PART II
Presentations made by Scientific Authority staff from producer and consumer Parties

Chapter 3
Presentations made by CITES representatives

3.1 Introduction

To understand how the Scientific Authorities interpret and implement the Convention with regard to the making of non-detriment findings, a range of producer and consumer countries prepared information on making these findings. Contributors considered the following points: how they interpret the requirement for a non-detriment finding, the methods that they use to make such findings and the problems that they encounter in making such findings. This chapter presents an introduction to the CITES requirements for non-detriment findings by the CITES Secretariat followed by summaries prepared by CITES staff from producer and consumer countries.

3.2 CITES Secretariat – the requirements for non-detriment findings and tasks of Scientific Authorities, *Ger van Vliet*

Requirements of the Convention

The text of the Convention contains several specific references to the responsibilities of the Scientific Authority. The Convention does not specify, however, who should form the Scientific Authority; nor does it specify who should form the Management Authority. For the Management Authority however, it seems widely accepted by all Parties that this is a legally established authority, working within the legislation used to implement the Convention. This consideration will be discussed in relation to the information provided below in more detail in the presentation to the meeting.

The following summary refers to the text of the Convention and the Resolutions that relate to the tasks of the Scientific Authority.

According to the Convention text, the following tasks relating to non-detriment findings **must** be carried out by the Scientific Authority for trade in Appendix I and Appendix II species to be authorized:

Article III (trade in specimens of species included in Appendix I)

2. *The export of any specimen of a species included in Appendix I shall require the prior grant and presentation of an export permit. An export permit shall only be granted when the following conditions have been met:*
   (a) a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species;
3. *The import of any specimen of a species included in Appendix I shall require the prior grant and presentation of an import permit and either an export permit or a re-export certificate. An import permit shall only be granted when the following conditions have been met:*
   (a) a Scientific Authority of the State of import has advised that the import will be for purposes which are not detrimental to the survival of the species involved;

Article IV (trade in specimens of species included in Appendix II)

2. *The export of any specimen of a species included in Appendix II shall require the prior grant and presentation of an export permit. An export permit shall only be granted when the following conditions have been met:*
   (a) a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species;
3. *A Scientific Authority in each Party shall monitor both the export permits granted by that State for specimens of species included in Appendix II and the actual exports of such specimens. Whenever a Scientific Authority determines that the export of specimens of any such species should be limited in order to maintain that species throughout its range at a level consistent with its role in the ecosystems in which it occurs and well above the level at which that species might become eligible for inclusion in Appendix I, the Scientific Authority shall advise the appropriate Management Authority of suitable measures to be taken to limit the grant of export permits for specimens of that species.*

The text of the Convention is clear with regard to exports. Exports may not be authorized unless the Scientific

Authority has been consulted and has determined that the proposed transaction will not be detrimental to the species. A survey that the Secretariat carried out some time ago revealed that many Scientific Authorities were never, or rarely, consulted by their Management Authorities. Apart from discussing how to make a non-detriment finding, it is also important to address the issue of mutual co-operation between Management and Scientific Authorities.

Article V (trade in specimens of species included in Appendix III)

Although Article V deals with trade in specimens of species included in Appendix III, the article contains no reference to the responsibility of the Scientific Authority to judge the sustainability of exports of specimens of Appendix-III species; not even for a country that has included the species concerned in Appendix III.

Tasks included in Resolutions

Although various Resolutions refer directly to responsibilities of the Scientific Authority, only one refers specifically to the task of the Scientific Authority with regard to the non-detriment findings – Resolution Conf. 10.3 on the Designation and Role of the Scientific Authority. A number of paragraphs of this Resolution repeat in more detail the requirements of the Convention referred to above. However, some paragraphs under RECOMMENDS are worth further thought:

d) Parties enlist the assistance of Scientific Authorities of other Parties, as appropriate;

e) neighbouring Parties consider sharing their resources by supporting common scientific institutions to provide the scientific findings required under the Convention;

From these paragraphs it is clear that the drafters of the Resolution expect the Parties to work together and assist each other in making non-detriment findings. It is also important to consider why the Parties use the phrase "appropriate Scientific Authority" in paragraphs g) and i) to o).

Precautionary principle

Annex 4 to Resolution Conf. 9.24 (Criteria for Amendment of Appendices I and II) contains a number of precautionary measures that do not directly relate to non-detriment findings. However, paragraph A) could easily be applied by Scientific Authorities that do not have adequate information when trying to make a non-detriment finding. That paragraph reads as follows:

A. When considering proposals to amend the Appendices, the Parties shall, in the case of uncertainty, either as regards the status of a species or as regards the impact of trade on the conservation of a species, act in the best interest of the conservation of the species.

Conclusion

These excerpts from the Convention text and appropriate Resolutions, underline the importance of the requirement for making a non-detriment finding before exports of Appendix I and II taxa are allowed to take place. It is also worth noting that the Parties have recognised the need to work together in collecting reliable information on which to make the necessary non-detriment findings.

3.3 China – process, problems and recommendations for making non-detriment findings, *Wang Sung and Guo Yin Feng*

The role of the Scientific Authority

The function of the Scientific Authority (SA) to CITES in China is performed by the Endangered Species Scientific Commission located in the Chinese Academy of Sciences. The SA in China is able to advise the Management Authority (MA) on the export of CITES Appendix I and II specimens and on the import of Appendix I specimens. This advice is binding to decisions of the MA. For other species including nationally protected species, the SA provides advice when consulted by the MA. For the export of Appendix I and II specimens and the import of Appendix I specimens, non-detriment findings are normally made by SA members nominated by the Chinese Academy of Sciences. There are currently 27 members with different backgrounds such as systematics, ecology, behaviour, etc., who have expertise on species of different taxonomic groups of interest to CITES. Other biologists and competent authorities are also consulted as the SA deems necessary. The National Forestry Bureau is responsible for conservation and management of most CITES listed species and some specialized issues such as trophy hunting. Their comments on the status of species in trade is very helpful to the SA in making non-detriment findings.

What is meant by the "non-detriment finding"?

The SA of China has no ready definition of the meaning of non-detriment findings. These findings are usually made by SA members whose understanding of what is meant by a non-detriment finding may differ from member to member. The SA in most cases acts as a conveyor of the findings, in the form of documents representing the advice of the SA. Generally speaking, a non-detriment finding is made based on the best knowledge of a species as a whole, taking into account the following factors:

- basic information on population, such as geographical distribution, available habitats, population status;
- information on threats and population trend if available;
- biological attributes, endemism and other information showing the uniqueness of the species;
- level of harvest, volumes of domestic and international trade, potential for illegal trade;
- availability and success of management programmes;
- breeding success, etc.

Sources of information used to make non-detriment findings

Most non-detriment findings are made by SA members based on their best knowledge of a particular species. The main types of information used as the basis to make such findings can be divided into the following categories:

- Results of research projects on various aspects of species ranging from distribution, threats, captive breeding and behaviour to age structure, sex composition, etc. Most of the projects are conducted by the Chinese Academy of Sciences and university and college students.
- Data accumulated from regular national monitoring programmes on species under national protection, organized by national wildlife authorities and conducted by wildlife research institutions, colleges and universities. Information acquired is less inclusive and comprehensive than the above mentioned projects.
- Information on levels of harvest of species under national and local protection and species of economic value, and statistics of international trade in these species.
- Results of projects organized by the SA on species in significant trade or conducted by the SA on species or issues of CITES significance.
- Information from the China Endangered Species Information System (CESIS). This system results from the 8th 5-year Biodiversity Plan Programme undertaken by the SA and contains information on 653 vertebrate species, including data on species distribution, population status, threats, protected measures taken, recommendations, rearing and breeding conditions, etc. Data is still being entered into the system.
- Other information, such as domestic trade statistics from companies trading in animal parts and from specialized associations related to wildlife use, etc.

Difficulties encountered and recommendations

There are many constraints affecting the making of non-detriment findings by the SA in China, including a shortage of funds to allow the SA to work more independently and a lack of personnel with a strong biological background. In addition, there is a lack of complete and centralized information on the levels of harvest and use of species, particularly for species with a wide distribution. Neither the SA nor its members are able to acquire and gain access to all these scattered data. The information used by the SA members only reflects members' own knowledge rather than the best information available on the species. Furthermore, whilst some species are well studied, for others there is a lack of even basic biological information.

To improve the process of making non-detriment findings and maximize the use of available information, the following recommendations should be considered:

1) Pragmatic, scientific and standardized guidelines for non-detrimental trade should be made, to enable the SA to give sound advice for different groups of species. The guidelines would take care of the general situations of Scientific Authorities of all CITES Parties.
2) A mechanism should be introduced (in the guidelines) to let the local wildlife authority responsible for developing management programmes for most Appendix II species demonstrate that the approved levels of harvest are not detrimental, while the SA members (or SA) make non-detriment findings on the basis of the information provided. This will also help to overcome the knowledge limitations of members themselves.
3) Quick and inexpensive communication tools such as e-mail should be used and the SA encouraged to strengthen its communications with domestic and international wildlife research institutions and field biologists with expertise on various taxonomic groups to ensure that wider input of information can be incorporated into the SA's advice.

3.4 Indonesia – making non-detriment findings in the Scientific Authority,

Siti Nuramaliati Prijono

Indonesia is thought to have the second highest level of biodiversity in the world. Overseas demand for Indonesian wildlife and wildlife products is very high so a balance between production and harvest of Indonesia's resources is needed to achieve sustainable use.

Indonesia ratified the Convention on International Trade in Endangered Species of Fauna and Flora (CITES) in 1978. However, the threats to Indonesia's wildlife continue to increase and smuggling and illegal trade are rife, as the total prevention of poaching and smuggling is difficult. Therefore, producer countries require the assistance of consumer countries to complement their own efforts to enforce strict border controls.

The role of the Scientific Authority

One of the principal mechanisms of CITES for the regulation of international wildlife trade is that provided by Article IV of the Convention. Poor implementation of Article IV severely reduces the effectiveness of CITES trade controls, with possible disastrous consequences for excessively traded species. The Indonesian Institute of Sciences (LIPI) is the designated CITES Scientific Authority in Indonesia. LIPI is responsible for approving, co-ordinating, supervising and also conducting research on Indonesia's flora and fauna, and advising the Management Authority on the status of species that are, or may be, subject to trade. One of the major roles of LIPI as the Scientific Authority is to advise when exports of a species should be limited. Export limitation is usually achieved by setting an annual harvest quota. The procedure for the establishment of the annual quota is central to the implementation of Article IV of the Convention in Indonesia.

What is meant by the "non-detriment finding"?

The advice from the Scientific Authority that the export will not be detrimental to the survival of the species is obviously essential for achieving the aims of the Convention. Non-detrimental trade is defined as trade in a species of fauna or flora, which will not cause the species to decline in number in its natural habitats to a level where it is threatened with extinction. Different definitions of non-detrimental trade are used for Appendix I and Appendix II species in Indonesia.

Sources of information used to make non-detriment findings

For the Government of Indonesia to achieve sustainable use of wild species and implement its obligations under Article IV of CITES, effective assessment and monitoring programmes are essential. Ideally, an assessment should be performed before the harvest of a wild species begins, to acquire information on the status of the species in the wild. This assessment should aim to determine its: abundance, distribution, role in the habitat and ecosystem, reproductive capacity, reproductive behaviour, habitat quality, etc. Based on this information, harvest levels can be set with a reasonable assurance that they will not have a detrimental impact on the survival of the species in the wild. However, it is not realistic for LIPI to provide rigorous baseline surveys and follow-up monitoring for all populations being harvested. Nonetheless, LIPI endeavours to ensure that harvests are sustainable for the highest priority species. Furthermore, Indonesia's capacity to survey wild species can be enhanced by co-operating with non-Indonesian scientists who wish to undertake field research on wild animals or plants in Indonesia.

Indonesia has a national biodiversity monitoring programme which regularly collects status information at the species level, for priority species. The Indonesian Scientific Authority collaborates with non-governmental organizations and universities to develop this monitoring programme. In addition, information on the status of wild species in Indonesia is also collected by recording data from harvesting activities.

The national programme to monitor levels of species use at the domestic and international levels is undertaken by Management Authority personnel. The Scientific Authority does not undertake this type of monitoring as it does not receive export permits from the Management Authority. However, the Scientific Authority can give advice to the Management Authority to prevent exports, if it believes these exports to be detrimental to the survival of the species.

Difficulties encountered and recommendations

Efforts to control the trade in wildlife species, and to promote species conservation in Indonesia face many obstacles, because the desire of the general public to keep or to consume wildlife species is still high. As a result of these pressures on wildlife, Indonesia now has the unfortunate distinction of being the country with the greatest number of vertebrates threatened with

extinction. Conservation efforts are necessary to promote the sustainable utilization of living resources and their ecosystems to ensure that they are maintained in balance. The functions of the Scientific Authority are extremely important and should be considered as absolutely essential for the implementation of the Convention.

The following recommendations should help to improve the process by which non-detriment findings are made, and to increase confidence in the findings:

1) Field surveys should be initiated for selected priority species.
2) LIPI should develop methods for wildlife population monitoring for distribution to the regional Directorate for Forest Protection and Nature Conservation (PHPA) offices and local universities so that information gathering can be performed on the basis of defined methods.
3) Existing relevant data on priority species should be collected from all sources, including non-governmental organizations and other agencies to facilitate pilot surveys and monitoring activities.

3.5 Namibia – quotas, monitoring and management plans in relation to non-detriment findings, *Malan Lindeque*

The role of the Scientific Authority

Namibia's Scientific Authority functions are performed by an informal group of dispersed scientists who have information relevant to the implementation of CITES. As such it is impractical to consult with a given authority on a case-by-case basis. Namibia has accordingly attempted to streamline the non-detriment process as well as integrating CITES implementation with domestic conservation management in general. Consequently, Namibia intends to expand the use and scope of annual quotas and management plans to ensure sustainable use of wildlife resources. This approach will in effect obviate the need to make individual non-detriment findings for exports of Appendix I and Appendix II species. Accordingly, Namibia sponsored Resolution Conf. 9.21 which provides that export quotas set by the Conference of Parties to CITES for Appendix I species satisfy the requirements of Article III regarding the making of a non-detriment findings. The same approach is followed as far as possible within Namibia regarding Appendix II species, i.e. managing exports on the basis of a predetermined annual quota.

Quotas and management plans have been established by the relevant management agency (or the Namibian CITES Management Authority) in collaboration with local and international scientific authorities for most of the major species exported, i.e. the African elephant *Loxodonta africana*, cheetah *Acinonyx jubatus*, leopard *Panthera pardus* and Cape fur seal *Arctocephalus pusillus*. Management plans are also available for some other CITES listed species, and the drafting of a plan for the Hartmann's Mountain zebra *Equus zebra hartmannae* has been initiated. The management planning process is not yet complete and existing plans will need frequent revision. However, the Namibian CITES Management Authority supports the adaptive management paradigm and hopes eventually to make all harvests from wild populations subject to management plans.

CITES quotas

All Namibia's CITES quotas are fixed annual quotas, as in most other countries. However, several aspects of the quota setting process within the Conference of Parties to CITES merit further consideration:

- no common standard for quota setting has emerged, i.e. some quotas appear to be arbitrary and apparently not based on representative information or scientific criteria;
- quotas are seldom sufficiently specific, they only indicate the number and type of specimens, but do not include information on other restrictions such as locality of harvest, harvesting method, monitoring of harvest and time period;
- the CITES quota setting process is difficult, cumbersome and inequitable, deterring Parties from seeking frequent amendments to quotas that may more accurately reflect conservation and management needs;
- increasingly, CITES decisions are apparently made on political rather than scientific grounds; and
- Appendix I (sometimes viewed as the zero quota system) is particularly inflexible and divorced from actual conservation concerns and needs.

Appendix I, or zero quotas are regarded by some as the pinnacle of conservation success and by others as the worst conservation failure. This dichotomy distorts CITES, and this situation of inequity and insecurity will continue to undermine the scientific integrity of CITES decisions.

Namibia's proposed quota and licence system

Namibia has recently updated and revised its conservation policies and legislation to consolidate achievements such as the long-term recovery of wildlife populations, the establishment of a large and growing wildlife-based industry and the community-based natural resource management approach. All commercial use of wildlife will in future become subject to a quota control system which aims to:

- shift the level of management from individual farming units to the level of a distinct wildlife population, so as to establish management at the appropriate ecological level and eliminate multiple uncoordinated harvests from the same population;
- regionalize the system to reduce the need for farm inspections and for issuing permits on a case-by-case basis;
- encourage the formation of conservancies, through management at the population level;
- maximize the benefits from economy of scale for the Ministry of Environment and Tourism's (MET) monitoring, regulatory and administrative roles in the quota and licence system;
- determine the level of harvest through adaptive management by using initial resource inventories, monitoring the impact of previous harvests and responding to environmental variance; and
- ensure that total annual harvest from all forms of use falls within sustainable limits, by proactive government regulation and monitoring of total harvest rather than managing on a case-by-case basis.

Sustainable harvest quotas for all species will be established on the basis of population estimates and the demographic characteristics of populations. Initial quotas will be determined from potential rates of increase typical for each species in arid and semi-arid areas. These quotas can be subsequently adjusted on the basis of monitoring of population trends. In some areas it might be appropriate to manage populations at a level that will allow for population recovery and increase. In such cases harvests should be well below the maximum sustainable level. A licence system will be used in conjunction with the quota system to:

- distribute the quota on a competitive or representative basis amongst the landholders; and
- certify harvest as part of a quota, and thus facilitate law enforcement.

Namibia's approach to resource monitoring

A fundamental principle of adaptive management is that wild populations should only be used if the impact of such use is monitored. An effective survey and monitoring system is necessary for the initial determination of the size of the resource and for subsequent monitoring of the impact of use. Current aerial survey technology and capacity in Namibia are sufficient to obtain independent scientific estimates of population densities for at least the economically important species throughout the country. While such monitoring is a considerable undertaking, and requires significant resources, the information returns justify the input. In 1998, *c*.350,000km^2 or nearly 40% of the land was surveyed. In addition to regular population monitoring, quota uptake should also be monitored, particularly where population monitoring is not undertaken annually. It is essential to monitor the effort and efficiency of harvesting, i.e. the proportion of the quota used, and harvest/person or per time period. It is particularly important to know how much of the quota was not used (in a given area or time period), and incentives are needed to ensure that this information is provided (e.g. a discount on future licences or a lottery for the return of unused licences).

Management plans

The proposed quota system for Namibia provides strong incentives to encourage communal management of migratory, nomadic or communal wildlife populations. The strongest incentive is to exempt certain categories of land or certain wildlife producers from the standard quota system on the basis of approved management plans. Such plans should have an integrated quota setting and resource monitoring procedure (in addition to the more practical elements of wildlife management). This system will apply to land units which can be managed in isolation as well as to contiguous groups of farms or land holdings ('conservancies') preferably in excess of 200,000ha. To qualify, wildlife resources on such units have to be managed cooperatively to ensure that harvests are sustainable and biodiversity is maintained or restored.

To facilitate implementation, management plans must be simple. As a minimum requirement such plans should include the setting of management objectives (including quotas) and a protocol for monitoring population status, introductions, and removals. Removal should be recorded in such a way as to allow the monitoring of harvest effort.

3.6 Togo – making non-detriment findings: current practice, problems and future recommendations, *Joseph Esso Bowessidjao*

The role of the Scientific Authority

Other than the documents received periodically from the CITES Secretariat, there are few references available in Togo to assist the Scientific Authority in carrying out its work. There is a sad lack of the basic facts needed to establish the different quotas. The definition of non-detrimental international trade in a wild species refers to an international trade that does not threaten the survival of the wild species. This definition only concerns the species included in Appendix II.

In Togolese legislation, species listed in Annex I are said to be protected. However, according to the legislation of Togo, this Annex includes two distinct classes:

- **Class A** includes wild animals that are protected in full, for which hunting and capture, including that of young or eggs, are forbidden except to those carrying scientific permits and within the limits and means detailed in those permits; and
- **Class B** includes the taxa of wild animals protected in part and is divided into Group I and Group II:
  - **Group I** includes the list of all fully protected wild animals, of which hunting and capture, including that of young or eggs, is only authorized to those carrying capture permits (within the limits and means detailed in those permits) and to those carrying special sport hunting permits (for trophies or collection pieces).
  - **Group II** includes the list of partially protected wild animals of which the hunting of individual adults, with the exception of females accompanied by young, is permitted to holders of special sport hunting licences, within the limits of the quantities fixed for each grade, and by means authorized by law. Capture, including that of young, is permitted to those carrying capture permits within the limits and means detailed in the permit.

What sources of information are used to make non-detriment findings?

For species listed in Annex I of the Togolese legislation, the animal population needs to be examined in each case. It is possible to find local or regional populations where the population concentration, or density, actually threatens the survival of the species and in these cases it would be better to instigate scientifically-based population control. The CITES management groups would then need to find the necessary means to provide for local or regional management of the species concerned.

To form the basis for decisions on export that does not affect the survival of a species, a better knowledge of biology, ecology and exact distribution of the species is needed and information on productivity, birth, and death rates should be well known. However, there is no national programme for monitoring biological diversity in Togo. The establishment of such a programmeshould be considered. The Science Faculty of the Université du Bénin in Togo has initiated a small programme to establish a monitoring framework for waterbirds, but this suffers from a lack of materials and finance.

The motivation and technical knowledge exist at the Université du Bénin to develop a monitoring framework to manage reptile exports. However, open collaboration between ranch breeders, traders and management groups will be needed. To facilitate successful monitoring and management, the farms breeding wild animals will each need to keep the following information: exact stock records; statistics on reproduction and fecundity; records of death rates; records of stock released into the wild and their identification marks; and a record of the place of capture of wild animals. Capture records will help to establish the current distribution of the species and to avoid the export of species that do not occur in Togo.

Togo's wildlife management system requires that releases of surplus animals must be carried out in the presence of the CITES Scientific Authority. In addition, a scientific system must be developed to determine export quotas, at the very least for species such as the pythons, *Python regius* and *Python sebae*.

Recommendations

- CITES management bodies in Togo should enforce control measures on the general export of wild animals;
- CITES management bodies in Togo should, in future, use scientific management programmes to ensure long-term availability of specimens;
- CITES management bodies in Togo should also, in future, ensure that breeding farms strictly observe the above mentioned points before delivering an export permit;
- CITES management bodies should base the allocation of export quotas on credible scientific formulae and criteria;
- A biological and ecological study of animals destined for export should be made to ensure long-term sustainability of the resources.

3.7 Cameroon – interpretation of the non-detriment finding, *Jean Ngog Nje*

The role of the Scientific Authority

The responsibilities of the CITES Scientific Authority are described in Article III paragraphs 2a, 3a, b and 5a, and Article IV paragraphs 2a, 3 and 6a of the Convention and in Resolutions Conf. 2.11 (Rev.) and 10.3. The importance of Scientific Authorities was recognised in 1992 with the adoption of Resolution Conf. 8.6 (Rev.) which stressed the importance of Scientific Authorities and asked the CITES Secretariat, with the help of appropriate experts, to prepare guidelines for Scientific Authorities. To assist this process, a questionnaire on the role of the Scientific Authority, to be answered by both the Management and Scientific Authorities, was circulated to the Parties. Questionnaire responses highlighted several problems regarding the functioning of the Scientific Authorities: lack of independence; lack of communication between Management and Scientific Authority; and lack of resources (manpower, funding, time, etc.). These responses were used to inform the development of Resolution Conf. 10.3 which repeals Resolution Conf. 8.6 (Rev.).

The making of non-detriment findings by the Cameroon Scientific Authority

The Scientific Authority of Cameroon makes non-detriment findings using the text of the Convention and resolutions as references. The Scientific Authority does not have a working definition of the term 'non-detrimental', but uses the text of the Convention as a basis. Where possible, information on the distribution and approximate population size of the species in question are used in the making of non-detriment findings. Such information is available from two sources:

- since 1996, the GEF has supported a project to monitor Cameroon's biodiversity; and
- some monitoring is carried out by non-governmental organizations, the University, and individual researchers.

However there is no national programme known to Scientific Authority staff, to monitor levels of species use at the domestic and international levels. Due to lack of resources the Scientific Authority is not able to monitor regularly export levels and to advise the Management Authority of any concerns. If funds were available, the Scientific Authority would make arrangements to monitor exports at the main ports of exit and to train staff in species identification, national regulations, CITES regulations and in strategies used by customs to detect smuggled wildlife goods.

Recommendations to improve the making of non-detriment findings

To improve the making of non-detriment findings in Cameroon the following requirements are necessary:

- training seminars should be run on a regional and sub-regional basis for both the Scientific Authority and the Management Authority;
- guidelines must be available for Scientific Authorities;
- funds must be available for SA staff to undertake field investigations when necessary;
- funds must be available to improve communication with Management Authorities and the CITES Secretariat; and
- the Management Authority should have the necessary resources to function effectively.

Conclusion

The role of the Scientific Authority is complex but essential for the implementation of the Convention. The advice it is required to give necessitates knowledge of the conservation status of the species and good collaboration with other partners, especially the Management Authority.

3.8 Australia – Wildlife Protection (Regulation of exports and imports) Act 1982, *Tony Bigwood*

The role of the Scientific Authority

The export of wild harvested native plants and animals (including products) from Australia, and the import of specimens of CITES listed species is regulated by the Wildlife Protection (Regulation of Exports and Imports) Act 1982 (the Act), particularly Sections 10 and 10A of the Act. The Act bans the export for commercial purposes of live native vertebrate animals, except fish, and regulates exports of most native plants and animals, although there are a number of exceptions including some marine fin fish, some marine invertebrates and wood.

The Act also regulates the import of most live animals, and has the capacity to regulate the import of live plants. Where CITES Appendix II specimens are being

considered for commercial import into Australia, the management arrangements for those species must be approved by the Australian government.

Specimens may be harvested under a designated Management Programme or as a Controlled Specimen. In management programmes the Minister must be 'satisfied' about a number of moderately strict criteria in making a decision. In contrast, as a Controlled Specimen somewhat less stringent criteria must be 'taken into account' when making a decision. Management programmes are generally required for larger, more established harvesting proposals, while Controlled Specimen declarations are used for smaller start-up operations where there is often less information on the biology and ecology of the species in question. The Controlled Specimen provisions are also generally used when considering the commercial import of CITES Appendix II specimens.

The sort of information that is required to determine non-detriment for a species in trade is outlined under the Act. These criteria only apply to Appendix II specimens (the import and export of CITES Appendix I specimens is only permitted under the Act for inter-zoological gardens transfers, scientific purposes or where the specimen is captive-bred). Management programmes can be declared when there is sufficient information available on the biology of the species to ensure that the proposed harvest will not be to the irreversible detriment of the species, or its habitat. Such programmes are usually administered by State or Territory government agencies and reflect State/Territory-wide management for the particular species concerned. The criteria for a management programme are:

a) that there is sufficient information concerning the biology and ecology of each species intended to be subject to the management programme to enable the designated Authority to evaluate a management programme for that species;

b) in the case of a management programme that is proposed to be carried out, is being carried out, or has been carried out in another country – that the Designated Authority has received and considered information relating to the management programme; and

c) in the case of a management programme that is proposed to be carried out, is being carried out, or has been carried out in Australia or in an external Territory – that the Designated Authority has held discussions with all relevant bodies; and

d) after receiving and considering advice from the Designated Authority – that the management programme contains measures to ensure that the taking in the wild, under the management programme, of an affected specimen will be carried out so as to maintain the species or sub-species in a manner that is not likely to cause irreversible changes to, or long-term deleterious effects on, the species or sub-species, or its habitat; and

e) after receiving and considering advice from the Designated Authority – that the management programme provides for adequate periodic monitoring and assessment of the effects of taking specimens, under the management programme, on the species or sub-species to which the specimens belong, the habitat and any other species or sub-species specified in writing by that taking; and

f) after receiving and considering advice from the Designated Authority – that the management programme provides for a response to changes in:

   i) the populations and habitats of the species subject to the programme; and

   ii) knowledge and understanding of the biology and ecology of that or those species; and

g) after receiving and considering advice from the Designated Authority – that the management programme is consistent with the object of the Act.

Current management programmes include:

- A Management programme for the Saltwater crocodile *Crocodylus porosus* and the Freshwater crocodile *C. johnsoni* in the Northern Territory of Australia.
- Management programme for the Saltwater crocodile *C. porosus* and the Freshwater crocodile *C. johnsoni* in Western Australia.
- The Short-tailed shearwater *Puffinus tenuirostris* Management programme in Tasmania 1998–2000.
- Management programme for the Brush possum *Trichosurus vulpecula* (Kerr) in Tasmania 1997–1999.
- The New South Wales Kangaroo Management Programme 1998–2002.

The Controlled Specimens provision allows for commercial harvesting and trade, under strict conditions, where it would be inappropriate to insist on a management programme, and where it is consistent with the object of the Act not to declare an approved management programme. Such circumstances might include short-term salvage harvesting, small-scale harvesting of

common species, the developmental stages of management programmes and the import of CITES-listed species from overseas. All harvesting proposals are currently assessed in accordance with the principles of ecological sustainability and conservation of biological diversity. The criteria for a Controlled Specimen are:

a) the distribution of the species from which the specimens would be taken would be derived, and its national and regional status and abundance; and

b) the likely effect of the taking of the specimens on the population from which the specimens would be derived; and

c) any existing management provisions under laws relating to the species, or the population, from which the specimens would be derived; and

d) in the case of a specimen which is to be imported, advice from the Designated Authority following his or her consideration of information relating to the management of the animals or plants from which the specimen would be derived; and

e) in the case of a native Australian specimen, advice from the Designated Authority following his or her discussions with any relevant body; and

f) advice from the Designated Authority as to:

   i) the nature and extent of controls over the taking, possession and disposal of the specimens; and

   ii) the nature and extent of any proposed or potential trade in the specimens for commercial purposes; and

   iii) any management and monitoring procedures necessary to ensure that the population from which the specimens would be derived will not be adversely affected by the proposed level of exploitation.

Current controlled specimen declarations include:

- Management programme for Protected Plants in Trade in Queensland 1995–1998.
- Management of Native Freshwater Fish in the Northern Territory.
- Management arrangements for Specimen Shell Collection in Western Australia.
- Management Plan for the Commercial Exploitation of Jellyfish *Catostylus mosaicus* from New South Wales Ocean and Estuary Waters.
- Beche-de-mer Fishery Management Arrangements – Queensland.
- Interim plan for beche-de-mer fishing in Western Australia.
- Small scale harvesting operations for *Dicksonia antarctica* in Victoria.

Current Controlled Specimen declarations for overseas countries include:

- "Rain Sticks" where each consignment must be covered by a Chilean CITES export certificate or re-export certificate indicating Chile as the country of origin.
- Birdwing Butterflies: Applies only to butterflies derived from the operation conducted by the Insect Farming and Trading Agency Papua New Guinea. Relevant permit or certificate must be issued in compliance with CITES by the appropriate authority of the country of export or re-export.

When considering a proposal to export specimens of a species the level of monitoring is part of the consideration. The Declaration required to approve a commercial export proposal often reinforces the reporting requirements of the proponent. There is no co-ordinated national level biodiversity monitoring programme. Where an individual species is subject to a significant level of use, for example; kangaroo, crocodiles, mutton birds, and some species of flora, specific monitoring programmes are established to determine the population and the sustainability of harvesting operations.

The Scientific Authority has access to the trade database and regularly interrogates the database about the level of trade in particular species, as well as the origin of the export and other relevant information. There is however a requirement to upgrade the capabilities of the database to enable more rigorous assessment of trade. There is generally a preference to regulate harvesting at the point at which it is occurring or at the wholesale or processing points rather than through regulation at the point of export.

3.9 Bolivia – non-detriment findings and monitoring/quota setting policy,
Lillian Villalba

The role of the Scientific Authority

Bolivia's major wildlife and environmental laws were established in 1975 and 1992. Since 1986 three successive Supreme Decrees have established a total ban on all wildlife hunting, trade and export. However, the first two Supreme Decrees from 1986 and 1987 had some exceptions that permitted the export of skins of Yacare caiman *Caiman crocodilus yacare* and wild pecaries *Tayassu* spp. The third Decree dating from 1990 had no exceptions and established that species may be removed from this prohibition only by a specific Supreme Decree. However the export of wildlife products confiscated and sold by public bid, was authorized, if they were not included in CITES Appendix I.

From 1994, when the National Museum of Natural History (MNHN) was designated as the Scientific Authority, to the time of writing, the Bolivian government had not approved the export of wildlife for commercial purposes. However, products of Yacare caiman and wild peccaries, stock-piled during 1986–1989, and products confiscated and sold by public bid since November 1990 are exempt from this export ban.

The procedures for issuing CITES permits are rigorous. The evaluation and verification of the legality of acquisition of wildlife products by the exporting companies is particularly important. This evaluation includes examination by the Wildlife Consultative Council, composed of scientific institutions with relevant experience and knowledge, who *recommend* to the Management Authority whether the CITES permit should be issued. Until May 1998, issuance of CITES permits by the Management Authority, was supported only by the Wildlife Consultative Council recommendations. Later the General Biodiversity Direction established a permanent CITES co-ordination office and the mechanism for issuing permits was improved and became more efficient. The Scientific Authority is now the first point of contact for issuance of CITES permits.

Sources of information used to make non-detriment findings

The Scientific Authority non-detriment findings are based on:

- the knowledge of specialists;
- the Vertebrate Red Data Book of Bolivia (published in 1996);
- the IUCN Red List categories; and
- recommendations of the Wildlife Consultative Council, of which MNHN is one of the three non-governmental members.

However the lack of basic knowledge about local geographical distribution, numbers and conservation status of several species, makes it difficult or impossible to decide if the export is detrimental or not for a specific species.

Currently, only two species, vicuña *Vicugna vicugna* and Yacare caiman *Caiman crocodilus yacare*, are under specific regulations that allow their use in an experimental way. A national census for the vicuña and a survey to establish the relative abundance of Yacare caiman were required before the specific regulations allowing experimental use could be issued. Therefore at the time of writing, these were the only two species for which reliable population status information was available. However, a regular monitoring programme has not yet been initiated.

The lack of human resources (the absence of dedicated core staff) and operating funds, have restricted the ability of MNHN to fulfil its functions as a Scientific Authority. Activities have been limited to an evaluation of the issuance of CITES permits.

Recommendations to improve the making of non-detriment findings

A number of factors should be considered to improve the work of the Scientific Authority in Bolivia:

- Funding and institutional support is essential to encourage and improve the work of the Scientific Authority and to ensure that the following can occur:
  - long term studies on biology, ecology, population dynamics, surveys and a monitoring programme for native, economically important species;
  - an assessment and monitoring of wildlife trade;
  - the establishment of a data bank and information network about CITES;
  - training of additional field staff for MNHN and other scientific institutions of other Bolivian departments to carry out surveys and monitoring; and
  - joint work, through collaborative agreements, between MNHN and other local institutions for the implementation of monitoring programmes.

- The functions of the Management Authority should be clearly defined and separated from those of the Scientific Authority.
- Communications should be improved between Scientific Authorities in the region, in order to exchange information and experience.
- The Management Authority will require funds for operations, equipment, improving local infrastructure and training official staff, to allow effective control of hunting, trade, export and inspection of wildlife use or management programmes.

3.10 Procedures used by the United States of America in making CITES non-detriment findings, *Susan Lieberman*

The role of the Scientific Authority

The United States has the unique advantage of a large and robust scientific community to draw upon, as no matter how many staff there are in the Scientific Authority, we can never have all the expertise necessary to make non-detriment decisions alone. We must work closely with the scientific community, experts, and others around the world. I believe that the same is true in all countries of the world. Decisions on particular exports, either for individual shipments or annual quotas, should be made based on the best available information, and based on consultations with experts on particular taxa. If we reach a global scientific consensus on what is not detrimental for particular species then we will reduce much of the controversy about whether or not particular uses are sustainable or not.

The United States is both an exporting and major importing country. We have a federal system in the United States, and the office of the Scientific Authority works very closely with our States and Indian Tribes in the export of our native species. In some cases, such as for the American alligator and American ginseng, those exports are extensive. We also support large numbers of captive-bred wildlife, often of species wherein the founder stock was imported from other countries. This paper will focus on fauna, but many of the same points could be made for flora.

All non-detriment findings are made in the United States by the Division of Scientific Authority (as required by the CITES treaty). There has been some discussion in CITES fora as to what is meant by the independence of the Scientific Authority, as required by CITES and Resolution Conf. 10.3. The explanation is quite simple. When we in the Scientific Authority make a finding that a particular export (or import for Appendix I species) would either be detrimental or that we have insufficient information on which to make a non-detriment finding, the Division of Management Authority cannot issue the CITES permit. It is as simple as that. Of course, in some cases further dialogue with the Management Authority, or the provision of new information, may modify our finding, and in all cases applicants that have been denied a permit have an appeal process available to them. But the important point is the independence; the Management Authority cannot issue a permit if the Scientific Authority does not make the non-detriment finding. I am acutely aware that in many countries that is not the case, and the Management Authority either does not consult the Scientific Authority, or ignores their biological opinion in many cases; in some countries they are even the same individuals. That lack of scientific independence poses a serious problem for the implementation of CITES, and more critically, a serious problem for the conservation of species subject to international trade. In other words, the independence of the Scientific Authority is not a function of where it sits in a country's bureaucracy, but rather the independence of the decision-making process.

Sources of information used to make non-detriment findings

In all cases, the status of the species in the wild is the primary factor that we take into consideration in making a non-detriment finding. Our non-detriment findings, whether for Appendix I or Appendix II species, are based on the best available biological information, are scientifically grounded and consider whether the species in the wild is common, abundant, managed, stable, declining, threatened, or endangered. We may pay greater attention to some proposed shipments than others, based on the status of the species. In all cases, the degree of risk to the species (risk of detriment, illegal trade involvement etc.) determines the degree of scrutiny. Therefore, if a species being bred in the United States is a highly valuable species subject to illegal trade, or a rare endemic in its country of origin, we might pay closer scrutiny than to a species bred here that is extremely common and less valuable economically (and thus less at risk of illegal trade, laundering etc.). I believe that Scientific Authorities must pay particular attention to illegal trade risks to species, as illegal trade poses significant risks to the conservation of species in the wild. This is true for both Appendix I and II species.

It is useful to highlight some of the information sources that we use. When our Scientific Authority receives permit applications from the Management Authority, any of the following information sources may be consulted in making non-detriment findings:

- Published literature – scientific journals, the Internet, databases, publications of TRAFFIC and other NGOs and other publications;
- Species experts – individual scientists, field biologists, members of IUCN specialist groups, Species Survival Plan coordinators, studbook keepers, and other experts;
- U.S. government officials in other countries – when applicable we consult U.S. government officials in other countries that may have useful information on conservation and management in that country where they are located (such as the U.S. Agency for International Development and the U.S. Department of State);
- Other CITES Management and Scientific Authorities;
- CITES Secretariat (when applicable);
- CITES documents – documents from previous meetings of the Conference of the Parties (including proposals submitted to amend the Appendices), and documents from the Animals, Plants and Standing Committees, when applicable.

Many of the sources of information that we use are now available on the Internet, and I welcome efforts to produce a directory of these information sources for CITES Scientific Authorities.

For every CITES permit request we receive from our Management Authority, a non-detriment finding is "on file". However, the United States issues more than 5,000 CITES permits every year, and therefore we must prioritize applications. We therefore do not request to actually see every application (although which applications or types of application we see is at the discretion of the Scientific Authority). We have set up a system whereby certain "lower priority" or otherwise simpler applications can use so-called "general advices" that we issue to the Management Authority.

Every permit file has a U.S. Scientific Authority non-detriment finding in it, and every permit issued by the Management Authority is copied to the Scientific Authority. We track the permits that are issued as required by the CITES treaty, and the exports from the United States, in particular, for Appendix II species to implement effectively Article IV. Such monitoring is vital to the implementation of the requirement of Article IV paragraph 3. Unfortunately, all too often, Scientific Authorities in some countries may implement Article IV paragraph 2 (the non-detriment finding), but they have ignored the requirement of paragraph 3 to ensure that the species are maintained throughout their range at levels consistent with their role in their ecosystems, and well above levels at which they might become eligible for inclusion in Appendix I.

General advices

To expedite permit issuance for lower risk activities the Scientific Authority has devised a system whereby "general advices" have been issued for certain species and activities. Exceptions to these general advices often exist, and in those cases the Scientific Authority requests that the Management Authority provide it with a copy of the permit application. Both offices are in constant, close coordination, but the decision-making processes are independent. The Management Authority provides the Scientific Authority with copies of all permits issued, to assist it in its monitoring functions and to allow the Scientific Authority to confirm that permits have been issued appropriately and the correct advices have been used.

General export findings (general advices) can be facility-based or species-based. Facility-based non-detriment findings are issued for facilities with which we are very familiar, and whose work usually either benefits species conservation or recovery, or the facility is breeding in captivity or artificially propagating species that we are familiar with. In many cases, we have physically inspected the facility (or it has been inspected by another Fish and Wildife Service representative, usually from our Division of Law Enforcement). Facility-based non-detriment advices can either be annual or multi-year. For example, we issue general multi-year findings for certain scientific research institutions with which we are very familiar. We have recently issued such multi-year findings for Appendix I and II specimens involving major conservation research institutions in the United States, for the import and export of tissue samples for scientific research. This does not exempt them from needing a CITES permit, of course, but it allows our Management Authority to issue a permit more expeditiously.

Species-based non-detriment advices include more open-ended general advices for export of certain (low risk) non-native captive-bred animal species or artificially propagated plant species. We evaluate whether or not certain species meet the criteria in Resolution Conf. 10.16, as bred in captivity, and in particular whether all specimens in the United States meet those criteria. Such determinations take into consideration the establishment of the original founder stock, and whether or not additional animals are imported into the United States for commercial breeding purposes, among other

factors. There are also native species for which we have issued species-based advices, including the paddlefish (*Polyodon spathula*) and white sturgeon (*Acipenser transmontanus*), with the stipulation to our Management Authority that these are for aquaculture-produced fish only. The Management Authority then has the obligation to ensure that the specimens are indeed captive-bred.

In addition, we approve several native Appendix II species on an annual or multi-year basis for export, based on State programmes. For species such as American ginseng and American alligator, we approve the programmes of the various States and Indian Tribes in the United States on an annual basis, based on the information provided to us by our States. We make our non-detriment finding based on that information. We do not issue quotas to our States, or national quotas, but rather approve the export programmes of individual States and Tribes, based on our satisfaction that the State's or Tribe's harvest or export programme is not detrimental to the species. A list of approved programmes is available on request. There are also several furbearer species in the United States (such as the bobcat *Lynx rufus* and river otter *Lutra canadensis*) that are listed under Article II.2.b of CITES, in that they are similar to other furbearer species, and their pelts may be confused with either Appendix I species or similar Appendix II species. Under Article II.2.b., their listing is in order to ensure that trade in the other species to which they are similar is brought under control and our non-detriment finding for these species is made on this basis. Of course, it is the obligation of each Scientific Authority, in the case of II.2.b species, to ensure that the species does not decline to the point that it qualifies for Appendix II in its own right. We receive information from our States every year that allows us to monitor exports and satisfy us that exports are not detrimental.

Samples of any of our general advices (facility-based, species-based, or State programmes) are available on request from the Scientific Authority. The important point is that we have devised a flexible system that allows us to strategically focus our resources and attention.

Types of non-detriment advices

So how do we make non-detriment findings? Population monitoring and censusing may be appropriate for certain exports, while adaptive management and similar strategies may be appropriate in other cases. In the case of imports of Appendix I specimens, censusing and population monitoring or other management is the responsibility of the range country and so the US Scientific Authority adopts a different approach. We make individual non-detriment findings for three categories of trade: live animals, sport-hunted trophies and scientific specimens. Some of the more contentious findings that we make often involve those for the import of Appendix I species. Our general operating principle is that for Appendix I species, import or export is likely to be considered detrimental if the proposed activity stimulated removal from the wild, or may stimulate the removal of additional specimens from the wild, without any off-setting benefit for the conservation of the species in the wild. The degree of off-setting benefit necessary is related to the extinction risk to the species. For imports, we take into consideration the management programme in the country of export in evaluating the conservation benefits of the proposed activity. As stated previously, the status of the species in the wild is the primary factor that we take into consideration in making all non-detriment findings.

Live animals: We look at captive animals a bit differently from wild-caught animals, as the risk to the conservation of the species in the wild is by definition greater for wild-caught animals. For captive animals, we look at the origin of the animals. If the animals are captive-bred, in general, neither import nor export is considered detrimental, unless the proposed activity would disrupt conservation efforts for rare or endangered species. If the animal is wild caught, but is a long-term captive, we usually treat it the same as a captive-bred animal, as long as the proposed activity is unrelated to the circumstances of the original removal of the animal from the wild. Therefore, we take into consideration the length of time that has elapsed since the animal was removed from the wild. This is particularly germane for personally owned animals or animals for zoological exhibition or display. In the case of recently wild-caught animals, if the removal from the wild appears to be unrelated to the proposed activity, we may treat them the same as captive-bred specimens. An example of such an occurrence is the case where an animal is removed from the wild for the treatment of injuries.

In looking at live captive animals, we pay particular attention to the origin of the animal [and founder stock in the case of captive-born individuals]. This is vital to ensure that wild-caught animals are not being traded as captive-bred specimens. There are also all-too-many cases where animals may themselves be bred in captivity, but the founder stock was not obtained legally, and therefore export of even the progeny would be detrimental to the survival of the species (in that it increases demand and facilitates detrimental trade). Information that we use to verify the origin of the animals can include: a) affidavits from the applicant, the breeder, and previous owners; b) ISIS (International Species Inventory System) documents and studbooks; or c) published sources, such as the

International Zoo Yearbook, IUCN Red Data Books, or other similar publications.

In the case of wild-caught animals, we look at the impact on the species in the wild and we verify the origin of the animals. In considering the impact on the species, each case is looked at individually, based on the best available biological information. This is particularly relevant for imports of either Appendix I species or species subject to stricter domestic measures here in the United States (such as the Endangered Species Act or the Wild Bird Conservation Act). We consider various factors, including: a) the current status of the species (including population size, trend and distribution); b) the impact on the population or species of removal of specimens from the wild; c) for Appendix I specimens, whether or not there is any off-setting benefit to wild populations from the proposed activity; d) range country management of the species; e) impacts on future recruitment; and f) the amount of incidental take.

In verifying the origin of wild-caught animals, the information that we consider can include: a) affidavits from the applicant; b) copies of collecting permits and other permits required by the range country; c) verification by other Management or Scientific Authorities; d) a copy of the CITES export permit (if applicable); and e) information from the current literature or species experts with knowledge about the species or country in question.

Sport-hunted trophies: One of the more frequent types of non-detriment advices that we provide pertains to sport-hunted trophies. In the case of Appendix II species (where our finding is on exports from the United States), we: 1) consult with the relevant State agency or Indian Tribe within the United States; 2) consider the current status of the population, including population size, trends and distribution; and 3) consider the management programme for the species, including permits or licences, quotas or bag limits, restrictions on seasons or hunting areas, age or sex limitations, and the marking of specimens.

For Appendix I species for which we are requested to make import findings, we consider a number of factors. For species that are imported in large numbers, we may issue a programmatic finding for one or more range countries, on an annual basis. Such is the case, for example, for the leopard, for which there is a CITES-approved quota, and for certain countries' populations of African elephants. We consider the following information in making import findings for sport-hunted trophies:

1. relevant Resolutions of the CITES Conference of Parties;
2. relevant Decisions of the CITES Conference of Parties;
3. relevant decisions or recommendations of the CITES Animals and Plants Committees;
4. the status of the species in the wild (population size, trends and distribution, including the IUCN classification);
5. the management of the species, including: permits or licences, quotas or bag limits, restrictions on seasons or hunting areas, age or sex limitations, and the marking of specimens;
6. whether the hunting programme in the range country provides benefits for the conservation of the species, including improved enforcement, habitat protection, or research on the species; and
7. the effectiveness of the implementation of CITES by the range country, including its implementing legislation, enforcement and overall CITES management.

Scientific specimens: We issue a relatively large number of findings for scientific specimens. In many cases, we try to issue these programmatically, usually on a facility basis, for a number of species or specimen types. This is analogous to the CITES exception in Article IV paragraph 6 for scientific institutions exchanging accessioned museum specimens. In this case we look at scientific institutions (such as universities or research institutions) that are working to benefit species conservation; it is our goal to expedite their import and export of scientific specimens. A certain amount of scrutiny is required to ensure that the research is legitimate. We have also issued general advices for tissue culture specimens, and for other specimens involving negligible risk to species in the wild. For scientific specimens, we differentiate between specimens from salvage materials or those taken from live animals. For salvaged material, we consider an activity to be non-detrimental if the material is derived from animals that have died of natural causes or opportunistically from legal subsistence or other take. We also take into consideration whether the import would stimulate additional take from the wild, such as by offering rewards or monetary compensation for specimens. We often condition our findings (and the Management Authority thus conditions its permits) to preclude the payment of rewards for specimens, which we believe could be detrimental to the survival of some species. For scientific specimens taken from live animals, we take into consideration the record of the importing facility, including its history of compliance with wildlife laws and regulations. We also consider the methods of capture, restraint, sample, collection, and other manipulations of the animals involved. Finally, we take into consideration whether the research is designed to result in

benefits for the conservation status of the species. We require each facility (particularly those with programmatic findings) to be responsible for ensuring the qualifications of the persons involved in the collection of samples.

Conclusion

In conclusion, I have tried to give an overview of the types of information we use in making our non-detriment findings, and therefore in fulfilling our obligations under the CITES Convention. The space available does not allow for examples of individual permit decisions and how we reach our conclusions. Our primary goal is the conservation of species in the wild, as stated best in the CITES preamble: "Recognizing that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the earth which must be protected for this and the generations to come". We are cautious and precautionary, and always focus on what is in the best interest of the conservation of the species in the wild.

3.11 European Union – stricter domestic measures and non-detriment findings for imports of Appendix II species, *David Morgan*

CITES Implementation in the EU

The implementation of CITES in the European Union (EU) countries needs to be considered in the light of a number of fundamental points:

- There is only one basic law for the whole of the EU. Its provisions are binding on each Member State.
- There are no customs barriers within the EU so CITES specimens are free to circulate without controls between Member States.
- Permits and certificates are issued by each member State and harmonized implementation is ensured by a Scientific Review Group (SRG) comprised of representatives from the Scientific Authorities of the Member States and a Committee comprised of representatives from each Management Authority.
- The EU trade regulations are designed to support CITES, not to replace it.

The legislation implementing CITES in the EU is based very closely on the requirements of CITES. The legislation incorporates directly into EU law virtually all the provisions of the many CITES resolutions. In this respect, it is arguably the most comprehensive legislation for implementing CITES anywhere in the world. All this contrasts with the position of the EU under CITES. The "Gaborone Amendment" agreed in 1983 and permitting accession to the Convention by regional economic integration organizations has still not been ratified by sufficient Parties to enter into effect. The mismatch between the day-to-day realities of implementation at EU level and the Union's position under CITES results in a lack of accountability and hinders the EU's attempt to play its full part in the work of the Convention. Parties who have still to ratify this amendment should do so without delay.

The significance of the application of non-detriment requirements in the EU is heightened by the fact that we have adopted a stricter domestic measure requiring import permits for CITES Appendix II species. These permits can only be issued after a non-detriment finding has been made. The conditions required to be fulfilled for import and export of CITES specimens in the EU are summarized in Table 1.

Derogations from the conditions specified in the above table are available for captive-bred animals/ artificially propagated plants, non-commercial exchange between registered scientific institutions and so forth in a similar way as applies under CITES.

As shown in Table 1, the non-detriment finding can be determined at three levels. Firstly, the importing Member State's Scientific Authority must determine that "after examining available data, the introduction into the EU would not have a harmful effect on the conservation status of the species or on the extent of the territory occupied by the relevant population of the species, taking account of current or anticipated trade". If the finding is negative, the European Commission is informed and coordinates such that the SRG either upholds or rejects this conclusion.

Secondly, the SRG also systematically reviews the conservation status of Annex B species and forms positive or negative non-detriment findings. As these are collective decisions of the Scientific Authorities, they are followed by them in their everyday work. It is important to note that EU Management Authorities cannot issue import and export permits unless a non-detriment finding has been made.

Thirdly, if the SRG has made a negative non-detriment finding, the European Commission can then formalize this decision though the publication of an import restriction in the Official Journal of the European Communities. Before doing so, the Commission is

Table 1. Checklist of prerequisites for the delivery of EU CITES import and export permits

	ANNEX A (= ±CITES App. I)		ANNEX B (= ± CITES App. II)	
	Import	**Export**	**Import**	**Export**
Not for primarily commercial purposes	√	√	**X**	**X**
Valid import/(re-)export document from other Party	√	√	√	**X**
Non-detriment finding (NDF) by importing SA	√	√	√	√
No Negative NDF by the SRG	√	**X**	√	**X**
No EU level import restriction	√	**X**	√	**X**
Non-detrimental purpose*	√	**X**	**X**	**X**
Live specimens to be properly housed	√	**X**	√	**X**
No other negative conservation factors	√	√	√	√
Documentary evidence of legal acquisition	**X**	√	**X**	√
Live specimens to be properly shipped	**X (√)**	√	**X (√)**	√

*Non-detrimental purpose under the Regulations defined as:
- advancement of science
- essential biomedical purposes
- breeding/propagation with conservation benefits
- research or education aimed at conservation of the species
- other non-detrimental purposes

(√) Transport of all live animals is subject to general EU standards

required to consult with the affected range States. Information presented by the range States during this process is reconsidered by the SRG to see if a change of view is required. This consultation exercise is seen as a vital element of the process. In passing, it can be noted that the European Commission can also establish restrictions on the import of Annex B species subject to high mortality during transport or unlikely to survive in captivity for a considerable proportion of their potential lifespan and of live specimens of any species presenting an ecological threat to indigenous EU species.

Negative opinions of the SRG and EU-level import restrictions are published on the Internet (unep-wcmc.org/species/trade/eu) to aid transparency. Further general information and a detailed guidebook about EU CITES implementation can be found at europa.eu.int/int/en/comm/dg11/cites/citeshome.htm.

3.12 The Netherlands – making a non-detriment finding and issuing an import permit under the EU stricter domestic measures, *Marinus Hoogmoed*

Introduction

The Netherlands is mainly an importing and transit country for wildlife managed by CITES, not an exporting country. Nonetheless, non-detriment findings are regularly made when import permits are applied for. Under the present European Union (EU) regulation, all member States of the EU are bound to work along the same lines when considering non-detriment findings etc. When one country denies an import permit, all other countries are required to do the same. These decisions are regularly coordinated in meetings of the Scientific Review Group (SRG), in Brussels. The advice of the SRG to the European Commission is final. The Commission regularly asks consultants to study certain species in order to facilitate decisions of the SRG. In the Netherlands data are regularly reviewed for species that cause concern. This is done by experts of the Dutch Scientific Authority (SA) in cooperation with other experts, based on their own experience, on literature, on data available through the internet, and in cooperation with IUCN Specialist Groups. Some examples will be provided.

The role of the Scientific Authority

The Netherlands is a country that deals mainly with imports and re-exports of CITES-listed wildlife, and is not an exporter of such products. Any CITES specimens that are exported are always specimens that have been bred or propagated in captivity and so there is no direct influence on the wild population. So, it might be considered strange that such a country contributes to a workshop on making non-detriment findings for CITES species. However, non-detriment findings are regularly made in the Netherlands when import permits are requested. The European Union requires import permits not only for Appendix I species (as required under the CITES Convention) but also for imports of all Appendix II species and even for some non-CITES species.

The Dutch Scientific Authority for CITES consists of a committee of several scientists with different backgrounds, currently comprising four zoologists and three botanists. They are assisted by a full-time professional secretary, also a zoologist with a long experience of CITES matters from the Management Authority side. The Committee's expertise covers mammals, birds, reptiles, amphibians, fish, invertebrates, bulbs, plants in general and tree species and also zoological gardens and captive breeding. The Committee scientists are backed by their institutions, including the National Museum of Natural History and the National Herbarium and are assisted by other experts within these institutions. Two expert members of the Committee can devote 20% of their working hours to CITES tasks, but the remaining members have no designated time and must often work on CITES matters outside their normal duties. As a result, efficiency may be less than desirable.

Sources of information for making non-detriment findings

The Management Authority contacts the Scientific Authority Committee about import requests either when it perceives there may be a problem, or when it is a species that the Scientific Authority has asked for notification about. In addition, copies of all import permits issued are regularly sent to the Scientific Authority experts to check for possible irregularities, mistakes etc. When a particular import request requires action, the relevant Scientific Authority specialist supplements his own knowledge by gathering information from: colleagues, pertinent IUCN Specialist Groups, studbook keepers, other Party Scientific Authorities, published literature and reports, reviews from the SRG, CITES Significant Trade Reviews, the original CITES listing proposals, internet databases of IUCN/TRAFFIC/ UNEP-World Conservation Monitoring Centre (UNEP-WCMC), and other information from the internet (although the latter is treated with some caution). The types of information sought include: species distribution and habitat preference and availability, population data (including age class of individuals involved in the import), trends in population development, trade data from UNEP-WCMC reports and other sources, Red Data book status, mortality rates between harvest and export, and threats to the population. In the case of Appendix I species, close scrutiny is given to the destination of the specimens, although most import requests come from *bona fide* zoological gardens and so there are few problems.

Based on the information gathered in this way by the Scientific Authority expert, either a positive or negative finding will be made. These findings are either reported directly to the Management Authority or first discussed within the full Scientific Authority, which then presents advice. If the finding is negative it will be reported to the European Commission in order to alert other EU countries to the problem. At the next meeting of the SRG the finding will be discussed and the data on which it is based will be presented to the group, which will then attempt to reach consensus for a SRG advice to the European Commission. If the SRG agrees with a negative finding the import of the species from a certain country (or in some cases all countries of origin) will be stopped. If the group is not convinced, the negative decision will be revoked and imports will be allowed again. If a negative finding is made the country or countries concerned will be consulted and informed about the basis on which the decision was made and invited to supply comments and additional information. In the case of negative findings it is the intended policy of the EU that follow-up will be taken, if necessary in the form of a proposal to transfer the species to a more protective Appendix.

The advice will hold as long as there are no new data that could lead to reconsideration. All advices are publicly available on the internet site of the EU database.

If no consensus is reached a vote has to be taken in line with normal EU procedure. For a scientist, this latter process is illogical, as larger countries have more votes than smaller countries, so the final decision may not be made on the basis of science, but of politics.

There has been concern that such findings made by importing countries can be viewed as unilateral trade restriction measures. However in the EU context, such measures are taken in consultation with exporting countries and aim to assist exporting countries in managing their own natural resources in a sustainable way. Often Scientific Authorities in Europe have better access to recent publications, libraries and specialists than do the Authorities of exporting countries. Thus the

SRG is trying to gather all available data and make it available to other Parties.

Examples of practical action taken by the EU to ensure the sustainable use of wildlife

To facilitate data exchange and decision-making, the EU has contracted UNEP-WCMC to produce desk-based reviews of over 300 species for which there is concern that harvest for international trade may not be sustainable. The reviews are conducted on the same basis as the CITES Significant Trade Reviews and include information on biological data (distribution, abundance, detailed population data, natural history notes) and trade data over the past five years. Generally, population data are sadly lacking and mainly consist of anecdotal information. So any decisions made by the SRG are based on the combined expertise of scientists and their knowledge of the literature and the field situation. Clearly, these decisions are open to criticism. However, the countries involved are consulted and when they provide better data to the SRG, a change in the position of the EU may be considered.

In cases of special interest to the EU, (e.g. when most of the exports of certain countries, areas or species seem to be directed to the EU), the Commission of the EU might decide that further studies are necessary and may allot funds for these studies. Generally these studies are commissioned through the CITES Secretariat and aim to lead to the provision of more detailed information. For example a number of studies have been commissioned on various aspects of the reptile trade in West Africa. These studies led to a number of recommendations both to the EU and the countries concerned, which were accepted by the EU as the basis for opening up the EU market again to products coming from these operations, provided the exporting countries accept the recommendations directed to them.

Due to concerns about the large volume of trade in millions of bulbs of *Galanthus* spp. and *Cyclamen* spp. from Turkey and Georgia to the Netherlands, the EU has sent several fact-finding missions to these two countries. These missions have been appreciated by all involved. Information from these missions has allowed the SRG and the botanists to determine whether the current levels of trade are deemed to be non-detrimental.

As a final example, recently there has been concern that species of reptiles claimed to have been bred in captivity do not in fact comply with the CITES definition of this term. Consequently, the EU has financed missions organized by the CITES Secretariat to look into this matter. Members of the SRG have been examining data on breeding effort, clutch size and on the size of specimens exported. In some cases maximum size of specimens have been imposed to ensure that only juveniles are exported and no wild-caught adults are entering the trade. With more communication between the Parties involved a solution will be reached.