

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



Fifty-fourth meeting of the Standing Committee
Geneva (Switzerland), 2-6 October 2006

Interpretation and implementation of the Convention

Trade control

TRADE IN APPENDIX-I SPECIES

1. This document was prepared by the CITES Secretariat. The report in Annex 2 was prepared by the UNEP World Conservation Monitoring Centre.
2. At its 13th meeting (Bangkok, 2004), the Conference of the Parties adopted Decision 13.20 on Trade in Appendix-I species, as follows:

The Standing Committee shall:

- a) *conduct a review of trade in Appendix-I plant and animal species, through UNEP-WCMC. The review should take into account all exports, re-exports, and imports of Appendix-I specimens, including the species name, the source and purpose codes, existing exemptions and all other relevant information for the last five years. The identity of individual Parties should be protected in the report; and*
 - b) *consider the UNEP-WCMC report and draft recommendations, if necessary, based on the analysis of Appendix-I trade, at its 54th meeting, and present these recommendations for consideration at the 14th meeting of the Conference of the Parties.*
3. At its 53rd meeting (Geneva, June – July 2005), the Standing Committee agreed on the terms of reference for the required review. These are shown in Annex 1.
 4. In accordance with Decision 13.20, the Secretariat contracted UNEP-WCMC to conduct the review and their report is attached as Annex 2. The work was funded by the Government of Ireland, to which the Secretariat wishes to express its appreciation.

Recommendations

5. The Standing Committee is mandated to draft recommendations, if necessary, based on the attached report. On the basis of the conclusions of UNEP-WCMC contained in the section entitled Discussion (see page 20), the Secretariat suggests the Standing Committee consider the following possible actions:
 - a) The Secretariat should examine the evidence of cases where it appears that there might have been a contravention of the Convention and discuss this with the States concerned. If necessary, it should initiate the procedure provided in Article XIII of the Convention and, in this case, it should inform the Standing Committee.
 - b) Parties should be reminded that the Conference of the Parties, in Resolution Conf. 12.10 (Rev. CoP13) (Guidelines for a procedure to register and monitor operations that breed

Appendix-I animal species for commercial purposes), has agreed that "Parties shall restrict imports for primarily commercial purposes, as defined in Resolution Conf. 5.10, of captive-bred specimens of Appendix-I species to those produced by operations included in the Secretariat's Register and shall reject any document granted under Article VII, paragraph 4, if the specimens concerned do not originate from such an operation and if the document does not describe the specific identifying mark applied to each specimen". As it appears that this agreement is not always respected, the Conference or the Standing Committee should consider what action to take in cases where trade is authorized contrary to this agreement. [The Secretariat takes this opportunity to reiterate its opinion that the 'Register of captive-breeding operations for Appendix-I species' serves no useful purpose.]

- c) The Clearing House should be asked to advise the Standing Committee as to which body should consider how to deal with the problem that Management Authorities may be unaware of imports that have taken place when specimens are shipped by mail (seeds of cacti and orchids for example).
- d) With regard to the use of source codes on permits and in annual reports, the Animals and Plants Committees should take into consideration the comments in the report from UNEP-WCMC when preparing their document for CoP14 regarding production systems.

TERMS OF REFERENCE

Review of trade in Appendix I plant and animal species

1. From the CITES trade database, produce summary tables of all records of trade in Appendix-I species for the years 1999-2003, indicating the taxon, the type of specimen, the quantity traded (including units of measurement), and the source and purpose codes.
2. Separate-out the data relating to captive-bred and artificially propagated specimens.
3. Regarding the data on trade under Article III (specimens declared as anything other than source 'C', 'D', or 'A' and presumed to be wild-taken), conduct an analysis in order to identify where possible:
 - a) species traded at levels that appear to UNEP-WCMC to give cause for concern about the wild population; and
 - b) indications of trade that could be commercial in nature (e.g. transactions declared as commercial or transactions involving large numbers of specimens).
4. Regarding the data on trade under the exemptions provided for in Article VII, paragraph 4, 5 or 7 (captive-bred and artificially propagated specimens with source 'A', 'C' and 'D'), conduct an analysis in order to:
 - a) identify indications of false declarations that the specimens were bred in captivity or artificially propagated [e.g. noteworthy levels of trade in taxa not commonly bred in captivity, taking into account AC16 Inf. 15 (list of commonly-bred Appendix-I species) and other appropriate sources];
 - b) identify indications that specimens of Appendix-I animal species produced in breeding operations not included in the Secretariat's register are being traded for commercial purposes; and
 - c) determine what conclusions can be drawn from the data indicating the levels of trade in specimens that were bred in captivity or artificially propagated (including conclusions regarding the levels of commercial and non-commercial trade).
5. Identify indications of trade that appears to be illegal (e.g. where the reported imports of a species into one country from another exceeds the reported level of exports, or where a permit number reported by the importing and exporting Parties refer to different species, source codes or quantities, or where there are other significant inconsistencies).
6. Prepare a report summarizing the findings indicated above and with explanations in each case and without reference to individual Parties, for consideration by the Standing Committee, at its 54th meeting.

REVIEW OF TRADE IN APPENDIX I ANIMAL AND PLANT SPECIES

A report prepared by the UNEP World Conservation Monitoring Centre
under contract to the CITES Secretariat

Introduction

Article III of the Convention lays down the provisions that regulate trade in specimens of species included in Appendix I, and Article VII specifies possible exemptions and other special provisions relating to those rules. This report examines all trade in specimens of Appendix-I taxa traded between 1999 and 2003, as reflected by the data reported by the Parties in their annual reports, amounting to some 89,000 records for fauna and 43,000 records for flora. Attempts have been made to identify trade in wild specimens that may be unsustainable, and also to identify trade that could be commercial in nature, whether or not reported as such. Trade in specimens reportedly bred in captivity or artificially propagated has been examined to determine whether any such declaration is doubtful, taking account of the list of commonly-bred Appendix-I species contained in document AC16 Inf. 15, and other available sources. Analysis has been made of specimens likely to have originated in an operation included in the Secretariat's Register and detailed cross checking of export permit numbers has been carried out where possible indications of illegal trade have been detected.

Part 1. Purpose codes

The exemptions in Article VII of the Convention relate to trade not being for primarily commercial purposes, as defined in Resolution Conf. 5.10. For this reason, the first stage of the analysis was to investigate the use of the reported purpose of the transaction. Fauna and flora have been considered separately. The preferred purpose codes to be used in annual reports, as specified in Resolution Conf. 12.3 (Rev. CoP13), are as follows:

Table 1. Recommended purpose codes for use in CITES annual reports

B	Breeding in captivity or artificial propagation
E	Educational
G	Botanical gardens
H	Hunting trophies
L	Law enforcement / judicial / forensic
M	Medical (including biomedical research)
N	Reintroduction or introduction into the wild
P	Personal
Q	Circuses and travelling exhibitions
S	Scientific
T	Commercial trade
Z	Zoos

FAUNA

All of the purpose codes, with the obvious exception of G, have been used for fauna and the table below illustrates the relative importance, in terms of database records, of each of them. We have also examined records where the purpose of the transaction was not reported.

Table 2. Relative percentages of purpose codes for Appendix-I fauna trade records

Code	Percentage of App. I fauna records
T	43.2
P	17.0
H	11.6
none	6.7
Q	5.4
S	5.2
Z	4.6
B	3.3
E	2.4
N	0.3
L	0.1
M	0.1

Purpose code B – Breeding in captivity or artificial propagation

This code is partially interchangeable with 'Z', as many zoos support breeding programmes, and 'P', as many hobbyists seek to breed their animals, and it is not surprising therefore that a large proportion of the records involve zoo animals. In most of the transactions the numbers of animals involved is small and the great majority are captive-bred. Very few records involve trade from range States. All of the records involve live animals, eggs of live birds or scientific specimens such as sperm samples. No indication of commercial shipments of wild-sourced animals was encountered but captive-bred *Crocodylus porosus* and *C. siamensis* were reported being traded in very large numbers (> 75 000) which one might argue were commercial in nature and perhaps purpose code 'T' would have been equally or perhaps more appropriate.

Purpose code E – Educational

This code is occasionally used in error for purpose code 'S', e.g. where scientific specimens such as blood and serum are involved. Most of the records however are of confiscated and pre-Convention items such as carvings of tortoiseshell, ivory and whalebone that would appear to be for training seminars and workshops. In many instances the return of the specimens after their use can be observed. No indication of commercial shipments of wild-sourced animals was encountered.

Purpose code H – Hunting trophies

The majority of records in this category involve cheetah, leopard and African elephant, with smaller quantities of mountain sheep and goats, rhinoceroses and crocodiles. No indication of commercial shipments of wild-sourced animals was encountered.

Purpose code L – Law enforcement / judicial / forensic

This code is similar in concept to 'E', particularly where law enforcement might involve training, and mostly involved seized material having source code 'I'. No indication of commercial shipments of wild-sourced animals was encountered.

Purpose codes M – Medical (including biomedical research) and S – Scientific

The code 'M' is frequently misused, often involving scientific specimens of species unlikely to be traded for medical or biomedical research such as lemurs, marine turtles, cetaceans, etc. For this reason the two purposes have been considered here together.

Nearly all of the records in this category appear to be correctly reported for scientific purposes and involve bones, eggs, feathers, hatchling turtles, hair, skin samples, specimens, teeth, etc. The exceptions are two records in 2001 involving 65 live captive-bred *Falco peregrinus* (one shipment) and 56 live

captive-bred *Chlamydotis undulata* (10 shipments). The trade was reported by the exporting country but not by the importer and in view of the purpose code used may possibly have involved scientific specimens rather than live animals.

Purpose code N – Reintroduction or introduction to the wild

All records of trade in this category involved live animals or live birds eggs and were for repatriation of seized animals, introduction from captive-breeding schemes or relocation of surplus animals. No indication of commercial shipments of wild-sourced animals was encountered.

Purpose code Q – Circuses and travelling exhibitions

This category involves live circus animals such as bears, chimpanzees, elephants, leopards and tigers but also exhibition display items such as carvings and native handicrafts, many of them of pre-Convention origin. No indication of commercial shipments of wild-sourced animals was encountered.

Purpose code T – Commercial trade

Many Appendix I trade records in this category are of specimens shipped for reasons other than commercial trade. These include hunting trophies, scientific specimens and circus and zoo animals. Ambergris, captive-bred falcons, parrots, exotic pheasants and fish (*Scleropages formosus*), pre-Convention carvings of ivory, rhinoceros horn and turtle-shell, and products of farmed crocodilians form the bulk of the remaining records. Although the possibility exists to launder wild-caught material through captive-breeding operations, it is difficult to find evidence for this through annual report data and in many instances reported exports/re-exports exceed reported imports as a result of the trade being reported on the basis of permits issued rather than the actual trade that occurred. The only suspect records encountered were of 100 captive-bred *Eos histrio* (one shipment in 2003) and 90 *Probosciger aterrimus* (several shipments between 1999 and 2001) reported by the importing countries but not by the countries of export. These do not necessarily indicate illegal trade (i.e. trade occurring without an export permit) but may well be instances, fairly common in trade in Appendix-I taxa, where an import permit has been issued as a prerequisite to an export permit (and reported on the basis of permits issued) but the export then failed to occur. It is not uncommon in such trade for the apparent import to be reported the year preceding the export. One wild-caught species that occurs regularly in commercial trade is *Ara macao*, however the exporting country has a reservation on its Appendix-I listing. During the five-year period under study, the exporter reported exporting 236 birds however five importing countries, that do not hold a reservation on the Appendix-I listing of this species, reported imports of 178 birds for commercial purposes (see also purpose code 'Z').

Purpose code Z – Zoos

Records of animals traded for zoo purposes usually involve small numbers and few records involve wild-collected specimens from range States. None of the taxa reported as wild-collected give rise to concern about their wild populations. However for *Ara macao* the level of trade is such that one may suspect the imports are primarily commercial in nature. As noted above, the exporting country has a reservation on its Appendix-I listing and has reported exports of 52 birds for zoo purposes while the two countries of import have reported a total of 124 birds. Cross matching of trade records on the basis of export permit numbers indicates that some of the shipments reported by the importing countries as being for zoo purposes were reported by the exporter as being commercial in nature. Regarding the trade reported for captive-bred specimens of *Crocodylus porosus*, as was noted above for purpose code 'B', the high numbers involved might suggest that purpose code 'T' would be more appropriate.

Purpose code blank

Many of the records in this category are from Parties that routinely omit to include information about the purpose of each transaction in their annual reports. These data have been carefully scrutinized and the purpose can usually be surmised from the taxon and type of specimen involved e.g. hunting trophies, scientific specimens, zoo animals etc. Information on the original purpose of import is rarely recorded for Customs seizures of which there are many, particularly involving Traditional Chinese Medicines (TCM) and tourist souvenirs.

FLORA

Purpose codes 'H', 'M', 'N' and 'Z' have not been used for flora and the table below illustrates the relative volume, in terms of database records, of each purpose code reported. We have also examined records where the purpose of the transaction was not reported.

Table 3. Relative percentages of purpose codes for Appendix-I flora trade records

Code	Percentage of App. I flora records
T	87.3
none	8.0
P	2.7
B	1.0
G	0.3
S	0.3
E	0.1
L	0.1
Q	0.1

Purpose code B – Breeding in captivity or artificial propagation

No records of trade in wild-collected material occurs in this category. Almost 70 % of the records with this purpose code were reported in 1999 with a further 22 % in 2000. This uneven distribution, allied to the fact that very few countries have used the code, suggests that its use is highly dependant on the interpretation of the person producing the annual report. From the volumes of plants being traded it appears that many of the records should probably show purpose code 'T'.

Purpose codes E – Education and L – Law enforcement / judicial / forensic

There are very few records in this category and for some, cross matching of the export permit number reported by both importer and exporter suggest that 'T' would have been more appropriate. Other records indicate repatriation of seized material to the country of original export and specimens to be used for training purposes, etc.

Purpose code G – Botanical gardens

Very little wild material is reported with this purpose code and most transactions are of small quantities. They appear to involve exchanges between botanic gardens although it is rare for further details to be shown in annual reports.

Purpose code P – Personal

The only records of trade in wild-sourced material reported for personal purposes appear to relate to TCM and some carved specimens of *Dalbergia nigra*. Although much of the trade involves volumes that might be considered to be commercial in nature, particularly where *Encephalartos* species are involved, all is of artificially propagated specimens.

Purpose code Q – Circuses and travelling exhibitions

Many of these records appear to reflect exports to, and return from, plant exhibitions and further details of the exhibitions concerned are sometimes included in annual reports. Very little wild-collected material is involved.

Purpose code S – Scientific

A very small number of wild-collected specimens, particularly seeds and dried herbarium samples, are recorded in this category. The remainder are artificially propagated specimens and in the small quantities one would expect.

Purpose code T – Commercial

Although the vast majority of records of Appendix-I specimens of flora in trade indicate that the purpose was commercial, very few of the specimens are recorded as being wild-sourced material. The exceptions are some shipments of *Fitzroya cupressoides* for which the exporting country held a reservation at the time of export, and carvings, timber pieces and veneer of *Dalbergia nigra*, most, if not all of which, is pre-Convention. Much of the trade is in seeds of Appendix-I cacti and it is interesting to note that many more exports are reported than imports – there are over 13,000 export records but just 600 import records. One possible explanation for this is that the material is travelling by mail and the Management Authority of the importing country not being notified by the person importing them. As the specimens are artificially propagated and therefore treated as being in Appendix II there is no requirement for an import permit to be issued prior to granting of the export permit.

Purpose code blank

As with animal taxa, most of the records in this category are from Parties that routinely omit to include the purpose of transactions in their annual reports, and from Customs seizures. Careful analysis of the data shows no commercial shipments of wild-collected specimens apart from three shipments of *Fitzroya cupressoides* in 2002 for which the exporting country held a reservation at the time of export. The trade was not reported by the countries of import so may not necessarily have taken place.

Part 2. Source codes

Article VII of the Convention directs that specimens of an animal species included in Appendix I bred in captivity for commercial purposes, or of a plant species included in Appendix I artificially propagated for commercial purposes, shall be deemed to be specimens of species included in Appendix II. Therefore second stage of the analysis investigated the use of the reported source of the material and once again fauna and flora have been considered separately. Having already investigated all terms and purpose codes in part 1 of the report it was decided, after the initial extraction of the data, to analyse only records having purpose code 'T' and term codes LIV (live), SEE (seed) and SKI (skins).

The preferred source codes, relating to the original source of the species being traded, for use in annual reports, as specified in Resolution Conf. 12.3 (Rev. CoP13), are as follows:

Table 4. Recommended source codes for use in CITES annual reports

A	Plants that are artificially propagated in accordance with Resolution Conf. 11.11 (Rev. CoP13), paragraph a), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention (specimens of species included in Appendix I that have been propagated artificially for non-commercial purposes and specimens of species included in Appendices II and III)
C	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention (specimens of species included in Appendix I that have been bred in captivity for non-commercial purposes and specimens of species included in Appendices II and III)
D	Appendix-I animals bred in captivity for commercial purposes and Appendix-I plants artificially propagated for commercial purposes, as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 4, of the Convention
F	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof

I	Confiscated or seized specimens
O	Pre-Convention specimens
R	Specimens originating from a ranching operation
U	Source unknown
W	Specimens taken from the wild

FAUNA

The table below indicates the relative importance of source codes used for specimens of fauna.

Table 5. Relative percentages of source codes for Appendix-I fauna trade records

Code	Percentage of App. I fauna records
W	23.9
O	22.7
D	19.3
C	18.9
I	6.4
U	5.1
F	3.2
none	0.3
R	0.2

Source codes C and D

Article VII paragraph 4 states that "specimens of an animal species included in Appendix I bred in captivity for commercial purposes ... shall be deemed to be specimens of species included in Appendix II". Resolution Conf. 10.16 (Rev.) provides definitions of captive breeding and Resolution Conf. 12.10 (Rev. CoP13) states that Parties should restrict imports of captive-bred specimens of Appendix-I species for primarily commercial purposes to those produced by operations included in the Secretariat's Register. At the time of writing (July 2006) the Register covered 119 operations breeding a total of only 22 species of animal. Between 1999 and 2003 there were 134 Appendix-I animal taxa for which there were records of trade where the purpose of the transaction was commercial and the source was either 'C' or 'D'. A breakdown of these records is given in the Table 6 below, where it is also noted whether the species is difficult to breed in captivity according to document Inf. AC.16.15 and whether operations for that species are listed in the Register.

Source code F

As might be expected, most of the species for which the source code 'F' was used are also found in the list of source 'C' and 'D'. Additional species are *Cheirogaleus medius* (2 live in 2002), *Microcebus murinus* (2 live in 2002), *Hylobates agilis*, (1 live in 1999) *H. pileatus*, (1 live in 1999), *Puma concolor coryi* (3 live in 2001), *Elephas maximus* (2 live in 1999), *Capra falconeri* (1 live in 2002), *Harpya harpyja* (1 live in 2000), *Cyclura carinata* (2 live in 2001) and *Achatinella caesia* (4 live in 2003). From the taxa involved it would seem likely that most, if not all, were probably destined for zoos and none, apart from the three *Puma concolor coryi* came from range States.

Source code I

This code has been used to indicate either specimens that were seized at the time of an attempt to import them illegally or specimens that were being imported having been seized in the country of consignment.

Source code O

The records in this category refer to circus animals, personal items and antiques and for most it would seem that the purpose codes 'Q' or 'P' would appear to be more appropriate.

Source code R

There were only 17 trade records of fauna where the reported source code was 'R' and the term code was either 'LIV' or 'SKI'. Apart from one shipment of 1000 live *Crocodylus niloticus*, and another of 30 live *Amazona ochrocephala auropalliata* for which it is almost certain that the export permit was issued prior to the Appendix-I listing of the species, the taxa involved are not commonly reported as being ranched and it is likely that the code has been used erroneously.

Table 6. Appendix-I animal taxa traded as live or skins where the source was reported as 'C' or 'D' and the purpose was commercial

Appendix I animal taxa reported in trade as source C or D	Registered operation?	Difficult to breed in captivity?	Comments
<i>Eulemur fulvus</i>		?	5 live 2000 probably zoo
<i>Lemur catta</i>		N	16 live 1999-2002 probably zoo
<i>Varecia variegata</i>		N	2 live 1999-2001 probably zoo
<i>Callimico goeldii</i>		N	4 live 2001 probably zoo
<i>Callithrix aurita</i>		N	10 live 2003 probably zoo
<i>Leontopithecus chrysomela</i>		N	22 live 1999-2002 probably zoo
<i>Leontopithecus rosalia</i>		N	7 live 2000-2003 probably zoo
<i>Saguinus oedipus</i>		N	Frequently in trade, probably zoo
<i>Macaca silenus</i>		?	6 live 1999 probably zoo
<i>Mandrillus sphinx</i>		N	7 live 1999-2000 probably zoo
<i>Pygathrix roxellana</i>		N	2 live 1999 probably zoo*
<i>Hylobates lar</i>		N	5 live 1999-2003 probably zoo*
<i>Hylobates syndactylus</i>		N	4 live 2001 probably zoo
<i>Pan troglodytes</i>		N	Frequently in trade, probably zoo or circus
<i>Pongo pygmaeus</i>		N	1 live 2001 probably zoo*
<i>Ailurus fulgens</i>		N	1 live 2001 probably zoo
<i>Helarctos malayanus</i>		?	1 live 2001 probably zoo*
<i>Tremarctos ornatus</i>		?	1 live 2001 probably zoo
<i>Ursus arctos</i>		?	3 live 2001 probably zoo*
<i>Lutra lutra</i>		Y	2 live 1999 probably zoo*
<i>Mustela nigripes</i>		?	8 live 2000 probably zoo*
<i>Acinonyx jubatus</i>	YES	Y	5 live and 1 skin <u>not</u> from registered operations, probably zoo and personal
<i>Catopuma temminckii</i>		Y	2 live 1999 probably zoo*
<i>Herpailurus yagouaroundi</i>		Y	1 live 2001 probably zoo
<i>Leopardus pardalis</i>		?	3 live 2000-2003 probably zoo
<i>Neofelis nebulosa</i>		Y	2 live 1999 probably zoo*
<i>Oncifelis geoffroyi</i>		Y	6 live 1999-2002 probably zoo*
<i>Panthera leo persica</i>		Y	1 live 2002 probably zoo
<i>Panthera onca</i>		?	15 live 1999-2002 probably zoo*
<i>Panthera pardus</i>		N	10 live 1999-2003 probably zoo
<i>Panthera tigris</i>		N	Frequently in trade, probably zoo or circus

Appendix I animal taxa reported in trade as source C or D	Registered operation?	Difficult to breed in captivity?	Comments
<i>Prionailurus b. bengalensis</i>		?	1 live 1999 probably zoo
<i>Uncia uncia</i>		N	5 live 1999 probably zoo
<i>Loxodonta africana</i>		?	1 live 2003 probably zoo*
<i>Equus africanus</i>		N	4 live 2002-2003 probably zoo
<i>Equus grevyi</i>		N	6 live 1999-2003 probably zoo or circus
<i>Equus zebra</i>		?	2 live 2002 probably zoo
<i>Tapirus indicus</i>		N	1 live 1999 probably zoo*
<i>Ceratotherium simum cottoni</i>		Y	1 live 1999 probably zoo
<i>Cervus duvaucelii</i>		N	1 skin 1999 possible misidentification
<i>Addax nasomaculatus</i>		N	30 live 1999-2001
<i>Capra falconeri</i>		N	21 live 1999-2003 probably zoo
<i>Oryx dammah</i>		N	1 live 1999 probably zoo
<i>Oryx leucoryx</i>		N	5 live 2000-2002 probably zoo
<i>Rhea pennata pennata</i>		N	5 live 1999 probably zoo
<i>Spheniscus humboldti</i>		N	39 1999-2003 probably zoo*
<i>Ciconia boyciana</i>		N	3 live 1999-2001 probably zoo*
<i>Anas laysanensis</i>		N	26 live 1999-2002 probably zoo
<i>Branta canadensis leucopareia</i>		N	4 live 2001 probably zoo
<i>Branta sandvicensis</i>		N	Many in trade
<i>Rhodonessa caryophyllacea</i>		?	5 live 2002 possible misidentification
<i>Vultur gryphus</i>		N	4 live 2002 possible re-introduction
<i>Aquila heliaca</i>		?	2 live in 2000 probably personal
<i>Haliaeetus albicilla</i>		N	4 live 2001-2002 probably zoo*
<i>Haliaeetus leucocephalus</i>		N	12 live 1999-2003 probably zoo*
<i>Falco jugger</i>	YES	N	Many in trade
<i>Falco pelegrinoides</i>	YES	N	Many in trade
<i>Falco peregrinus</i>	YES	N	Many in trade
<i>Falco rusticolus</i>	YES	N	Many in trade
<i>Catreus wallichii</i>		?	2 live 2001 probably zoo
<i>Crossoptilon crossoptilon</i>		N	Many in trade
<i>Crossoptilon mantchuricum</i>		N	Many in trade
<i>Lophophorus impejanus</i>		N	Many in trade
<i>Lophura edwardsi</i>		N	Many in trade
<i>Lophura imperialis</i>		N	Many in trade
<i>Lophura swinhoi</i>		N	Many in trade
<i>Polyplectron emphanum</i>		N	Many in trade
<i>Rheinardia ocellata</i>		N	4 live 2001 probably zoo*
<i>Syrmaticus ellioti</i>		N	Many in trade
<i>Syrmaticus mikado</i>		N	Many in trade
<i>Tragopan caboti</i>	YES	N	Many in trade
<i>Grus japonensis</i>		N	8 live 1999-2002 probably zoo
<i>Grus monacha</i>		?	2 live 1999 probably zoo*
<i>Grus vipio</i>		N	5 live 1999 probably zoo*
<i>Rhynchotos jubatus</i>		?	1 live 1999 probably zoo
<i>Chlamydotis undulata</i>		?	12 live 2000 probably zoo*

Appendix I animal taxa reported in trade as source C or D	Registered operation?	Difficult to breed in captivity?	Comments
<i>Caloenas nicobarica</i>	YES	N	Many in trade mostly from registered operations
<i>Amazona barbadensis</i>		N	26 live 1999-2003 probably zoo
<i>Amazona brasiliensis</i>		?	21 live 1999-2003 probably zoo
<i>Amazona leucocephala</i>		N	Regularly in trade
<i>Amazona o. auropalliata</i>		no information	Regularly in trade
<i>Amazona o. oratrix</i>		no information	Regularly in trade
<i>Amazona pretrei</i>		?	21 live 1999-2003 probably zoo*
<i>Amazona rhodocorytha</i>		Y	18 live 1999-2003 probably zoo
<i>Amazona tucumana</i>		N	14 live 1999-2003 probably zoo
<i>Amazona vinacea</i>		N	> 50 live 1999-2003
<i>Amazona viridigenalis</i>		N	20 live 1999-2003
<i>Anodorhynchus hyacinthinus</i>		N	Regularly in trade
<i>Ara ambigua</i>		N	Regularly in trade
<i>Ara glaucogularis</i>		N	36 live 1999-2003
<i>Ara macao</i>		N	Regularly in trade
<i>Ara militaris</i>		N	> 50 live 1999-2003
<i>Ara rubrogenys</i>		N	> 50 live 1999-2003
<i>Cacatua goffini</i>		N	32 live 1999-2003
<i>Cacatua haematuropygia</i>		N	8 live 2003
<i>Cacatua moluccensis</i>	YES	N	Regularly traded from registered operations
<i>Cyanoramphus novaezelandiae</i>		N	Many in trade
<i>Eos histrio</i>	YES	?	20 live 1999-2001, some from registered operation (also see text)
<i>Eunymphicus cornutus</i>		N	1 live 2001 probably zoo
<i>Guarouba guarouba</i>	YES	N	Regularly traded from registered operations
<i>Pionopsitta pileata</i>		Y	6 live 2000-2001
<i>Probosciger aterrimus</i>		?	Regularly in trade (also see text)
<i>Propyrrhura couloni</i>		no information	28 live 2003*
<i>Propyrrhura maracana</i>		N	Regularly in trade
<i>Psephotus chrysopterygius</i>		?	26 live 1999-2001
<i>Psephotus dissimilis</i>		N	Regularly in trade
<i>Psephotus pulcherrimus</i>		?	6 live in 2002
<i>Pyrrhura cruentata</i>		N	Regularly in trade
<i>Carduelis cucullata</i>		N	Regularly in trade
<i>Leucopsar rothschildi</i>		N	27 live 1999-2001*
<i>Geochelone nigra</i>		N	2 live 2001 probably zoo*
<i>Geochelone radiata</i>		N	13 live 2003 probably zoo
<i>Testudo kleinmanni</i>		no information	13 live 2000-2003 probably zoo
<i>Alligator sinensis</i>	YES	N	Regularly traded from registered operations

Appendix I animal taxa reported in trade as source C or D	Registered operation?	Difficult to breed in captivity?	Comments
<i>Crocodylus acutus</i>	YES	N	Regularly traded from registered operations
<i>Crocodylus cataphractus</i>		?	19 live 2000-2003 probably zoo
<i>Crocodylus moreletii</i>	YES	N	Regularly traded from registered operations
<i>Crocodylus niloticus</i>	YES	N	Regularly traded but not from the registered operation
<i>Crocodylus porosus</i>	YES	N	Regularly traded from registered operations
<i>Crocodylus siamensis</i>	YES	N	Regularly traded from registered operations
<i>Osteolaemus tetraspis</i>		N	23 live 2000-2003 probably zoo
<i>Brachylophus fasciatus</i>		?	7 live 2003 probably zoo
<i>Cyclura cornuta</i>		?	5 live 2001 probably zoo
<i>Cyclura cychlura</i>		?	20 live 1999 probably zoo but possibly misidentification
<i>Python molurus molurus</i>		no information	9 live 1999-2002 probably zoo
<i>Acrantophis dumerili</i>		N	24 live 1999-2003 probably zoo
<i>Acrantophis madagascariensis</i>		N	37 live 1999-2003 probably zoo
<i>Boa constrictor occidentalis</i>		?	11 live 1999-2003 probably zoo
<i>Epicrates inornatus</i>		Y	21 live 2002 probably zoo
<i>Epicrates subflavus</i>		?	20 live 2001-2002 probably zoo
<i>Sanzinia madagascariensis</i>		?	48 live 1999-2003 probably zoo
<i>Dyscophus antongilii</i>		?	10 live 2002 probably zoo
<i>Acipenser brevirostrum</i>		?	900 live 1999 probably breeding
<i>Scleropages formosus</i>	YES	N	Regularly traded from registered operations
* denotes that some or all of the trade involved a range State			

Source code U

Apart from eight live specimens of *Struthio camelus* in 2002 and 210 live specimens of *Crocodylus porosus* in 2000, this category appears to involve mostly long-lived species and skins where both the country of origin and source of the material is unknown and where perhaps the source code 'O' (pre-Convention) might have been more appropriate. Some may involve personal possessions rather than commercial trade.

Source code W

The majority of records in this category have an incorrect purpose code as they involve hunting trophies, scientific specimens and zoo animals. Exceptions are 50 live *Amazona ochrocephala auropalliata* (for which it is almost certain that the export permit was issued prior to Appendix I listing), and *Ara macao* for which the exporting country holds a reservation.

FLORA

Table 7 below indicates the relative importance of source codes used for specimens of flora.

Table 7. Relative percentages of source codes for Appendix-I flora trade records

Code	Percentage of App. I flora records
D	47.2
A	43.8
I	4.2
O	3.7
W	0.7
U	0.2
none	0.1

Source codes A and D

Article VII, paragraph 4, of the Convention states that specimens of plant species included in Appendix I artificially propagated for commercial purposes shall be deemed to be specimens of species included in Appendix II. Resolution Conf. 11.11 (Rev. CoP13) provides definitions of 'artificially propagated'. Resolution Conf. 9.19 (Rev. CoP13) provides guidelines for the registration of nurseries to be included in the Secretariat's Register of nurseries. At the time of writing (July 2006), the Register contains 101 operations in eight countries. A breakdown of records reported as source 'A' or 'D', which together comprise 91 % of Appendix-I plant records for the period under review, is given in the table below, which also notes whether registered nurseries exist for those species.

Table 8. Appendix-I plant taxa traded as live or seeds where the source was reported as 'A' or 'D' and the purpose was commercial

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Agave parviflora</i>	YES	
<i>Nolina interrata</i>		No trade from range States
<i>Pachypodium ambongense</i>		No trade from range States
<i>Pachypodium baronii</i>	YES	
<i>Pachypodium decaryi</i>	YES	
<i>Araucaria araucana</i>	YES	
<i>Ariocarpus agavoides</i>	YES	
<i>Ariocarpus bravoanus</i>	YES	
<i>Ariocarpus fissuratus</i>	YES	
<i>Ariocarpus kotschoubeyanus</i>	YES	
<i>Ariocarpus retusus</i>	YES	
<i>Ariocarpus scaphirostris</i>	YES	
<i>Astrophytum asterias</i>	YES	
<i>Aztekium ritteri</i>	YES	
<i>Coryphantha werdermannii</i>	YES	
<i>Discocactus bahiensis</i>	YES	
<i>Discocactus ferricola</i>		No trade from range States
<i>Discocactus heptacanthus</i>	YES	
<i>Discocactus horstii</i>	YES	
<i>Discocactus placentiformis</i>	YES	
<i>Discocactus pseudoinsignis</i>	YES	
<i>Discocactus zehntneri</i>	YES	

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Echinocereus ferreirianus</i>	YES	
<i>Echinocereus schmollii</i>	YES	
<i>Escobaria minima</i>	YES	
<i>Escobaria sneedii</i>	YES	
<i>Mammillaria pectinifera</i>	YES	
<i>Mammillaria solisioides</i>	YES	
<i>Melocactus conoideus</i>	YES	
<i>Melocactus deinacanthus</i>		No trade from range States
<i>Melocactus glaucescens</i>	YES	
<i>Melocactus paucispinus</i>		No trade from range States
<i>Obregonia denegrii</i>	YES	
<i>Pediocactus bradyi</i>	YES	
<i>Pediocactus knowltonii</i>	YES	
<i>Pediocactus paradinei</i>	YES	
<i>Pediocactus peeblesianus</i>	YES	
<i>Pediocactus sileri</i>	YES	
<i>Pelecyphora aselliformis</i>	YES	
<i>Pelecyphora strobiliformis</i>	YES	
<i>Sclerocactus brevihamatus</i>	YES	
<i>Sclerocactus erectocentrus</i>	YES	
<i>Sclerocactus glaucus</i>	YES	
<i>Sclerocactus mariposensis</i>	YES	
<i>Sclerocactus mesae-verdae</i>	YES	
<i>Sclerocactus nyensis</i>		No trade from range States
<i>Sclerocactus papyracanthus</i>	YES	
<i>Sclerocactus pubispinus</i>	YES	
<i>Sclerocactus unguispinus</i>		No trade from range States
<i>Sclerocactus wrightiae</i>	YES	
<i>Strombocactus disciformis</i>	YES	
<i>Turbincarpus alonsoi</i>	YES	
<i>Turbincarpus beguinii</i>	YES	
<i>Turbincarpus bonatzii</i>	YES	
<i>Turbincarpus booleanus</i>	YES	
<i>Turbincarpus gielsdorfianus</i>	YES	
<i>Turbincarpus hoferi</i>	YES	
<i>Turbincarpus horriplius</i>	YES	
<i>Turbincarpus jauernigii</i>	YES	
<i>Turbincarpus knuthianus</i>	YES	
<i>Turbincarpus laui</i>	YES	
<i>Turbincarpus lophophoroides</i>	YES	
<i>Turbincarpus mandragora</i>	YES	
<i>Turbincarpus x mombergeri</i>	YES	
<i>Turbincarpus pseudomacrochele</i>	YES	
<i>Turbincarpus pseudopectinatus</i>	YES	
<i>Turbincarpus rioverdensis</i>	YES	
<i>Turbincarpus roseiflorus</i>	YES	
<i>Turbincarpus saueri</i>	YES	

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Turbinicarpus schmiedickeanus</i>	YES	
<i>Turbinicarpus subterraneus</i>	YES	
<i>Turbinicarpus swobodae</i>	YES	
<i>Turbinicarpus valdezianus</i>	YES	
<i>Turbinicarpus viereckii</i>	YES	
<i>Turbinicarpus ysabelae</i>	YES	
<i>Turbinicarpus zaragozae</i>	YES	
<i>Uebelmannia buiningii</i>	YES	
<i>Uebelmannia gummifera</i>	YES	
<i>Uebelmannia pectinifera</i>	YES	
<i>Fitzroya cupressoides</i>		No trade from range States
<i>Pilgerodendron uviferum</i>		No trade from range States
<i>Cycas beddomei</i>		No trade from range States
<i>Euphorbia ambovombensis</i>	YES	
<i>Euphorbia capsaintemariensis</i>	YES	
<i>Euphorbia cremersii</i>		No trade from range States
<i>Euphorbia cylindrifolia</i>	YES	
<i>Euphorbia decaryi</i>	YES	
<i>Euphorbia francoisii</i>	YES	
<i>Euphorbia moratii</i>	YES	
<i>Euphorbia quartziticola</i>		No trade from range States
<i>Euphorbia tulearensis</i>		No trade from range States
<i>Fouquieria fasciculata</i>	YES	
<i>Aloe albida</i>		81 live from range States
<i>Aloe albiflora</i>		No trade from range States
<i>Aloe bellatula</i>	YES	
<i>Aloe compressa</i>	YES	
<i>Aloe descoingsii</i>	YES	
<i>Aloe fragilis</i>	YES	
<i>Aloe haworthioides</i>	YES	
<i>Aloe laeta</i>	YES	
<i>Aloe parallelifolia</i>	YES	
<i>Aloe parvula</i>	YES	
<i>Aloe pillansii</i>	YES	
<i>Aloe polyphylla</i>	YES	
<i>Aloe rauhii</i>	YES	
<i>Aloe versicolor</i>		20 live from range States in 2000
<i>Aloe vossii</i>		90 live from range States in 2002
<i>Nepenthes khasiana</i>		No trade from range States
<i>Cattleya trianaei</i>	YES	
<i>Dendrobium cruentum</i>		Regularly traded from range States
<i>Laelia jongheana</i>		Regularly traded from range States
<i>Laelia lobata</i>	YES	
<i>Paphiopedilum acmodontum</i>	YES	
<i>Paphiopedilum adductum</i>	YES	
<i>Paphiopedilum appletonianum</i>	YES	
<i>Paphiopedilum argus</i>	YES	

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Paphiopedilum armeniacum</i>	YES	
<i>Paphiopedilum barbatum</i>	YES	
<i>Paphiopedilum barbigerum</i>	YES	
<i>Paphiopedilum bellatulum</i>	YES	
<i>Paphiopedilum bougainvilleanum</i>	YES	
<i>Paphiopedilum bullenianum</i>		No trade from range States
<i>Paphiopedilum callosum</i>	YES	
<i>Paphiopedilum charlesworthii</i>	YES	
<i>Paphiopedilum ciliolare</i>	YES	
<i>Paphiopedilum concolor</i>	YES	
<i>Paphiopedilum dayanum</i>	YES	
<i>Paphiopedilum delenatii</i>	YES	
<i>Paphiopedilum dianthum</i>	YES	
<i>Paphiopedilum druryi</i>	YES	
<i>Paphiopedilum emersonii</i>	YES	
<i>Paphiopedilum exul</i>	YES	
<i>Paphiopedilum fairrieianum</i>	YES	
<i>Paphiopedilum x fanaticum</i>		No trade from range States
<i>Paphiopedilum fowliei</i>	YES	
<i>Paphiopedilum gigantifolium</i>		No trade from range States
<i>Paphiopedilum glanduliferum</i>	YES	
<i>Paphiopedilum glaucophyllum</i>	YES	
<i>Paphiopedilum godefroyae</i>	YES	
<i>Paphiopedilum gratrixianum</i>	YES	
<i>Paphiopedilum haynaldianum</i>	YES	
<i>Paphiopedilum helenae</i>		No trade from range States
<i>Paphiopedilum hennisianum</i>	YES	
<i>Paphiopedilum henryanum</i>		No trade from range States
<i>Paphiopedilum hirsutissimum</i>	YES	
<i>Paphiopedilum hookerae</i>	YES	
<i>Paphiopedilum insigne</i>	YES	
<i>Paphiopedilum javanicum</i>	YES	
<i>Paphiopedilum kolopakingii</i>		No trade from range States
<i>Paphiopedilum lawrenceanum</i>	YES	
<i>Paphiopedilum liemianum</i>	YES	
<i>Paphiopedilum lowii</i>	YES	
<i>Paphiopedilum malipoense</i>	YES	
<i>Paphiopedilum mastersianum</i>	YES	
<i>Paphiopedilum micranthum</i>	YES	
<i>Paphiopedilum niveum</i>	YES	
<i>Paphiopedilum ooii</i>		No trade from range States
<i>Paphiopedilum papuanum</i>		No trade from range States
<i>Paphiopedilum parishii</i>	YES	
<i>Paphiopedilum philippinense</i>	YES	
<i>Paphiopedilum primulinum</i>	YES	
<i>Paphiopedilum purpuratum</i>	YES	
<i>Paphiopedilum randsii</i>		No trade from range States

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Paphiopedilum rothschildianum</i>	YES	
<i>Paphiopedilum sanderianum</i>	YES	
<i>Paphiopedilum sangii</i>		No trade from range States
<i>Paphiopedilum schoseri</i>		No trade from range States
<i>Paphiopedilum spicerianum</i>	YES	
<i>Paphiopedilum stonei</i>	YES	
<i>Paphiopedilum sukhakulii</i>	YES	
<i>Paphiopedilum supardii</i>		No trade from range States
<i>Paphiopedilum superbiens</i>	YES	
<i>Paphiopedilum tigrinum</i>		No trade from range States
<i>Paphiopedilum tonsum</i>		No trade from range States
<i>Paphiopedilum urbanianum</i>		No trade from range States
<i>Paphiopedilum venustum</i>	YES	
<i>Paphiopedilum victoria-mariae</i>	YES	
<i>Paphiopedilum victoria-regina</i>		No trade from range States
<i>Paphiopedilum vietnamense</i>		No trade from range States
<i>Paphiopedilum villosum</i>	YES	
<i>Paphiopedilum violascens</i>		No trade from range States
<i>Paphiopedilum wardii</i>	YES	
<i>Peristeria elata</i>	YES	
<i>Phragmipedium besseae</i>	YES	
<i>Phragmipedium boissierianum</i>		Regularly traded from range States
<i>Phragmipedium caricinum</i>	YES	
<i>Phragmipedium caudatum</i>	YES	
<i>Phragmipedium hirtzii</i>	YES	
<i>Phragmipedium klotzschianum</i>		Some trade from range States
<i>Phragmipedium lindenii</i>	YES	
<i>Phragmipedium lindleyanum</i>		No trade from range States
<i>Phragmipedium longifolium</i>	YES	
<i>Phragmipedium pearcei</i>		Regularly traded from range States
<i>Phragmipedium richteri</i>		No trade from range States
<i>Phragmipedium sargentianum</i>	YES	
<i>Phragmipedium schlimii</i>	YES	
<i>Phragmipedium vittatum</i>		150 live from range State 2000-2002
<i>Phragmipedium wallisii</i>	YES	
<i>Renanthera imschootiana</i>		No trade from range States
<i>Vanda coerulea</i>	YES	
<i>Sarracenia oreophila</i>		No trade from range States
<i>Stangeria eriopus</i>		Regularly traded from range States
<i>Ceratozamia hildae</i>		No trade from range States
<i>Ceratozamia kuesteriana</i>		No trade from range States
<i>Ceratozamia latifolia</i>		No trade from range States
<i>Ceratozamia matudae</i>		2 live from range States in 1999
<i>Ceratozamia mexicana</i>		No trade from range States
<i>Ceratozamia microstrobila</i>		No trade from range States
<i>Ceratozamia miqueliana</i>		No trade from range States
<i>Ceratozamia norstogii</i>		No trade from range States

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Chigua bernalii</i>		3 live from range States in 2002
<i>Chigua restrepoi</i>		5 live from range States in 2001-2002
<i>Encephalartos aemulans</i>		Regularly traded from range States
<i>Encephalartos altensteinii</i>		Regularly traded from range States
<i>Encephalartos arenarius</i>		Regularly traded from range States
<i>Encephalartos barteri</i>		6 live from range States in 2003
<i>Encephalartos brevifolius</i>		4 live from range States 2001-2003
<i>Encephalartos bubalinus</i>		Regularly traded from range States
<i>Encephalartos caffer</i>		Regularly traded from range States
<i>Encephalartos cerinus</i>		Regularly traded from range States
<i>Encephalartos chimanimaniensis</i>		Regularly traded from range States
<i>Encephalartos concinnus</i>		Regularly traded from range States
<i>Encephalartos cupidus</i>		Regularly traded from range States
<i>Encephalartos cycadifolius</i>		Regularly traded from range States
<i>Encephalartos dolomiticus</i>		Regularly traded from range States
<i>Encephalartos dyerianus</i>		Regularly traded from range States
<i>Encephalartos equatorialis</i>		4 live from range States 2000-2001
<i>Encephalartos eugene-maraisii</i>		Regularly traded from range States
<i>Encephalartos ferox</i>		Regularly traded from range States
<i>Encephalartos friderici-guilielmi</i>		Regularly traded from range States
<i>Encephalartos ghellinckii</i>		Regularly traded from range States
<i>Encephalartos gratus</i>		Regularly traded from range States
<i>Encephalartos heenanii</i>		Regularly traded from range States
<i>Encephalartos hildebrandtii</i>		Regularly traded from range States
<i>Encephalartos hirsutus</i>		Regularly traded from range States
<i>Encephalartos horridus</i>		Regularly traded from range States
<i>Encephalartos humilis</i>		Regularly traded from range States
<i>Encephalartos inopinus</i>		Regularly traded from range States
<i>Encephalartos ituriensis</i>		No trade from range States
<i>Encephalartos kisambo</i>		Regularly traded from range States
<i>Encephalartos laevifolius</i>		Regularly traded from range States
<i>Encephalartos lanatus</i>	YES	
<i>Encephalartos latifrons</i>		Regularly traded from range States
<i>Encephalartos laurentianus</i>		Regularly traded from range States
<i>Encephalartos lebomboensis</i>		Regularly traded from range States
<i>Encephalartos lehmannii</i>		Regularly traded from range States
<i>Encephalartos longifolius</i>		Regularly traded from range States
<i>Encephalartos manikensis</i>		Regularly traded from range States
<i>Encephalartos middelburgensis</i>		Regularly traded from range States
<i>Encephalartos msinga</i>		Regularly traded from range States
<i>Encephalartos munchii</i>		Regularly traded from range States
<i>Encephalartos natalensis</i>		Regularly traded from range States
<i>Encephalartos ngoyanus</i>		Regularly traded from range States
<i>Encephalartos nubimontanus</i>		Regularly traded from range States
<i>Encephalartos paucidentatus</i>		Regularly traded from range States
<i>Encephalartos poggei</i>		4 live from range States in 2003
<i>Encephalartos princeps</i>		Regularly traded from range States

Appendix I plant taxa reported in trade as source A or D	Registered nursery?	Comments
<i>Encephalartos pterogonus</i>		Regularly traded from range States
<i>Encephalartos schajesii</i>		200 seeds from range States in 2003 (reported by importer)
<i>Encephalartos sclavoi</i>		Regularly traded from range States
<i>Encephalartos sentica</i>		Regularly traded from range States
<i>Encephalartos septentrionalis</i>		Regularly traded from range States
<i>Encephalartos tegulaneus</i>		Regularly traded from range States
<i>Encephalartos transvenosus</i>		Regularly traded from range States
<i>Encephalartos trispinosus</i>		Regularly traded from range States
<i>Encephalartos turneri</i>		Regularly traded from range States
<i>Encephalartos umbeluziensis</i>		Regularly traded from range States
<i>Encephalartos villosus</i>		Regularly traded from range States
<i>Encephalartos whitelockii</i>		Regularly traded from range States
<i>Encephalartos woodii</i>		Regularly traded from range States
<i>Microcycas calocoma</i>		No trade from range States

Source code I

Trade reported as 'LIV' or 'SEE' with purpose code 'T' and source code 'I' was only reported by three Parties and appears to comprise seizures by Customs authorities. The quantities involved were generally very small.

Source code O

No trade in pre-Convention seeds or live material has been recorded between 1999 and 2003. The only records were of trade in wood and carvings of *Dalbergia nigra*.

Source code U

Trade records in this category amounted to 80 live specimens exported from non-range States. Consequently source 'A' or 'D' would have been more appropriate.

Source code W

With the possible exception of 200 live *Paphiopedilum sanderianum* reported as an export in 2000 from a range State to a country not party to the Convention, range States are not involved. This suggests that the trade is probably in artificially propagated specimens designated 'W' in error.

Part 3. Discussion

Despite investigating over 130,000 trade records, no instances were found where the trade gave cause for concern about the wild populations. Most of the individual records of trade related to small numbers of specimens, the larger quantities being taxa that are readily bred in captivity or artificially propagated. Although a number of anomalous records were encountered, most appeared to be the result of carelessness in annual report compilation. We have already drawn attention in the text to some of these and reiterate that the shipments involving *Falco peregrinus*, *Chlamydotis undulata*, *Eos histrio* and *Probosciger aterrimus*, if they indeed occurred as reported, may have been in contravention of the Convention. Similarly, imports of *Ara macao* are of sufficient volume to suggest that they are commercial in nature and, although the exporting country for this species holds a reservation on the Appendix-I listing of the species, the countries reporting the imports do not.

Attention has also been drawn to the problem for importing countries, of reporting imports of seeds of artificially propagated cacti and orchids if they are shipped by mail as, being treated as Appendix-II specimens by the exporting country, they would not normally require the prior issuance of an import permit.

Resolution Conf. 12.10 (Rev. CoP13) invites Parties to reject documents granted under Article VII, paragraph 4, of the Convention, if the animal specimens concerned did not originate from an operation listed in the Secretariat's Register or from a species that has not been declared as bred in captivity by a registered operation. However, given the small number of registered captive breeding operations and taxa, it is not surprising that most of the trade appears to come from unregistered sources. The exceptions perhaps are for *Scleropages formosus* and some crocodylians. Furthermore, it is rare for annual reports to declare that registered captive breeding operations were the source of the material so even if the trade emanates from a country with such an operation it is usually impossible to determine this. A similar situation exists for plants in that only eight countries have registered nurseries so most of the trade, although quite clearly in artificially propagated material (and reported as such), is from unregistered facilities.

The analysis has highlighted the importance of accurately reporting the source of the material and the purpose of each transaction but has also noted a certain ambiguity of interpretation that allows different codes to be used for the same transaction. For example, the distinction between 'Medical (including biomedical research)' and 'Scientific' is obscure; a museum specimen could be for both educational and scientific purposes; a hunting trophy is also a personal possession. Similarly the code 'C' has been traditionally used for 'bred in captivity' long before the distinction between 'for commercial purposes' and 'for non-commercial purposes' was made. The introduction of code 'D', without specifically linking it to material produced by operations listed in the Secretariat's Register, produces further possibilities for confusion of the reporting Parties and it should perhaps be noted that this code is frequently used in error for Appendix-II taxa.