME: Afghan Tortoise, Central Asian Tortoise, Four-toed Tortoise, Horsfield's Tortoise, Steppe Tortoise (E); Tortue des steppes, Tortue d'Horsfield (F); Tortuga terrestre afgana (S)

DISTRIBUTION: Afghanistan, Armenia, Azerbaijan, China, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Pakistan, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan

CONSERVATION STATUS: Listed in the 2003 IUCN Red List: VU – A2d

HISTORY OF REVIEW: Reviewed in 1988 and 1992, Phase 1. Recommendations formulated for: Kazakhstan; Russian Federation; Turkmenistan; Uzbekistan.

Testudo horsfieldii is a small central and southwest Asian tortoise. The species does not mature until 11-14 years of age and produces two clutches of five to six eggs per year. It was included in the Review of Significant Trade in 1988 (Luxmoore *et al.*, 1988), at which time it was thought that levels of harvest might be unsustainable. In the 1980s, annual net reported imports varied from a high of 97 512 to a low of 24 011 specimens, with the USSR recorded as the major exporter (Luxmoore *et al.*, 1988). It was reviewed again in 1992 (WCMC and IUCN/SSC, 1991).

Following the 1988 Review, a number of range States reviewed their management of this taxon and provided reports to the CITES Secretariat. Following the Secretariat's further request for information in 1992 (per a recommendation of the Animals Committee), in October 1992 Turkmenistan informed the Secretariat that it had not authorised exports of the species (Doc. SC.30.6.1). No exports have been recorded from that country since that year. In 1993, Kazakhstan provided a 1989 paper on this species from its Academy of Sciences, which estimated the population of the Arrisk Massif at 1.66 million animals, and included an explanation of the survey methodology used. The annual capture under licence in this area was 20 000 to 80 000 until 1992, when capture was prohibited. Poaching has been reported, however. Although population numbers have been estimated for other areas, monitoring is not regular. No exports were reported between 1992 and 2001, with harvest prohibited in 1997 and 1998 (Theile, 2000). In 2001, CITES data show the export from Kazakhstan of 35 000 animals (export quota of 40 000 animals).

Uzbekistan, another major exporter, in 1994 informed the Secretariat that the estimated population of this taxon was 15 million individuals, that the estimated take from the wild in 1993 was 3750 and that the quota for 1994 was 30 000 animals. However, in 1995 Uzbekistan informed the Secretariat that no export of this species had been authorised in 1994, to allow the populations to grow. The Institute of Zoology of the Academy of Sciences had re-assessed the population and concluded that it was roughly 10 million. On the basis of the results of a seminar held by the Wild Animal Quota Commission of the Institute of Zoology, Uzbekistan wished to establish a quota of 10 000. The Secretariat expressed no objection but asked for copies of the papers from the seminar. The Secretariat was satisfied that no further action was required to implement the recommendation of the Animals Committee. According to information in Theile (2000), Uzbekistan's population has been estimated at between 10 and 20 million individuals. Surveys showed that population densities varied greatly, and that widespread collection of the species for trade had apparently resulted in localised population declines (the species is also affected by habitat alteration). Uzbekistan set an export quota of 25 000 wild-collected animals for 2003.

Seizures of illegal shipments of *T. horsfieldii* provide evidence of illegal trade and indicate that total trade numbers are in excess of reported trade volumes.

INTERNATIONAL TRADE

Gross exports of live *Testudo horsfieldii*

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Russian Federation	0	0	7 300	4 198	3 700	3 411	0	0	0	0	3
Soviet Union	1 002										
Kazakhstan	0	0	0	0	0	0	0	0	35 000	0	0
Ukraine	0	1 000	675	4 000	0	0	0	0	0	0	0
Uzbekistan	0	0	0	0	0	0	26 000	36 100	26 500	32 700	15 000
Other	2 964	376	4 000	12	0	0	0	0	0	0	0

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Russian Federation	Re-exports from Tajikistan			15 000				
Russian Federation	Re-exports from Kazakhstan			20 000				
Russian Federation	Re-exports from Uzbekistan	20 000	25 000					
Tajikistan	Wild-taken					2000		
Uzbekistan	Wild-taken		25 000	35 000	35 000			25 000
Uzbekistan	Ranched							5 000
Uzbekistan	Wild-taken and Ranched					30 000		
Uzbekistan	Live (confiscated)							1 150
Kazakhstan	Live				39 000	40 000		

VARANIDAE

Varanus exanthematicus

COMMON NAME: African Large-grain Lizard, African Savanna Monitor, Bosc's Monitor, Northern Savanna Monitor (E); Varan des savanes, Varan des steppes (F)

DISTRIBUTION: ? Benin, ? Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, ? Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, ? Liberia, Mali, Mauritania, ? Niger, Nigeria, Senegal, Sierra Leone, Sudan, Togo

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. No recommendations formulated.

Varanus exanthematicus is widely distributed throughout sub-Saharan Africa, inhabiting savannah and open woodland. The species was included in Reviews of Significant Trade in 1988 and again in 1993. The 1993 review concluded that there was no evidence that reported international trade was a significant threat to the species (WCMC *et al.*, 1993).

According to De Buffrenil (1991), commercial demand for this species is limited, particularly in comparison with that for *V. niloticus*. Reported trade during the 1980s involved skins and live specimens. Reported skin exports from range States averaged approximately 80 000 per year from 1980-1985, the overall volume of trade being significantly lower in the period 1986-1990 (WCMC *et al.*, 1993). Reported exports from 1992-2002 were at or below 50 skins per year with the exception of the reported export of 20 000 skins in 1997.

The live trade has increased since the 1980s, averaging 1708 animals annually from 1980-1985, increasing to an annual average of 6654 animals from Ghana and 3923 from Togo, the main exporters, from 1986-

1990. From 1992-2002, annual live exports averaged 23 330 specimens, well below the former levels of skin exports. Exports from Ghana increased from 13 000 animals in 2001 to over 30 000 animals in 2002. This species was said to be "reasonably common" in Ghana in 1993, including around towns, despite being used for food; however, no quantitative data on populations was available at that time (B. Hughes, pers. comm., cited in WCMC *et al.*, 1993).

INTERNATIONAL TRADE

Gross exports of *Varanus exanthematicus*

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Mali	Skin	0	0	0	0	0	20 000	0	0	0	0	0
Benin	Live	495	4 622	14 422	13 110	6 601	2 972	5 479	3 841	4 090	3 091	1 159
Ghana	Live	7 450	7 458	8 706	12 172	15 323	14 176	13 356	12 936	16 913	13 081	30 351
Togo	Live	7 460	7 820	18 289	15 997	11 929	5 512	4 581	5 709	4 445	6 217	8 128

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Benin	Wild-taken			1 700	2 000	3 000	1 500	1 500
	Ranched	19 500	19 500	13 000	13 250	26 185	15 250	1 000
	Skins, wild-taken						5 000	
	Skins ?							5 000
	Skins, ranched					5 000		
Ethiopia	Live				500	500	500	500
Togo	Wild-taken	3 000	3 000	3 000	3 000	3 000	3 000	3 000
	Ranched	8 000	7 000	6 500	6 500	7 000	7 000	7 000
Mozambique	Skins and live	3 000	3 000					
Congo	Live					500		

Varanus niloticus

COMMON NAME: African Small-grain Lizard, Nile Monitor (E); Varan du Nil (F); Varano del Nilo (S)

DISTRIBUTION: Angola, Benin, Botswana, ? Burkina Faso, Burundi, Cameroon, ? Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, ? Djibouti, Egypt, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, United Republic of Tanzania, Togo, Uganda, Zambia, Zimbabwe

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. Recommendations formulated for: Benin; Cameroon; Chad; Mali; Sudan.

Varanus niloticus is very widespread within sub-Saharan Africa, associated with water courses and permanent water sources. The species was included in the 1993 Review of Significant Trade, when it was concluded that international trade at levels reported by the Parties was not likely to be a significant threat to the species (WCMC *et al.*, 1993).

International trade averaged 408 292 skins annually from 1980-1985, and similar volumes were recorded from 1986-1990 (WCMC *et al.*, 1993), but declined to an annual average of 144 987 skins from 1992-2002. Trade in live animals in the period 1986-1990 peaked at an annual total of 5884 animals in 1989, but has since risen to an annual average of 9917 animals in the period 1992-2002.

As a result of the 1993 Review of Significant Trade, recommendations were made for Benin, Cameroon, Chad, Mali and Sudan. Chad implemented the primary recommendation, establishing an export quota of 80 000 skins. Gross reported exports from Chad exceeded this level in 1999. Sudan agreed to establish a quota of 100 000 skins. Reported exports have only exceeded this level in 2000, when there were gross

reported exports of almost 150 000 skins. Mali established an initial annual harvest quota of 150 000, which was increased to 180 000 skins and since 1997, exports have been well below this level. Cameroon established a quota of 70 000 skins, and with the exception of 1996, exports have been within this limit. In 1993 Benin restricted exports to specimens sourced from captive breeding operations and after 1994, there are no reports of wild-sourced skins exported from Benin. In 2001, 155 000 skins were reportedly exported from Guinea, a country which had hitherto only been exporting small amounts in an inconsistent pattern.

INTERNATIONAL TRADE

Gross exports of *Varanus niloticus*

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Benin	Live	640	5 532	10 551	6 657	3 858	1 515	3 146	2 598	1 370	1 750	837
Togo	Live	7 072	5 547	12 335	12 308	9 901	4 239	4 992	3 594	2 275	4 631	6 212
Tanzania	Live	20	634	1 271	1 201	1 091	383	615	987	710	1 498	1 682
Cameroon	Skins	28 130	51 509	66 539	122 910	98 267	40 850	48 410	2 000	1	0	1
Guinea	Skins	17 000	30 100	22 211	12 000	0	0	0	0	8 000	15 500	0
Mali	Skins	10 500	55 000	45 500	82 997	225 750	112 820	75 710	41 180	66 748	68 481	56 362
Sudan	Skins	384 002	67 000	75 134	101 778	124 751	62 010	38 103	83 825	148 500	75 000	52 000
Chad	Skins	60 110	98 485	41 771	38 293	63 967	36 051	23 488	95 447	53 312	72 992	42 888
Togo	Skins	10 100	8 130	12 291	0	0	0	0	0	0	10 815	1 500

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Benin	Ranched	18 800	18 800	18 800	10 000	21 622	9 600	6 600
Benin	Skins ?							2 500
Benin	Skins, ranched					5 000	2 500	
Cameroon	Skins		70 000	70 000	70 000	70 000	70 000	70 000
Cameroon	Wild-taken							
Chad	Wild taken, total width >0.2 m					80 000		
Chad	Skins	80 000	80 000	80 000	80 000			
Congo	Live					500		
Ethiopia	Live				750	750	750	750
Mali	Skin	180 000	180 000	180 000			?	180 000
Mozambique	Skins and live	3 000	3 000	3 000	3 000	3 000	3 000	3 000
Sudan	Skins	100 000	100 000	100 000		150 000		
Togo	Wild-taken	3 000	3 000	3 000	3 000	3 000	3 000	3 000
Togo	Ranched	7 000	6 000	7 500	7 500	7 500	7 500	7 500
Tanzania	Wild-taken	3 000	3 000	3 000	3 000		3 000	3 000
Tanzania	F1 specimens			25	29	10	25	50

Varanus salvator

COMMON NAME: Common Water Monitor, Malayan Monitor, No-mark Lizard, Plain Lizard, Rice Lizard, Ring Lizard, Two-banded Monitor, Water Monitor (E); Varan à deux bandes, Varan aquatique commun (F); Varano de dos bandas (S)

DISTRIBUTION: Bangladesh, ? Brunei Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Sri Lanka, Thailand, Viet Nam

CONSERVATION STATUS: Not listed in the 2003 IUCN Red List

HISTORY OF REVIEW: Reviewed in 1988 and 1993, Phase 2. Recommendations formulated for Indonesia.

Varanus salvator is the most widely distributed of the Asian monitor lizards and appears to flourish around human settlement. It was included in the 1993 Review of Significant Trade which concluded that it was locally abundant despite prolonged exploitation, although local declines had been reported (WCMC *et al.*,

1993). Reported trade varied between 1 and 1.5 million skins annually, with Indonesia the major exporter with annual exports from 1986-1990 averaging 955 300 skins. During the same period exports from Thailand averaged 254 250 and from Malaysia averaged 143 750, trade from the Philippines was decreasing at this time. From 1992-2002 the major skin exporters were Indonesia and Malaysia, with annual average exports of 514 600 and 140 520 skins respectively. Whilst exports from Malaysia have remained fairly stable between 1986-1990 and 1992-2002, those from Indonesia have almost halved between the two periods. In 1995, following recommendations from the 1993 Review of Significant Trade, Indonesia informed the Secretariat that it would establish an annual export quota of 350 000 skins per year. Export quotas were increased as of 1997, varying from a low of 408 600 to a high of 440 000, almost 100 000 more than originally agreed with the Secretariat. The Animals Committee might want to request additional information regarding the basis of this increase.

INTERNATIONAL TRADE

Gross exports of *Varanus salvator*

Country	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Indonesia	Live	4 023	4 330	2 387	3 417	4 778	4 038	6 618	4 019	3 966	5 182	2 846
Malaysia	Live	910	3 692	981	620	659	683	915	18 169	7 439	7 900	14 117
Malaysia	Live (kg)	0	0	0	0	0	0	0	0	0	0	20 800
Malaysia	Meat (kg)	0	0	0	0	960	0	0	700	10 100	13 140	19 140
Indonesia	Skins	1 028 076	575 605	356 114	379 121	458 038	720 211	396 013	632 189	431 843	669 360	117 218
Malaysia	Skins	2 973	9 168	6 882	11 399	0	0	0	0	0	0	0
Indonesia	Skin pieces	1 368	64 540	36	36 467	1 194	0	48	0	17	0	0

Export quotas

Country	Term	1997	1998	1999	2000	2001	2002	2003
Indonesia	Live		5 400			5 400	5 400	6 000
	Skin		408 600			444 600	444 600	444 000
	Live and Skins			450 000	471 200			
	?	432 000						
Malaysia	Live							
	Skins							
Peninsular Malaysia	Live						12 000	
	Skin						160 000	

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PISCES AND INVERTEBRATAE

I. Taxa identified as possible candidates for the Review of Significant Trade

Mollusca

Tridacnidae

Hippopus hippopus, *Tridacna crocea*, *T. maxima*, *T. squamosa* and *T. derasa*

COMMON NAME(S): Giant clams

DISTRIBUTION: Indo-Pacific tropical seas: extending from Japan south-east to the Islands of the south-west Pacific, and west as far as south-eastern Australia.

CONSERVATION STATUS: VU A2cd: *Tridacna derasa*; *T. gigas*; *T. rosewateri*

VU B1+2c: *T. tevoroa*

LR/cd: *Hippopus hippopus*; *H. porcellanus*; *T. maxima*; *T. squamosa*

LR/lc: *T. crocea*

HISTORY OF REVIEW: All nine species reviewed in 1995, Phase 3. Recommendations formulated at the genus level for *Tridacna crocea*, *T. maxima* and *T. squamosa* for the Philippines and the Solomon Islands.

The molluscan family Tridacnidae, or giant clams, is composed of two genera and nine species: *Tridacna crocea*, *T. derasa*, *T. gigas*, *T. maxima*, *T. rosewateri*, *T. squamosa*, *T. tevoroa*, *Hippopus hippopus*, and *H. porcellanus*. *Tridacna derasa* and *T. gigas* were listed in Appendix II in 1983, with the remaining seven species in the family being listed in Appendix II in 1985. IUCN (2003) classifies four species of Tridacnidae as Vulnerable and the five others are considered to be Lower Risk.

Giant clam species are all particularly vulnerable to over-harvesting because of their late sexual maturity, their general distribution within shallow waters which provides easy access for collection, and breeding behaviour that affects reproduction as soon as a low broodstock density threshold is reached. Several species, e.g. *Hippopus hippopus*, *Tridacna derasa* and *T. gigas*, have already been declared extinct, locally or totally, by range some States; and remaining populations are potentially becoming rapidly depleted throughout the range of the species (Raymakers *et al.*, in prep.). See UNEP-WCMC (2004) for further information on the status of Tridacnidae species in individual range States.

Shells, live specimens, meat (particularly the prized adductor muscle) and "carvings" represent the vast majority of tridacnid trade as reported in CITES annual reports. The value of the meat is high and increasing. Except for some of the trade in "live" specimens for the aquarium trade that comes from aquaculture operations, global trade is relying almost entirely on wild-sourced specimens, particularly for meat. Domestic consumption and use, whether for subsistence or commercial purposes, is potentially high in many countries. In the few countries where fishing is prohibited or strictly regulated, poaching has been reported; illegal trade has also been reported, e.g. Indonesia to Singapore, Papua New Guinea to Indonesia (Raymakers *et al.*, in prep.).

There is a general lack of population status information and monitoring of the harvest of giant clams. There is therefore general concern for the adequacy of the making of non-detriment findings for giant clam species in international trade. There are few regulations or legislative management measures in place, and little knowledge on the level of traditional management for giant clam resources as well as on the way it contributes to the conservation of the species. In most range States, the harvest and use of giant clams are regulated inadequately or not at all, for instance subsistence fisheries for giant clams are not subject to any governmental management rules in most range States (Raymakers *et al.*, in prep.).

All nine species of giant clams were included in the third phase of the Review of Significant Trade in 1995. The Animals Committee formulated recommendations for *Tridacna crocea*, *T. maxima* and *T. squamosa* for the Philippines and the Solomon Islands. Following these, the Philippines adopted, in April 1996 a total prohibition on exports of all giant clam (Tridacnidae) specimens, while the Solomon Islands reported that

only exports of cultured giant clams were allowed (Doc. AC.13.14.1, September 1996). The CITES Secretariat and the Animals Committee were satisfied with the implementation of the recommendations.

From 1987-1992, the majority of meat originated in the Philippines (IUCN *et al.*, 1996). Since the time of the first Review of Significant Trade, a shift has occurred in the important countries of origin, particularly given that the Philippines established an export ban in 1996; both Viet Nam and Mozambique have emerged as the most significant exporters of certain types of Tridacnidae specimens recorded in international trade, whereas they were not exporting Tridacnidae specimens at the time of the first Review of Significant Trade.

Species recommended for inclusion in the Review of Significant Trade

- *Tridacna crocea*, *T. maxima*, *T. squamosa*

These three species are of the greatest conservation concern, given a general lack of population status information in the main exporting countries, significant volumes in trade, and shifting countries of origin for specimens in trade.

- *Hippopus hippopus* and *T. derasa*

Recent volumes of *Hippopus hippopus* and *T. derasa* in trade are considerably smaller than those reported for the three species named above. However, given that some of this trade may be being reported at the genus or family level, and given restricted distributions and/or reported population declines in some countries, it may also be prudent to include these species in the Review to confirm the basis for making non-detriment findings.

Species not recommended for inclusion in the Review of Significant Trade

- *H. porcellanus*

The most recent significant exports in terms of quantity occurred in 1992.

- *T. gigas*

Exports have decreased in recent years, with only the export of 2900 kg of shells from Viet Nam in 2000 being of potential concern. However, if trade in this species from Viet Nam is likely to continue in significant quantities, given that the level of exports from Viet Nam of other Tridacnidae species appears to merit review, the Animals Committee may wish to consider whether inclusion of this species in the Review would also be merited to confirm the basis for making non-detriment findings.

- *T. rosewateri* and *T. tevoroa*

CITES data show no reported international trade.

INTERNATIONAL TRADE

Gross exports of *Tridacna crocea*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Australia	Live	0	80	8	158	34	140	0	0	0	0	0
Australia	Shells	0	500	500	0	0	0	0	0	0	0	0
ex. Trust Territory	Live	0	0	59	0	0	0	0	0	0	0	0
Fiji	Live	0	0	50	31	4	1 351	5 113	2 507	866	99	303
Fiji	Live (kg)	0	0	0	0	0	0	39	0	0	0	0
Fiji	Shells	0	0	0	0	0	0	40	0	0	0	0
Indonesia	Live	0	0	82	0	0	8	0	0	2	50	0
Malaysia	Live	0	0	0	0	0	0	5	0	0	0	0
Malaysia	Shells	0	0	0	0	24	0	0	0	1	0	0
New Caledonia	Shells	0	0	0	0	0	0	120	66	300	345	257
Papua New Guinea	Shells	0	0	0	0	0	0	1	0	0	0	0
Palau	Live	100	0	18	0	40	0	58	0	0	0	0
Palau	Shells	0	0	0	0	0	0	0	1	0	0	0
Philippines	Live	250	41 341	75 460	82 539	38297	0	392	0	0	0	0
Philippines	Live (kg)	0	760	0	0	0	0	0	0	0	0	0
Philippines	Meat	0	55 511	0	0	0	0	0	0	0	0	0
Philippines	Meat (kg)	29 475	65 111	60 331	59 737	28 100	0	0	0	0	0	0
Philippines	Shells	59 319	43 202	22 275	24 300	408	0	0	41	0	0	0
Philippines	Shells (bags)	0	0	6 220	0	0	0	0	0	0	0	0
Pitcairn	Live	0	0	60	0	0	0	0	0	0	0	0
Singapore	Live	0	0	0	42	0	0	0	0	0	0	0
Solomon Islands	Live	0	200	2 184	3 093	6 685	9 524	7 847	4 025	1 273	5 400	3 864

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Solomon Islands	Shells	0	0	0	28	0	0	0	0	0	0	0
Thailand	Live	0	13	0	0	0	0	0	0	0	0	0
Tonga	Live	0	1 204	0	282	57	0	0	0	65	0	12
Unknown	Live	0	0	0	0	0	25	90	0	0	0	0
Vanuatu	Live	0	0	0	0	0	250	15 310	11 150	17 386	8 290	232
Vanuatu	Live (kg)	0	0	0	0	0	0	179	0	266	0	100
Vanuatu	Shells	0	0	0	0	0	150	202	0	462	0	0
Viet Nam	Live	0	0	0	0	0	500	46 390	36 500	40 000	62 203	48 342
Viet Nam	Shells (kg)	0	0	0	0	0	0	0	0	4	0	0

Gross exports of *Tridacna derasa*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ex. Trust Territory	Live	0	0	376	234	0	213	0	0	0	0	0
ex. Trust Territory	Shells	0	0	0	10	0	0	0	0	0	0	0
Fiji	Live	0	499	342	96	379	1 988	1 494	2 121	1 217	942	194
Fiji	Live (kg)	0	0	0	0	0	174	3	0	0	35	0
Fiji	Shells	0	0	0	0	0	27	20	0	0	0	0
Fiji	Shells (kg)	0	0	0	0	0	12	0	0	0	0	0
Indonesia	Live	0	0	0	0	0	30	0	0	3	803	0
Kiribati	Shells	0	1	0	0	0	0	0	0	0	0	0
Marshall Islands	Live	0	0	0	0	0	0	0	0	0	124	32
Micronesia	Live	0	50	0	0	0	0	0	0	0	0	0
New Caledonia	Shells	0	0	0	0	0	0	103	93	211	310	192
Palau	Live	137	0	817	54	188	0	112	157	884	1 902	1 218
Palau	Meat	0	0	0	0	8	0	0	0	0	0	0
Palau	Shells	0	0	0	0	138	0	9	1	2	2	0
Philippines	Live	0	0	115	0	158	0	0	0	0	0	0
Philippines	Shells	0	0	6	0	0	0	0	0	0	0	0
Pitcairn	Live	0	0	114	0	0	0	0	0	0	0	0
Samoa	Live	0	0	0	0	116	1 108	0	100	2 004	159	0
Solomon Islands	Live	0	1 175	1 778	8 283	11 217	7 978	8 320	6 941	5 543	1 815	45
Solomon Islands	Shells	0	0	0	20	0	118	0	0	0	0	0
Tonga	Live	11	2 363	0	1 119	4 232	721	2 705	1 431	1 407	1 523	867
Tonga	Live (kg)	0	0	0	0	0	43	0	0	75	54	0
Tonga	Shells (kg)	0	0	0	0	0	0	0	0	0	11 000	0
United States	Live	254	100	0	0	0	0	0	0	0	0	0
United States	Shells	200	0	0	0	0	0	0	0	0	0	0
Unknown	Live	0	0	0	0	0	10	344	0	0	0	0
Unknown	Shells	0	0	0	0	0	1	4	0	0	0	0
Vanuatu	Live	0	0	0	0	0	0	0	150	905	0	0
Vanuatu	Shells	0	0	0	0	0	4	0	0	25	0	0

Gross exports of *Tridacna gigas*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Australia	Live	0	10	0	0	0	5	0	0	0	0	0
Australia	Shells	0	0	0	0	0	0	3	0	4	1	0
ex. Trust Territory	Live	0	0	233	52	0	2	35	0	0	0	0
ex. Trust Territory	Shells	0	0	0	1	0	0	0	0	0	0	0
Fiji	Live	0	0	0	3	0	196	13	113	46	0	53
Indonesia	Live	1	0	0	0	0	0	0	0	0	5	0
Indonesia	Shells	0	0	0	0	0	0	0	0	21	0	0
Kiribati	Live	0	2	0	0	0	0	0	0	0	0	0
Kiribati	Shells	0	0	0	2	0	0	12	0	4	2	0
Marshall Islands	Live	1	2	61	288	0	0	16	7	0	0	0
Morocco	Live	0	0	6	0	0	0	0	0	0	0	0

New Caledonia	Shells	6	0	0	0	0	0	0	0	0	6	11
New Zealand	Shells	0	0	0	0	0	0	2	0	0	0	0
Papua New Guinea	Meat (kg)	0	0	0	0	2 000	0	0	0	0	0	0
Papua New Guinea	Shells	25	8	5	9	3	1	0	0	0	2	0
Palau	Live	30	0	0	0	0	0	0	0	39	0	0
Philippines	Live	0	0	30	0	3	0	0	320	390	0	0
Philippines	Live (kg)	1 036	0	0	0	0	0	0	0	0	0	0
Philippines	Shells	736	1	6	1	0	2	0	35	0	0	0
Philippines	Shells (kg)	3 600	0	0	0	0	0	0	0	0	0	0
Solomon Is.	Bodies	0	0	0	14	0	0	0	0	0	0	0
Solomon Is.	Live	0	1 492	795	2 106	1 660	717	258	354	11	4	12
Solomon Is.	Shells	2	0	0	0	0	0	0	0	0	0	0
South Africa	Shells	0	0	0	0	0	1	1	0	0	0	0
Sri Lanka	Live	2	0	0	0	0	0	0	0	0	0	0
Tonga	Shells	0	0	0	0	0	0	0	0	0	10	0
United States	Live	1	0	0	0	0	0	0	0	0	0	0
Unknown	Live	0	0	0	0	0	0	8	0	0	0	0
Vanuatu	Live	0	0	0	0	0	0	0	100	0	0	0
Vanuatu	Shells	0	3	6	0	0	2	10	11	0	0	2
Viet Nam	Live	0	0	0	2	0	0	0	0	0	0	100
Viet Nam	Shells (kg)	0	0	0	0	0	0	0	0	29 000	0	0

Gross exports of *Tridacna maxima*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Australia	Bodies	0	60	0	0	0	0	0	0	0	0	0
Australia	Live	0	30	0	0	34	0	0	0	0	0	0
Australia	Shells	0	50	91	0	0	0	5	0	0	0	0
Cook Islands	Live	0	0	0	0	0	0	0	0	0	0	300
Cook Islands	Shells	0	0	0	0	8	0	16	0	6	0	0
Egypt	Live	0	0	520	2 362	1 729	992	1 925	905	0	0	0
Egypt	Shells	0	0	0	50	0	0	0	0	0	0	0
ex. Trust Territory	Live	0	0	916	597	788	3 202	921	0	0	0	0
Fiji	Live	0	0	55	0	35	5 576	5 474	4 986	5 069	5 168	1 558
Fiji	Live (kg)	0	0	0	0	0	211	165	0	0	117	0
Fiji	Shells	0	0	0	0	0	0	215	0	0	775	0
Fiji	Shells (kg)	0	0	0	0	0	26	0	0	0	0	0
French Polynesia	Shells	0	0	0	0	0	20	0	0	0	3	0
Kenya	Live	0	0	0	177	0	0	0	0	0	0	0
Madagascar	Live	0	0	0	0	0	0	4 283	0	0	60	0
Madagascar	Shells	0	0	0	0	4 375	0	0	2 500	2 500	3 491	2 967
Malaysia	Live	0	0	0	0	0	0	5	0	0	0	0
Marshall Is.	Live	3 268	369	571	450	25	0	770	4 915	2 172	2 810	3 809
Marshall Islands	Live (kg)	0	162	0	0	0	0	0	0	0	0	0
Marshall Islands	Shells	0	0	0	0	0	0	0	0	0	37	0
Micronesia	Live	0	0	0	0	0	0	465	2 996	5 876	3 641	3 608
Morocco	Live	0	0	22	0	0	0	0	0	0	0	0
Mozambique	Shells	0	0	0	0	0	6 260	27 000	16 600	0	11 000	0
Mozambique	Shells (kg)	0	0	0	10 000	0	64 000	25 500	25 040	21 000	22 000	0
New Caledonia	Shells	0	0	0	0	0	0	1 991	855	1 108	1 200	1 217
Papua New Guinea	Shells	0	0	0	0	0	9	0	0	4	0	0
Palau	Shells	0	0	0	0	0	0	0	0	1	0	0
Philippines	Live	0	0	8	0	400	0	0	0	0	0	0
Philippines	Shells	0	0	1	0	0	1	0	875	0	0	0
Samoa	Live	0	0	0	0	100	1	0	100	2 340	111	0

Seychelles	Live	0	0	900	800	0	50	0	0	0	0	0
Seychelles	Shells	0	0	0	200	4	4	0	0	0	0	0
Singapore	Live	0	0	0	66	0	0	0	0	0	0	0
Singapore	Shells	0	0	4	0	0	0	0	0	0	0	0
Solomon Islands	Live	0	933	1 588	3 575	4 420	2 962	1 662	541	453	162	721
Solomon Islands	Shells	0	0	0	56	0	18	0	0	0	0	0
Sri Lanka	Bodies	0	3	0	0	0	0	0	0	0	0	0
Sri Lanka	Live	0	10	0	0	0	0	0	0	0	0	0
Tonga	Live	0	3 450	0	0	0	2 122	9 021	5 901	4 955	4 621	5 572
Tonga	Live (kg)	0	182	0	0	0	62	0	264	276	399	100
Tonga	Shells (kg)	0	0	0	0	0	0	0	25	0	500	0
Unknown	Live	0	0	0	0	0	2 012	529	1 325	0	0	0
Vanuatu	Live	0	0	0	0	0	20	800	525	6 641	2 798	5 079
Vanuatu	Live (kg)	0	0	0	0	0	0	0	0	10	0	0
Vanuatu	Shells	0	0	4	0	0	45	22	6	140	0	200
Viet Nam	Live	0	0	0	0	0	310	5 240	9 000	9 250	8 250	7 700
Viet Nam	Shells (kg)	0	0	0	0	0	0	0	0	1000	0	0

Gross exports of *Tridacna squamosa*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Australia	Shells	0	0	0	0	0	0	1	0	0	0	0
Belgium	Live	0	0	6	0	0	0	0	0	0	0	0
Egypt	Live	0	0	0	0	1 316	775	1 310	430	0	0	0
ex. Trust Territory	Live	0	0	166	376	90	425	395	0	0	0	0
ex. Trust Territory	Shells	0	0	0	0	0	2	0	0	0	0	0
Fiji	Live	0	0	280	49	137	1 040	156	305	127	160	597
Fiji	Shells	0	0	0	0	0	0	0	0	0	42	0
Indonesia	Live	0	0	0	0	0	20	0	20	0	100	0
Indonesia	Shells	0	0	2	0	0	0	0	0	0	53	0
Kenya	Shells	0	0	0	0	0	0	0	0	0	0	2
Kiribati	Shells	0	0	0	3	0	0	0	0	0	0	0
Madagascar	Shells	0	0	0	0	1 875	0	2	0	0	0	0
Marshall Islands	Live	0	0	50	123	65	0	270	378	403	1 020	1 312
Micronesia	Live	0	0	0	0	0	0	0	0	0	0	1
Mozambique	Shells	0	0	0	0	40 200	0	0	0	0	0	0
Mozambique	Shells (kg)	0	0	0	20 000	10 010	0	0	0	0	0	0
New Caledonia	Shells	0	0	0	0	0	0	218	211	269	258	318
Papua New Guinea	Meat (kg)	0	0	0	0	2 000	0	0	0	0	0	0
Papua New Guinea	Shells	0	8	1	6	4	2	0	0	0	0	0
Palau	Live	50	0	0	0	2	0	0	0	0	0	0
Philippines	Live	0	0	5	0	2	0	0	0	0	0	0
Philippines	Shells	60 257	1	12	13	0	11	1	0	0	0	16
Philippines	Shells (kg)	3428	0	0	0	0	0	0	0	0	0	0
Samoa	Live	0	0	0	0	0	0	0	0	5	62	0
Seychelles	Shells	0	0	0	0	0	0	0	0	1	0	0
Singapore	Shells	0	0	4	0	0	0	0	0	0	0	0
Solomon Islands	Live	0	7	859	3 180	2 837	1 326	24	837	140	552	343
Tonga	Live	13	594	0	761	1 925	254	0	226	1 573	1 663	2 474
Tonga	Live (kg)	0	0	0	0	0	4	0	0	181	261	0
Tonga	Shells (kg)	0	0	0	0	0	0	0	0	0	4 500	0
United States	Live	0	0	0	30	0	0	46	0	0	0	0
Unknown	Live	0	0	0	0	0	0	25	0	0	0	0
Unknown	Shells	0	0	0	0	0	0	0	1	0	0	0
Vanuatu	Live	0	0	0	0	0	0	3	300	2 415	1 015	0
Vanuatu	Shells	0	45	25	0	0	73	149	48	33	26	7

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Viet Nam	Live	0	0	0	0	0	110	3 750	8 900	23 700	15 081	18 654
Viet Nam	Live (kg)	0	0	0	0	0	0	0	0	0	10 000	0
Viet Nam	Shells (kg)	0	0	0	0	0	0	0	0	17 004	0	10 000
Yemen	Live	0	0	0	0	0	0	2	7	0	0	0

Gross exports of *Hippopus hippopus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Australia	Shells	0	0	0	0	0	0	6	0	0	0	0
ex. Trust Territory	Live	0	0	14	1 030	0	0	0	0	0	0	0
Fiji	Live	0	0	0	0	0	28	27	73	22	0	14
Indonesia	Live	0	0	0	0	0	9	0	0	0	0	0
Marshall Islands	Live	0	0	0	0	0	0	0	52	0	20	155
Mexico	Bodies (kg)	0	0	0	0	0	0	0	8	0	0	0
Micronesia	Live	0	0	0	0	0	0	0	0	0	0	8
New Caledonia	Shells	0	0	0	0	0	0	5 112	778	926	1 067	1 018
Papua New Guinea	Shells	0	1	0	0	0	0	0	0	0	0	0
Palau	Live	0	0	6	0	0	0	77	0	60	16	0
Palau	Shells	0	0	0	0	1	0	0	0	3	0	0
Philippines	Live	0	0	20	0	15	0	0	0	0	0	0
Philippines	Shells	142 128	0	2	2	0	1	0	76	9	3	29
Philippines	Shells (kg)	23 990	0	0	0	0	0	0	0	0	0	0
Pitcairn	Live	0	0	9	0	0	0	0	0	0	0	0
Solomon Islands	Live	0	215	88	576	340	319	105	82	39	325	177
Solomon Islands	Shells	0	0	0	20	0	0	0	0	0	0	0
Taiwan	Shells	0	0	0	0	0	0	0	0	0	0	2
Tonga	Live (kg)	0	0	0	0	0	0	0	0	0	20	0
United States	Live	3	0	0	0	0	0	0	0	0	0	0
Unknown	Live	0	0	0	0	0	10	0	0	0	0	0
Unknown	Shells	0	0	0	0	0	1	0	0	0	0	0
Vanuatu	Live	0	0	0	0	0	0	0	150	34	0	0
Vanuatu	Shells	0	9	25	0	0	99	123	50	56	19	7
Viet Nam	Shells (kg)	0	0	0	0	0	0	0	0	1 000	0	0

Gross exports of *Hippopus porcellanus*

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Palau	Shells	0	0	0	0	1	0	0	0	0	0	0
Philippines	Shells	35 935	0	0	20	0	0	0	0	0	0	0
Philippines	Shells (kg)	4 595	0	0	0	0	0	0	0	0	0	0
Solomon Is.	Live	0	0	0	0	0	21	0	0	0	0	0

Gross exports reported to family or genus level only - *Tridacnidae* spp., *Tridacna* spp., *Hippopus* spp.

Exporter	Term	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Cook Islands	Meat	0	0	0	0	2	40	0	26	27	214	1 023
Cook Islands	Meat (kg)	0	0	0	0	0	0	20	0	0	0	0
Cook Islands	Shells	0	0	0	2	40	154	146	62	17	76	188
Egypt	Live	0	0	0	0	740	0	450	250	0	0	0
Fiji	Live	0	0	20	0	0	44	691	3 032	75	3	45
Fiji	Live (kg)	0	0	0	0	0	0	0	0	0	13	0
Fiji	Meat	0	0	0	0	0	0	0	0	0	17	0
Fiji	Meat (kg)	0	0	0	0	1 700	0	20	25	0	0	0
Fiji	Shells	6	14	0	12	65	2	9	8	5	11	22
Indonesia	Live	0	0	0	0	0	0	0	0	1 500	0	0
Indonesia	Shells	3	1	1	0	25	0	41	0	0	0	0
Kiribati	Meat	0	0	0	0	0	0	0	0	0	16	0
Kiribati	Meat (kg)	0	0	0	0	0	44	0	0	0	0	0

Madagascar	Live	0	0	0	0	0	0	800	0	0	0	0
Madagascar	Shells	0	0	0	0	0	26	4 307	1	0	0	0
Marshall Islands	Live	0	0	400	520	490	0	0	125	0	0	0
Marshall Islands	Meat (kg)	0	0	0	0	0	0	0	22	0	0	0
Mozambique	Shells (kg)	0	0	0	3 281	2 000	0	0	0	0	0	0
New Caledonia	Shells	0	0	225	360	264	2 336	456	4	14	7	26
New Caledonia	Shells (kg)	0	0	0	0	2 366	4	0	0	0	0	0
Papua New Guinea	Meat (kg)	0	0	0	0	12 000	0	0	0	0	0	0
Papua New Guinea	Shells	0	1	13	6	255	3	6	0	14	16	11
Palau	Live	0	0	0	175	0	0	0	0	0	0	0
Philippines	Live	0	2 567	305	2 304	298	0	0	0	0	0	0
Philippines	Shells	42 997	453	12	3 811	107	0	2	90	5	1	19
Philippines	Shells (kg)	1 700	0	0	0	0	0	0	0	0	0	1
Samoa	Meat	0	0	0	0	0	0	0	0	0	21	2
Samoa	Shells	1	1	1	0	0	0	34	0	0	3	0
Seychelles	Live	0	0	0	800	0	0	0	0	0	0	0
Solomon Islands	Live	0	0	15	115	159	636	0	4	0	0	0
Solomon Islands	Shells	33	0	5	0	0	5	12	0	0	0	0
Taiwan	Shells	0	0	2 772	0	0	0	0	0	0	0	0
Tonga	Live	0	990	0	185	0	0	71	0	58	0	0
Tonga	Live	0	1	0	0	0	0	0	28	216	0	0
Tonga	Meat	223	0	0	0	60	4 592	0	4 702	3 135	7 828	7 278
Tonga	Meat (kg)	0	0	45	675	1 220	0	7 600	0	0	5	25
Tonga	Shells	0	0	0	6	8	0	31	178	13	115	67
Vanuatu	Live	0	0	0	0	0	500	0	799	9 946	0	9
Vanuatu	Shells	38	27	0	0	0	24	24	80	12	66	133
Viet Nam	Live	0	0	0	0	0	340	7 880	26 444	27 535	0	0

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