

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



Sixty-first meeting of the Standing Committee
Geneva (Switzerland), 15-19 August 2011

Interpretation and implementation of the Convention

Species trade and conservation

Snake trade and conservation management

REPORT OF THE SECRETARIAT

1. This document has been prepared by the Secretariat.
2. At its 15th meeting (Doha, 2010), the Conference of the Parties adopted Decision 15.75 as follows:

Directed to the Secretariat

15.75 *The Secretariat shall, subject to available funds, convene a technical workshop to consider the conservation priorities and management and enforcement needs related to the trade of snakes in Asia, with a particular focus on the markets and commercial trade in East, South, and Southeast Asia.*

- a) *The Secretariat shall invite the members of the Animals and Standing Committees, representatives from range, exporting and consumer states, and relevant inter-governmental and non-governmental organizations to participate in this workshop, to be held within 12 months of the conclusion of the 15th meeting of the Conference of the Parties.*
- b) *The Secretariat shall contract with appropriate technical experts to prepare documents on Asian snake conservation, trade management, enforcement, and biology for the workshop and shall invite workshop participants to submit the same.*
- c) *The findings and recommendations of this workshop should be reported by the Secretariat to the Animals and Standing Committees.*

3. In compliance with this Decision, the Secretariat convened an Asian snake trade workshop in Guangzhou, China, from 11 to 14 April 2011. The workshop was attended by 51 government representatives from 18 range, exporting and consumer States, with expertise in science, management and enforcement related to CITES and snakes. The workshop was opened by the Chinese Management Authority and the Secretary-General, and was attended by the Animals Committee interim Chair and one of the Committee's regional representatives for Asia, together with 10 representatives from relevant inter-governmental and non-governmental organizations.
4. The Secretariat contracted Mr Auliya of the Department of Conservation Biology at the Helmholtz Centre for Environmental Research in Leipzig, Germany, to prepare documents on conservation, trade management, enforcement and scientific issues relating to Asian snakes for the workshop and invited workshop participants to submit the same information in their country reports.
5. The agenda for the workshop, list of participants, background documents, and country reports and presentations are available on the CITES website at <http://www.cites.org/eng/com/AC/25/snake/trade.html> (in English only).

6. On the basis of the expertise of the participants, the workshop split into three groups to discuss and prepare recommendations on the science, management and enforcement issues relating to Asian snakes. In the final plenary session, the participants agreed on the findings and recommendations that are found in the Annex to the present document.
7. The workshop was made possible by external funding provided by the United States of America, with supplementary funds provided by the European Union. China provided direct funding and assistance in-kind for the workshop, and hosted the event in an exemplary fashion. The Secretariat takes this opportunity to warmly thank the donors and host for their generous support for the workshop.

CITES Asian snake trade workshop
Guangzhou, China
11-14 April 2011

FINDINGS AND RECOMMENDATIONS OF THE WORKSHOP¹

1. Science

Overview

In assessing the degree to which science could be applied to the conservation, management and sustainable use of snakes in the Asian region, it must be recognized that the knowledge-base on snakes is limited. The resources available for research into snakes, at the taxonomic, natural history, and population dynamic levels of resolution have been extremely limited. There are few field data at the population level of resolution indicating the diverse ways that populations may respond to harvest (dynamic populations). This constrains the degree to which conservation problems with particular species at the national level can be clearly recognized and defined, regardless of whether there is international trade or not. It also constrains the ability to adapt population models developed for one species to another. The research base on dynamic populations, which is the most pertinent to non-detriment findings (how snake populations respond to harvesting), is virtually non-existent. Capacity building measures need to be implemented with this basic research (e.g. creation of forums for sharing of biological information on snakes).

Over and above the specific needs of the Parties to CITES to refine methodologies to ensure that trade in specific snake species, in a particular country, is sustainable, there would be benefits to CITES in highlighting the fact that basic scientific research into snakes, at all levels of resolution, is sadly lacking, would benefit from capacity building, and should be prioritized by NGOs and Governments in all countries in the region, including the establishment of baseline information on distribution and abundance using appropriate techniques.

Recommendations are divided into four themes:

1. Taxonomy
2. Good Practices for Non-Detriment Findings
3. Value of Farming/Captive Breeding as a Conservation Tool
4. Additional Species that need to be added to CITES Appendices

Taxonomy Recommendations

It was the view of the meeting that the final decision on taxonomic changes should be made by the nomenclature experts linked to the Animals Committee, but the workshop took the opportunity to comment on the proposed nomenclatural changes, in the hope that it may assist that process:

- The use of *Eryx conicus* rather than *Gongylophis conicus*. The name *Eryx* is commonly used in most range countries.
- *Ptyas mucosus* should probably be retained in preference to *Ptyas mucosa* unless there are compelling technical reasons.
- Clarification as to if the following *Naja* should be species or subspecies.
 - *Naja atra*
 - *Naja kaouthia*
 - *Naja mandalayensis*
 - *Naja naja*
 - *Naja oxiana*

¹ The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

- *Naja philippinensis*
 - *Naja sagittifera*
 - *Naja samarensis*
 - *Naja siamensis*
 - *Naja sputatrix*
 - *Naja sumatrana*
- *Leiopython albertisii* should be retained unless the evidence to divide it into 6 species is compelling and would not adversely affect trade.
 - *Morelia azurea* should be retained as *Morelia viridis* since only genetic markers currently distinguish it.
 - Recognizing *Python molurus* and *Python bivittatus* as full species would not compromise CITES trade issues.
 - Maintain the use of *Python* (not *Broghammerus*) as the genus for *P. reticulatus* and *P. timoriensis*. Not enough evidence from recognized sources to warrant change.

Non-Detriment Finding Recommendations

- The use of life history traits to make non-detriment findings is particularly difficult at this moment given the paucity of data available for most Asian snake species.

As a first stage to data gathering, it is recommended that the Animal Committee look into maximizing the scientific data collected from trade harvest data (e.g. data on size, sex, etc.) as it pertains to commercial species collected, particularly for skin and meat trade. As a consequence, Scientific and Management authorities are encouraged to establish annual catch quotas/export quotas of any snake species involved in trade activities. This is of course voluntary and individual countries set their own quotas as per Resolution Conf. 14.7 (Rev. CoP15).

The pet trade is a more difficult situation to evaluate detriment, because the harvest is often focused on a species with a small distribution, unique color or morphological form, and a high retail value. Therefore to improve NDFs, case studies should be carried out on some selected examples from the pet trade, to determine the impact of harvest for the pet trade on their wild populations, as well as identifying the kinds of info needed to establish NDF. Working in cooperation with the range states, the workshop suggests the following species: *Liasis mackloti savuensis* and *Morelia boeleni*.

- Initial catch quotas at the domestic level can be based on current harvest levels as a first step towards monitoring the harvest, with more rigorous biological methods introduced as they become available. Export quotas need to be derived from the catch quotas.
- Animal Committee to investigate methodologies (e.g. size, behaviour, radio isotopes) to differentiate between wild and captive raised snakes in trade.
- The extent of the venom trade and its impact on species and populations has two main issues of concern:
 - i) The venom trade is basically unregulated, with venom and antivenom serum (produced from venom) crossing borders without CITES certificates. Better implementation of CITES is needed.
 - ii) People who “milk” wild caught snakes for their venom should be trained in how to do this (some sort of standard). Untrained collectors increase the probability of death to the snakes by improper handling (as is prevalent in Pakistan, where the practice is illegal). There is a concern that the level of take is sufficient for it to be detrimental to the survival of wild populations.

Forensic Identification Recommendation

- Conservation genetics could be useful for forensic identification associated with illegal trade, and interested institutions should be encouraged to pursue this.

Farming / Captive breeding Recommendations

- The promotion of farming of any kind must be carefully assessed in terms of conservation benefits to the species. It is up to individual countries to decide if captive breeding is a desirable goal within their national context.

Additional Species to be Considered for Addition to CITES Appendices Recommendations

The workshop took note that the representative from Cambodia indicated that they are investigating the utility of listing *Homalopsis buccata* and *Enhydris bocourti* on Appendix III because there is still not enough scientific research data available and there is a need to conduct biological and stock assessments and introduce catch and export quotas. Also that Indonesia believed an Appendix III listing for *H. buccata* might be appropriate for their national population.

- Animal Committee to investigate such non-CITES species of snakes that may be identified for potential listing in the CITES Appendices, in the light of the outcome of the IUCN Red Listing Workshop on Asian snakes at in late August 2011.

2. Management

Annual harvest and export quotas

Discussions centered on whether unlisted species should be subject to workshop recommendations. It was noted that CoP15 had mandated the workshop to examine trade in listed and unlisted snakes. Although some States establish harvest and export quotas for unlisted species, other representatives (CN) advised that it did not have any legal mechanism domestically to apply export quotas to unlisted (unprotected) species.

Recommendations

Parties are encouraged:

- a) to establish to establish national harvest and trade policies for Asian snake species, including sea-snakes; and
- b) to identify which species are impacted by international trade and, where appropriate, establish annual export quotas, propose possible CITES listings, or take other measures to further conservation of the species concerned.

Parties are reminded to communicate Appendix-II export quotas to the Secretariat, and are encouraged to also communicate export quotas for non-CITES snake species, including sea-snakes, to the general public.

Production systems and use of source codes

An increasing number of operations in the Asian region are being established to ranch and breed snakes in captivity. Furthermore, numerous export permits have been issued that employ the CITES source code 'C' and 'R'. The workshop agreed with the views expressed by the consultant, that the characteristics of the different operations producing snakes for international trade should be subject to an independent evaluation to assess the extent to which each operation complies with the CITES requirements for ranching and captive breeding, together with use of the correct CITES source code.

Recommendation

Subject to external funding, a study should be undertaken on production systems for Asian Appendix-II listed snakes in international trade, and compliance in the correct use of CITES source codes. In evaluating different production systems, the biological feasibility and, where possible, economic viability of operations should be considered.

Assessment and monitoring of trade in snake products (venom, meat, gall bladders etc.)

In light of concerns expressed by the consultant and several representatives, the workshop agreed there is a need for an improved knowledge base of the extent and nature of trade in a range of parts, products and derivatives of Asian snakes, including sea-snakes.

Recommendation

The workshop recommends the Secretariat should be asked to contact those Parties that may be exporting and/or importing parts, products and derivatives (e.g. gall bladders, venom, meat etc) derived from Asian snake species to evaluate their compliance with CITES requirements. The Secretariat should be asked to work bilaterally with those Parties to encourage compliance and shall report its activities and findings to the SC. The Secretariat could be asked to inform their process of bilateral consultation using information derived from the IUCN Asian snake assessment process and other relevant sources.

Recommendation

Parties should be encouraged to re-double their efforts to ensure that trade in CITES-listed snakes is fully reported in Annual Reports and that reporting units are fully in line with the *Guidelines for the preparation and submission of annual reports* established under Resolution Conf. 11.17 (Rev. CoP14).

Capacity-building

The workshop recognized the importance of capacity-building in the Region across a wide range of management-related issues. Some discussion ensued on the utility of various manuals to improve management and regulation of trade in Asian snakes, including sea-snakes.

The workshop recognized there is a definite need for increased capacity in the Region in establishing harvest and export quotas. However, it was recognized that achieving adequate knowledge on the population biology of most harvested species will require considerable time and resources. On the issue of an identification manual for Asian snakes in trade, the workshop recognized the need for identification tools for parts, products and derivatives. However, because of the complexity of the issue, the workshop agreed that, in the first instance, an identification manual on skins and live animals should be produced.

Recommendations

The Animals Committee and other experts, explore the development of a practical manual to assist the Parties evaluating captive breeding operations and other production systems;

The Secretariat should be asked to seek external funding to develop the manual referred to in the foregoing recommendation and to conduct one or more training workshops in the use of the manual for CITES and other relevant Authorities of range States of Asian snake species, including sea-snakes, subject to international trade. Training programme(s) should utilize most recent available research findings.

3. Enforcement

Participants noted that countries in Asia shared the following problems or issues in relation to regulating trade in snakes and responding to illegal trade in snakes:

- Poor coordination between relevant national agencies, i.e. CITES, Customs, Forest and Wildlife Departments and Police, and that this could include poor coordination at the federal, state and provincial levels;
- Lack of capacity which includes human resources but also vehicles, training, and access to specialized support, such as forensic science;
- Lack of a legal basis on which to respond to cross-border illegal trade in snakes involving species that are not listed in the CITES Appendices;
- In some cases, lack of a legal basis on which to respond to illegal domestic trade in snakes;
- Wildlife law enforcement is not seen as a priority and illegal trade in snakes has an even lower priority;
- Lack of awareness among enforcement and border control personnel of the conservation threats facing snake species (which is also absent among the general public and the judiciary);
- Insufficient understanding of, or intelligence relating to, the illegal trade in snakes;
- Use of the Internet to advertise and sell snakes;

- Difficulties in identifying snake species, and distinguishing between CITES-listed and non CITES-listed;
- Difficulties in identifying snake parts and derivatives, particularly meat, venom, gall bladders and, again, distinguishing between CITES and non-CITES specimens;
- Difficulties in distinguishing between wild-harvested and captive-bred snakes;
- Difficulties in the storage and disposal of confiscated specimens and in establishing the country of origin (noting that returning specimens was often impractical and expensive);
- The illegal harvesting of snakes is problematic to detect and combat, since it often involves local people who gather small numbers on individual occasions and is very unlike most 'poaching';
- Reluctance of personnel to engage in snake-related investigations and inspections of facilities due to the potential hazards and the absence of personal protection equipment;
- Huge, and often porous borders, and the ease with which contraband can be smuggled between countries, especially via sea;
- Slow response rates to requests for permit verification and confirmation and invalid email addresses of Parties on the CITES website; and
- Corruption of officials at all levels.

The workshop noted that there was considerable scope for increased cross-border collaboration, coordination and joint investigations. It noted that there was scope for ASEAN-WEN and SA-WEN to include illegal trade in snakes in their activities. The workshop noted that e-permitting had considerable promise in relation to facilitating legal trade, whilst identifying and intercepting illegal trade. The workshop believed that the international media should highlight the plight of many snake species, the current demand, which seems unlikely to diminish, and the questions over whether harvests are sustainable. It acknowledged that much of the capacity-building that it might call for was needed for all CITES enforcement and not just trade in snakes. However, it believed the following specific recommendations would assist countries in Asia in relation to this subject.

Recommendation 1

The CITES Secretariat should prepare an Alert on 'Illegal trade in snakes in Asia'. Countries represented at the workshop, and relevant organizations, should supply any additional information (beyond what was contained in country reports) to assist in its preparation. The Alert should include information such as:

- A description of the nature of the illegal trade in snake species heavily traded, its routes, smuggling methods, consumption types, etc.;
- A list of those countries which prohibit commercial trade and export of snakes, to encourage potential importing countries to refuse shipments of snakes arriving from these countries;
- An encouragement for countries to take account of financial implications when reviewing declarations of captive-breeding or when monitoring captive-breeding facilities, noting that current prices would appear to be make some operations highly questionable and not commercially viable;
- An encouragement for better screening of cargo and passengers in transit;
- An encouragement for increased scrutiny of mail and postal services, which are increasingly used for smuggling;
- An encouragement for countries to seek out, and disseminate, intelligence from all possible sources, such as NGOs, traders, trappers, transport services, cargo and baggage handlers, etc.;
- The fact that genuine CITES permits are apparently available for purchase by unscrupulous traders;
- That skins and other specimens may be smuggled from a country of origin and then be 'laundered' into international trade, accompanied by genuine CITES export permits or re-export certificates that have been obtained fraudulently or corruptly; and
- Details of possible sources of forensic science support in relation to the identification of snake parts and derivatives and distinguishing between wild-harvested and captive-bred snakes.

Recommendation 2

The Animals Committee should collate information regarding existing snake identification and training materials and guidelines for handling snakes, such as the practical species sheets prepared by TRAFFIC, and publicize their existence. Concerning snake identification materials, the Animals Committee should:

- a) Explore all snake identification tools currently available to find gaps and then develop a manual or wiki involving all specimens in trade including venom; and
- b) Examine the possibility of developing tools for relating specimens in trade (e.g. skins, gall bladders, meat and venom) to the size of snake from which they were taken (which could help distinguish large wild specimens from smaller ones produced through captive breeding).

Donors should be encouraged to fund the translation of these materials into relevant Asian languages.

Recommendation 3

The Standing Committee should call upon countries to ensure that current and accurate contact details are provided to the CITES Secretariat, for inclusion in the CITES website. The Committee should consider establishing a deadline within which Parties should respond to requests for permit confirmation and other export, import and re-export clearance related information.

Recommendation 4

All Parties that have snake captive-breeding or ranching facilities in their territories must engage in regular and intensive scrutiny and monitoring of such facilities, taking into account not only the legal origin of parental stock and the practicality of producing the offspring claimed, but also the commercial and financial viability of such operations. Parties should be encouraged to use independent monitoring or verification of such operations, to respond to the current high level of suspicion that is expressed regarding captive-breeding declarations.

Recommendation 5

Noting that the International Consortium on Combating Wildlife Crime (ICCWC) is developing its work plans and programmes, the Consortium should be encouraged to take account of the illegal trade in snakes and to take note that the Parties represented at the workshop saw national inter-agency coordination as a priority, which they seek ICCWC support in achieving.