**SUMMARY OF THE CITES TECHNICAL COMMITTEES MEETINGS: 7-15 DECEMBER 2000**

Participants in the Second Joint Meeting of the Animals and Plants Committees of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the 16th Meeting of the Animals Committee and the 10th Meeting of the Plants Committee gathered from 7-15 December 2000, at the US Fish and Wildlife Service’s National Conservation Training Center (NCTC) in Shepherdstown, West Virginia.

The Joint Meeting of the CITES Animals and Plants Committees convened from 7-9 December 2000. This meeting drew together approximately 150 participants from States, non-governmental organizations (NGOs) and international organizations, including the regional representatives for the Plants and Animals Committees in the Criteria Working Group (CWG) and experts appointed to the CWG. Participants had the task of commenting on the review of the criteria for amendments to Appendices I and II. Appendix I includes all species threatened with extinction, which are or may be affected by trade, therefore trade in these species must be subject to particularly strict regulation. Although participants seemed satisfied with the outcome of this meeting, some criteria proposals by the CWG initially came as a surprise to many. Some commented on a lack of scientific expertise among participants, which might have slowed the review process and made it less efficient. All agreed that the importance of this review should not be underestimated, including consequences for discussions at COP-12 and future Appendix listing.

Following the Joint Meeting, the sixteenth Meeting of the Animals Committee convened from 11-15 December and gathered roughly 200 participants, including over 70 NGOs. The Animals Committee tackled, *inter alia*: the transport of live animals; trade in hard corals; traditional medicines; captive breeding and ranching; conservation of seahorses; labeling of caviar; the status of sharks; tissue samples; and trade in alien species and in freshwater turtles and tortoises. At the conclusion of the meeting, most delegates felt the Committee had managed to tackle all the issues contained in its heavy agenda. Many highlighted this could not have been possible without the efficient collaborative work completed in the numerous working groups. The Committee made definite progress on the issues of turtles and surgeon and caviar labeling. Others welcomed enhanced interest in seahorses. Overall, participants said the Committee had accomplished its role of distributing “homework” to Parties to be completed before the next meeting of the Animals Committee.

The tenth Meeting of the Plants Committee met in parallel. Approximately 50 participants, including 15 NGO representatives, attended this meeting, which addressed: medicinal plants, orchids, *Araucaria araucana*, Bigleaf mahogany, *Guaiacum sanctum*, artificial propagation of timber, identification material, significant trade in plants, and strategic planning and training initiatives. Participants were satisfied with the work achieved in the Plants Committee, and the early conclusion of the meeting was taken as a sign of efficiency. Some delegates linked the professionalism and efficiency of the meeting to the homogeneity of participants’ background and the absence of NGOs. The Committee succeeded in achieving its first and foremost intention to instigate initiatives and cooperation among participants. The launching of a review on orchids and progress in the significant trade review were perceived as accomplishments.

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A BRIEF HISTORY OF CITES.

During the 1960s, countries became increasingly aware that over-exploitation of wildlife through international trade was contributing to the rapid decline of many plants and animals species. In 1963, the World Conservation Union (IUCN) began drafting an international convention to regulate the export, transit and import of rare or threatened wildlife species. The international commitment for a convention was established in June 1972 at the UN Conference on the Human Environment in Stockholm, Sweden, which recommended the immediate preparation of an international convention to deal with these issues. The same year, IUCN, the United States and Kenya produced a unified working paper, which became the basis for convention negotiations. The final negotiations were held from 12 February to 2 March 1973 in Washington, DC. CITES was adopted 2 March 1973 and entered into force on 1 July 1975. There are currently 152 Parties to the Convention.

The Convention’s conservation goals are to: monitor and stop commercial international trade in endangered species; maintain those species under international commercial exploitation in an ecological balance; and assist countries towards a sustainable use of species through international trade. CITES Parties regulate wildlife trade through controls and regulations on species listed in three Appendices. Appendix I lists species endangered due to international trade. Their exchange is permitted only in exceptional circumstances. Species listed in Appendix II are subject to strictly regulated trade based on: quotas and/or permits to prevent their unsustainable use; and controls aimed at maintaining ecosystems and preventing species from becoming eligible for Appendix I. Appendix III species are subject to regulation by a Party who requires the cooperation of other Parties to control their international trade. To list a species, a Party provides a proposal for Conference of the Parties (COP) approval containing scientific and biological data on population and trade trends. The proposal must be supported by a two-thirds majority of Parties present and voting at a COP. CITES only lists species whose populations are obviously impacted by international trade. At present, there are 890 species of flora and fauna in Appendix I; 29,111 in Appendix II, and 241 in Appendix III. Flora species outnumber fauna by approximately seven to one. As the trade impact on a species increases or decreases, the COP decides whether or not the species should be shifted between or removed from Appendices.

CITES also regulates international trade through a system of permits and certificates that are required before specimens enter or leave a country. Each Party must adopt national legislation to provide official designation of a Management Authority responsible for issuing these permits and certificates based on the advice of a designated Scientific Authority. Parties maintain trade records that are forwarded to the CITES Secretariat annually, the sum of which enable it to compile statistical information on the world volume of trade in Appendix species. These two designated national authorities also enhance CITES enforcement through cooperation with customs, police or appropriate agencies.

The operational bodies of CITES include the COP and its Standing Committee, as well as several scientific advisory committees – the Animals Committee, the Plants Committee, the Nomenclature Committee and the Identification Manual Committee. Located in Geneva, the CITES Secretariat interprets Convention provisions and services the CITES Parties and Committees.

FIRST JOINT MEETING OF THE PLANTS AND ANIMALS COMMITTEES: The first Joint Meeting convened in Brussels in September 1993 to review the criteria adopted at COP-1 in Bern in 1976. This technical work was carried out in consultation with IUCN and other appointed experts. COP-8, held in 1992, decided that the criteria did not provide adequate basis for amending the Appendices and directed the Standing Committee to undertake, with the assistance of the Secretariat, a revision of the criteria for amending the Appendices. The Secretariat and the Standing Committee created a Criteria Working Group and directed the Joint Committee to review the work of the Working Group.

NINTH MEETING OF THE PLANTS COMMITTEE: The Plants Committee convened in Darwin, Australia, from 7-11 June 1999, to consider proposals to be forwarded to COP-11 including, _inter alia_, harmonizing annotations to plant species traded for medicinal use, the possible exemption of rainsticks from Appendix II, and Parties’ concerns on the trade of non-listed Asian ginseng. Progress reports on trade in medicinal plants and Turkey’s bulk trade were reviewed. The Plants Committee also approved a draft resolution on trade in wild-collected plant specimens.

FIFTEENTH MEETING OF THE ANIMALS COMMITTEE: The Animal Committee convened in Antananarivo, Madagascar, from 5-9 July 1999. The Animals Committee agreed on action points including, _inter alia_, preparation of draft resolutions on sturgeon markings, use of microchips for live animal marking and consideration of crocodile trading to be discussed at COP-11.

COP-11: The eleventh Conference of the Parties (COP-11) convened from 10-20 April 2000, at UNEP Headquarters in Nairobi, Kenya. Delegates at COP-11 considered 62 proposals to amend Appendices I and II as well as over 40 resolutions on a wide range of topics, including: the evolution of the Convention; financial matters; conservation of and trade in tigers, elephants, rhinoceros and Tibetan Antelopes; and trade in bears, freshwater turtles and tortoises, seahorses and traditional medicines. Proposals to downlist populations of gray and Minke whale and the Hawksbill turtle were defeated. Most delegates were satisfied with COP-11 and championed the compromise reached on African Elephants as the triumph of COP-11.

REPORT OF THE SECOND JOINT MEETING OF THE ANIMALS AND PLANTS COMMITTEES

The Second Joint Meeting of the Animals and Plants Committees commenced on Thursday, 7 December. Susan Lieberman, North America representative to the Animals Committee in the Criteria Working Group (CWG) and Vice-Chair of the Animals Committee, opened the meeting. Rick Lemon, Director of the National Conservation Training Center (NCTC), welcomed participants to the new NCTC facility.

Willem Wijnstekers, CITES Secretary-General, stressed the importance of reviewing CITES criteria to ensure clarity, sustainability and consistency with conservation needs and to avoid conflicting interpretations. Marinus Hoogmoed (the Netherlands), Chair of the Animals Committee, thanked the NCTC and welcomed participants. He stressed the need to focus discussions on science and avoid political debates. Plants Committee Chair Margarita Clemente (Spain), praised the increased participation in the Plants Committee. Jamie Rappaport Clark, Director of the US Fish and Wildlife Service, welcomed the Plants and Animals Committees to their first meeting held in the US. She highlighted the importance of reviewing the CITES criteria for proper listings of species. With 152 States Parties, she said CITES is the largest international conservation treaty. Delegates proceeded to adopt the rules of procedure (ACPC.1.2), the agenda (ACPC.1.3) and the working programme.

Delegates met in Plenary throughout the three-day meeting. Plenary was co-chaired by Margarita Clemente and Marinus Hoogmoed, with the help of Hank Jenkins, Chair of the CWG. Participants
discussed at length the CWG-proposed amendments to Resolution 9.24 on criteria for amendment of Appendices I and II. Delegates were required to comment on the criteria and make recommendations to be forwarded to the Standing Committee, but were reminded that no decision could be formally adopted at this point. The following report reviews comments by the Parties on the review of the listing criteria.

**REVIEW OF THE CRITERIA FOR AMENDMENTS OF APPENDICES I AND II.**

**OPERATIVE PART:** In the operative part of Resolution 9.24, new text was introduced to define when a species is or may be affected by trade, including when international trade could have a detrimental impact on the status of species. The North America representative to the Animals Committee opposed the need to prove detrimental impact for listing. The International Wildlife Coalition (IWC) and the US opposed qualifying trade, and supported deletion of “detrimental.” Doug Butterworth, University of Cape Town, suggested reference to non-negligible impact. IUCN, with the Center for Marine Conservation (CMC), suggested referring to “likely has a detrimental impact.” The FAO suggested shifting the burden of proof to proving that trade is non-detrimental. TRAFFIC Network, supported by the Center for International Environmental Law (CIEL) and the CMC, expressed concern that text on avoiding species listing in Appendix II, in particular where the risk that the species would be eligible for listing in Appendix II in the near future is negligible, may result in varying interpretations of sound management. The International Association for Marine Mammals suggested adding a reference to demonstrated negligible risk.

On new text on refraining from listing a species in Appendices I or II where it may have adverse conservation effects by increasing levels of trade, Australia called for broader language to include non-trade-related risks. Canada noted the risk linked to illegal activities could not be quantified or controlled with available scientific techniques. The US noted the implementation of risk assessment would unduly burden the Parties. IWC called for deletion of the new text, highlighting this could be used as a tool to defeat proposals for listing.

Hank Jenkins said CWG-proposed text, on preventing the transfer of species to Appendix I when subject to the significant trade process, attempts a more cooperative approach to resolving implementation problems. Several delegates, including the North America representative to the Animals Committee and the Oceania and Asia representatives to the Plants Committee, opposed containing the right of Parties to submit an Appendix I listing proposal and Wijnstekers suggested the text could apply to proposals by non-range States. Several delegates called for deletion of text on annotations to proposals to amend Appendices I and II. On encouraging Parties submitting an amendment proposal to factor in quantitative analyses where the data are available, the EU, the US and Mexico requested that the text reflect the scarcity of available plant data. Austria and Doug Butterworth encouraged the use of qualitative data in the absence of accessible quantitative data. The FAO supported the use of the best scientific information available (both quantitative and qualitative).

**BIOLOGICAL CRITERIA FOR APPENDIX I:** Regarding recruitment/reproductive success or reproductive potential, Hoogmoed and several delegates supported US alternative text referring to recruitment into reproductive age classes and subsequent reproductive success.

Mexico said it is unclear whether a reference to maturity of individuals concentrated in one sub-population refers to maturity in growth or reproductive status and weakens the biological criteria. Germany suggested deleting the reference to “mature.” IWC, using the example of the Philippine cockatoo, which has many mature individuals but low recruitment, said an overbalance of mature individuals might give a misrepresentation of the reproductive potential of a population. In accordance, the Animal Protection Institute illustrated the case of the effect of endocrine disruptors on Minke Whales. The Africa representative to the Plants Committee offered alternate language highlighting the number of individuals critical to different life history stages and to the continuance of life of the species. The FAO suggested reference to life stages that provide critical viability.

Several delegations, including the US, Germany, Costa Rica and IWC, opposed deletion of a listing criteria regarding species with impending need for listing in Appendix I.

**CRITERIA FOR THE INCLUSION OF SPECIES IN APPENDIX II IN ACCORDANCE WITH ARTICLE II, PARAGRAPH 2(A):** Hank Jenkins said CWG amendments correspond to a need for more prescriptive criteria. The Oceania representative to the Plants Committee, with Austria and Germany, remarked that the wording is not a substantial improvement. IUCN, supported by the IWC, called for the incorporation of quantitative factors and models for interpretation. The Secretariat, noting Appendix II could be considered either as a stepping stone to Appendix I or as a way to regulate international trade, said the text would satisfy both perspectives.

**CRITERIA FOR THE INCLUSION OF SPECIES IN APPENDIX II IN ACCORDANCE WITH ARTICLE II, PARAGRAPH 2(B):** On species that are morphologically indistinguishable, or look-alike species, the Africa representative to the Plants Committee called for language on species in the form in which they are traded. The FAO supported stating that species “may,” instead of “should,” be included in Appendix II base on the look-alike criteria. Several delegates, including the Central and South America and Caribbean representative to the Plants Committee and the Humane Society, opposed a CWG-proposed deletion of text on listing species that are members of a taxon of which most species are included in Appendix II. The Europe, Oceania and Africa representatives to the Plants Committee all noted that the numerous species of plants on Appendix II poses a challenge for record keeping and tracking, especially for range States. As the proposed language for Appendix II listing states that a non-expert, using basic identification materials, could not distinguish between look-alike species, the International Fund for Animal Welfare (IFAW) suggested that “basic identification materials” be defined, and these materials be provided. The Humane Society similarly wondered how it would be determined that non-experts could demonstrate their ability to distinguish between species.

**SPECIAL CASES:** For the case of split listings between Appendices, the CWG draft suggested this only be applied to down-listings to Appendix II, while retaining the recommendation that this be applicable only to national or continental populations because of enforcement considerations. Many delegates, including the US, the World Society for the Protection of Animals, TRAFFIC, the Marine Turtle Specialist Group and IWC expressed concern that both the old and the new text lead to inconsistencies with the known biology of some species, particularly migratory species. Their recommendations were not to allow individuals of the same population to be placed in more than one Appendix when applying split listing. Hank Jenkins noted that precautionary measures should accommodate enforcement concerns. Japan supported the CWG amendments.

**PRECAUTIONARY MEASURES:** Several delegates opposed deletion of text stating that the best interest of the species should be taken into account when considering proposals to amend the Appendices.
Several delegates opposed rephrasing a paragraph stating that a species should not be deleted from Appendix II when it is likely to qualify for listing in the near future. Hank Jenkins said the amended language retains an exit mechanism but contains language better suited to CITES. The US asked that a reference be added stating that taxa qualifying for listing be included in Appendix II. IWC said the amended paragraph is counter-precautionary and supported the US addition. He also suggested keeping the original paragraph together with the amended one. The Netherlands said it should remain clear that not listing could, in some cases, be in the best interest of a species. The FAO encouraged including a definition of the precautionary principle and suggested narrowing the common definition with wording from the FAO technical guidelines. Doug Butterworth highlighted that some language contained in the annex on precautionary measures is not compatible with the UN Convention on the Law of the Sea.

**DEFINITIONS, NOTES AND GUIDELINES:** The FAO suggested that the definitions of species of populations and population units should be brought in line with common knowledge. Japan requested that a definition of the precautionary principle be included. On the definition of decline, China called for a standardized method of survey and, on the definition of generation, suggested that a reference to the average age of parents be replaced by the mean age of individuals and age of reproduction. The US recommended using taxonomically-based numeric guidelines when defining generation and proposed investigating the variable utility of numeric guidelines according to species' productivity.

Many delegates supported the creation of a working group to address definitions. Costa Rica suggested having a small populations genetic expert present. ODFEPESCAl requested that the group include experts representing the various regions. IWC requested that a legal specialist be involved. The Secretariat confirmed that the CWG would convene a definitions working group in February or March 2001, which Spain offered to host. Hoogmoed clarified that the new working group would consist of one representative for Plants and one for Animals from each region, with Hank Jenkins as Chair. The CMC advocated similar treatment of marine and terrestrial species and recommended the resuscitation of a marine fisheries working group. Care for the Wild echoed the CMC’s request to address a broad range of taxa and suggested broadening the range of taxonomic expertise in the working group.

**FORMAT FOR PROPOSALS TO AMEND THE APPENDICES:** Hank Jenkins identified amendments, including provision of an executive summary to enable Parties reviewing proposals to better evaluate them based on specific criteria. The European Union questioned the 12-page limitation applied to proposals and suggested the executive summary be allowed an additional page. The North America representative to the Animals Committee clarified that the new language aims to help Parties that have not submitted proposals before. IWC suggested the new, expanded CITES website could contain explanations on organisms to help Parties identify species under review before proposals are made. Japan proposed an additional paragraph tackling potential problems in implementation and enforcement. Defenders of Wildlife suggested language demonstrating the role of species in the ecosystem and the impacts of a species depleting. The World Society for the Protection of Animals contested the reference to the relative importance of threats, as data on the extent of trade for particular species might not be available. He also suggested that a reference to parts and derivatives should be included in the text on safeguards and similar species.

The Chairs thanked participants for their contributions and adjourned the meeting on Saturday, 9 December.

**REPORT OF THE 16TH MEETING OF THE ANIMALS COMMITTEE**

On Monday, 11 December, Animals Committee Chair Marinus Hoogmoed welcomed participants and thanked former Chair Hank Jenkins for his contributions. Hoogmoed discussed the role of regional representatives and NGOs, emphasizing the importance of a biological foundation for discussions. CITES Secretary-General Wijnstekers stressed the need to strive for equal voice for all regions and to address implementation in both developing and developed countries. Hoogmoed then introduced, and delegates adopted, the rules of procedure (AC.16.2), the provisional agenda (AC.16.3.1), the working programme (AC.16.3.2) and admission of observers (AC.16.4).

The Animals Committee, met Monday, 11 December through Friday, 15 December, in twice-daily Plenary sessions. Delegates addressed, *inter alia:* transport of live animals; trade in hard corals; traditional medicines; captive breeding and ranching; conservation of seahorses; labeling of caviar; status of sharks; and trade in alien species and in freshwater turtles and tortoises. On Tuesday, 12 December, closed working groups were created to address the transport of live animals and hard corals and the Nomenclature Committee met on taxonomy. On Wednesday, 13 December, working groups convened on: significant trade in sturgeon, cobras and musk deer; review of taxa in Appendices; time-sensitive research samples; transport of live animals; seahorses; and hard corals. On Thursday, 14 December, working groups convened on captive breeding, significant trade review, caviar labeling, freshwater turtles and tortoises, hard corals, time-sensitive research samples and seahorses. Regional groups also met throughout the week. All the working groups reported to Plenary on Friday, 15 December.

Delegates were requested to comment on agenda items and make recommendations to be forwarded to the Standing Committee, but were reminded that no decision could be formally adopted by the Committee.

**STRATEGIC PLANNING**

On Monday, 11 December, the Secretariat introduced a document on the role of the Animals Committee in implementing the CITES strategic vision (AC.16.6.1). On enhancing the ability of Parties to implement CITES, numerous delegates expressed support for listing regional zoologists with expertise in CITES-listed animal species. The Bahamas requested stronger communication between countries regarding the effective use of databases. North America suggested pooling and distributing data from each region’s Scientific Authorities. IUCN reported that scientists can be contacted through the IUCN website. Chair Hoogmoed observed that these communication initiatives should be a priority.

On strengthening the scientific basis of decision-making processes, Chair Hoogmoed said CITES should not concentrate efforts on providing data on non-listed species. The Netherlands said the EU already has its own list of non-listed species, which may be useful when taking future measures. On decisions to amend Appendices using sound and relevant scientific information, Chair Hoogmoed invited Parties to provide additional information. The Secretariat stressed the need to improve data reporting. The US proposed revising a resolution to standardize units of measure for reporting.

On improving the scientific basis for non-detriment findings, Wijnstekers highlighted plans for a future workshop for top exporting countries on strengthening the exchange of information. North America suggested using non-detrimental finding case studies to improve the exchange of views among Scientific Authorities.
On the development of innovative technologies and relevant research, Hoogmoed noted that DNA testing is not fully accessible to every region. On promoting a greater understanding of CITES, the Chair said that this is largely a public relations goal for each member to pursue as much as possible. The Secretariat proposed, and the Committee adopted, decisions directed to the Animals Committee (AC.16.6.2), which mirror the meeting’s agenda. On the Animals Committee working programme priorities (AC.16.6.3 Annex), discussion focused on the potential for re-establishing an implementation committee, supported by several delegates including North America, Central and South America and the Caribbean, Switzerland and the World Conservation Trust (IWMC). Chair Hoogmoed proposed a mission statement for the Animals Committee.

**SIGNIFICANT TRADE REVIEW PROCESS**

On Tuesday, 12 December, the Secretariat introduced primary and secondary recommendations issued to Parties (AC.16.7.1), stating that most Parties had not commented. The Secretariat noted that deadlines for complying with primary recommendations could not realistically be met by Parties and offered assistance to help Parties commit to necessary action. Asia said some Parties have not responded because the species is already protected by legislation. The Secretariat said Parties should respond regardless of national measures. Bolivia requested information about imports of Pecari tajacu. The US highlighted the need to tackle the worldwide trade of Asian pangolins. Japan said that would entail persuading Laos to join CITES.

On options concerning the further review of species, the Secretariat supported efforts toward enhanced conservation before ending trade. He highlighted that rapid turnover of staff hinders enforcement and suggested a significant trade review of some sturgeons, freshwater turtles and tortoises, hard corals and animal species used for medicinal purposes. North America suggested examining trade patterns and commodities and selecting species of different regions in the review process. Chile suggested tackling illegal trade by investigating illegal flows in South America. The Secretariat agreed that total trade bans lead to increased illegal trade and should be avoided.

**STURGEON: TRAFFIC introduced a document on Acipenseriformes (AC.16.7.2), which contains the review and proposed categorization of ten species of sturgeon. Category 1 includes species where international trade poses a threat. Category 2 includes species with insufficient data to determine a threat from trade. Category 3 species are unaffected by international trade. Chair Hoogmoed added that the Committee should ultimately determine the categories applicable to each species and urged participants to draft recommendations by the end of the meeting. North America reminded participants that range States have an additional six weeks to review sturgeon categories. Iran expressed concern about data reliability and proposed setting up a working group on categories. Species recommended for inclusion in category 1 include: Russian sturgeon (Acipenser gueldenstaedtii); Ship sturgeon (Acipenser nivaliventris); Armor sturgeon (Acipenser schrencki); Stellage sturgeon (Acipenser stellatus); Kaluga (Huso dauricus); and Beluga (Huso huso). Species recommended for inclusion in category 2 include: Siberian sturgeon (Acipenser baerii); Lake sturgeon (Acipenser fulvescens); Sterlet (Acipenser ruthenus); and American paddlefish (Polyodon spathula).

Delegates also discussed the need for standardization of units, including a differentiation between live sturgeon specimens and meat. The Secretariat confirmed the need to specify trade units and, with the setting of quotas, to ensure compatibility across countries and species. The US, supported by the Northeastern Association of Fish and Wildlife Agencies, opposed the mandatory establishment of quotas. The US also noted that Kaluga and Beluga species should qualify for Appendix E listing. Iran, with Tsar Nicoulai Caviar, emphasized that classification should be based on geography and not species, and proposed convening a meeting of all range States to further discuss sturgeon conservation and fisheries management. IWMC stressed the need to include those directly involved in production, consumption and trade in caviar. The Secretariat and Germany announced funding for an IUCN specialist group on sturgeon to meet in Russia next year.

**COBRA: UNEP-WCMC gave an overview of taxonomic re-classification of cobra species (Naja) (AC.16.7.3). In the past, Naja has been treated as one species under CITES, but recent research has identified 10 subspecies, which are proposed to be treated by CITES as independent species. In many cases, it is not known which species is involved in trade as they are often reported simply as Naja naja. Cobra species recommended for inclusion in category 2 are siamensis and sumatrana, and in category 3, sagittifera. No species was proposed for category 1. Sputatrix, atrata and kaouthia were proposed for category 1 or 2, and naja, oxtiana, philippinensis for category 2 or 3. A newly named taxon from Myanmar (Naja mandalayensis) was described this year as a separate species and falls outside existing CITES controls for Naja, a point contested by Germany and the US. The Secretariat clarified that trade in this species cannot be monitored until the COP includes it in Appendix II.

**MUSK DEER: UNEP-WCMC, in cooperation with TRAFFIC and IUCN, introduced the review of Moschus species (AC.16.7.4). He recommended listing black musk deer (M. fuscus) and Siberian musk deer (M. moschiferus) under category 1, and forest musk deer (M. berezovskii) and Alpine Musk Deer (M. chrysogaster) under category 2. The Secretariat urged Parties to submit additional scientific data. India stressed musk trade has endangered the species. The US noted a lack of statistics and consensus on musk deer populations. She proposed that musk deer should be put under category 1. The Republic of Korea underlined his government’s efforts toward species conservation and the possibility of using synthetic substitutes.

On Friday, 15 December, Chair Marinus Hoogmoed, Europe, introduced a working group report on significant trade in cobra (Naja naja), musk deer (Moschus spp.) and sturgeon (Acipenseriformes). On cobra, he said it was agreed to place Naja sagittifera in category 3. On musk deer, the working group recommended that black musk deer (M. fuscus), forest musk deer (M. berezovskii) and alpine musk deer (M. chrysogaster) be in category 2, with Siberian musk deer (M. moschiferus) in category 1. The working group recommended that the Animals Committee send questionnaires to concerned countries.

Hoogmoed noted that no consensus was reached on Acipenseriformes. Iran requested that sturgeon species from the South Caspian Sea be placed on category 2. North America expressed concern on the status of sturgeon throughout its range.

**REVIEW OF ANIMAL TAXA IN THE APPENDICES**

On Wednesday, 13 December, Chair Hoogmoed noted that of the 31 species identified for taxonomic review, only nine reviews have been completed (AC.16.8). North America said it had received positive feedback from range States’ Scientific and Management Authorities. Asia expressed concern about reviewing species that exist in numerous range States. Africa said it gathered most of its information from the Internet, literature and databases. The Secretariat and Hoogmoed emphasized the need to clearly define a standard review format, and several delegates noted the need for additional range States to complete questionnaires.

Indonesia reviewed the crab-eating macaque (Macaca fascicularis) and suggested that, on the basis of a literature review and trade reports, the species be taken off Appendix II. North America, supported by Europe and the IWC, suggested keeping this species with
other primates on Appendix II. The US report on saiga antelope (*Saiga tatarica*), drawn from a recent WCMC review, concluded that the species is properly listed in Appendix II, but may warrant future consideration for uplisting to Appendix I. The US review of the peregrine falcon (*Falco peregrinus*), based on responses to a mailed survey, supported maintaining this species on Appendix I.

On maleo (*Macrocephalon maleo*), Indonesia’s review concluded that this bird species should be retained on Appendix I. The Wildlife Conservation Society highlighted a captive breeding programme for maleos, in collaboration with Indonesia, aimed at reintroducing populations to the wild. The leatherback sea turtle (*Dermochelys coriacea*), reviewed by the US with input from IUCN’s Sea Turtle Specialist Group, concluded that an Appendix I listing is appropriate. Mexico and France agreed. Namibia recommended keeping dwarf pythons (*Python anchietae*) on Appendix II. Indonesia recommended retaining golden arowana (*Scleropages formosus*) on Appendix I, based on biological criteria. The UK recommended that Julien’s golden carp (*Probarbus jullieni*) remain on Appendix I, based on such criteria as, *inter alia*, limited distribution area and decline in habitat quality. TRAFFIC expressed concern about the high volume of illegal trade of this carp species from Laos to Thailand. The US recommended, and Oceania supported, keeping black corals (*Antipatharia*) on Appendix II, but said they may need to be listed on Appendix I in the future, based on illegal harvesting information.

On Friday, 15 December, working group Chair Sue Lieberman, North America, reported that the group discussed the nine species reviews completed for this meeting and species and process for future reviews, recommending that the reports be standardized. On the reviewed species, the group recommended that: *Macrocephalon maleo, Dermochelys coriacea, Scleropages formosus and Probarbus jullieni* be retained in Appendix I; *Macaca fascicularis, Saiga tatarica, Python anchietae and Antipatharia* be retained on Appendix II; and more information be solicited on *Falco peregrinus*. The group suggested methods for the future Appendices review process and for species selection. They recommended that high "visibility species" and species in the significant trade review process not be selected, favoring review of species listed early in the Convention’s history and Appendix II species with low levels of trade. Species proposed by the working group, and assigned to Parties for immediate review, include: *Cephalophus sylvicultor, Caloenos nicobarica, Anas aucklandica, Ara macao, Agapornis fischerii, Dermatemyx mawi, Crocodylurus lacertinus, Cnemidophorus hyperythrus, Dyscophus antongili, Bufo superciliaris, Ambystoma mexicanum, Rana tigerina, Cynoscion maconaldi, and Ornithoptera alexandrae*.

**SPECIES BREED IN CAPTIVITY**

**REGISTRATION OF CAPTIVE-BRED ANIMALS**: On Thursday, 14 December, the Secretariat introduced Parties’ responses to notification on the registration and monitoring of animal species bred in captivity (AC.16.9.1). The document notes that the registration process for Appendix I captive breeding programmes is required by the Secretariat for species that are critically endangered in the wild and/or difficult to keep or breed in captivity. All other species are to be registered by the Parties themselves. The Secretariat recommended concentrating on species that meet all three criteria and focusing registration on those species where there is a conservation impact as a result of breeding for commercial purposes.

Many delegates, including North America, China, Costa Rica, the US, Israel and others, noted a lack of clear criteria to define: critically endangered in the wild; difficult to breed in captivity; and difficult to keep in captivity. Germany stressed the need to further discuss criteria as a high priority and suggested setting up a working group. India noted that the effects of illegal trade should be taken into consideration when defining "critically endangered." Mexico underlined the need for each State to evaluate its own species populations. Supported by the National University of Costa Rica and the IWC, he said the Committee should not use IUCN’s criteria for critical endangerment because it assesses species on a global rather than national level. IUCN confirmed that its classification system lists species at the global level, and in some cases, at the national level. The Humane Society-US called for using a precautionary approach in defining criteria. Chile, and others, emphasized that range States should not be the only Parties to submit species for the Secretariat’s approval. A working group was formed.

On Friday, 15 December, working group Chair Sixto Inchaustegui, South America, noted the development of definitions for a list of Appendix I species that are critically endangered in the wild and/or known to be difficult to breed or kept in captivity. He said the group considered a species as being "critically endangered in the wild" if: it is protected under national legislation by any range State; if there is a significant risk of increased levels of illegal trade; and if a species is listed in the IUCN categories "critically endangered," "endangered," or "vulnerable." He said the group considered a species "difficult to keep" if the adult mortality rate in captivity exceeds the estimated adult mortality rate for wild populations or if the species has highly specialized requirements for maintenance in captivity. A species is considered "difficult to breed" if: captive breeding operations are not self-sustaining; captive-bred species do not routinely produce viable offspring; and captive breeding has undetermined reproductive biology in captivity.

Chair Hoogmoed, with Europe, North America, South America, Israel and the IWC, did not support the definitions of criteria, particularly of “critically endangered in the wild.” The UK, Japan and Oceania said the proposed criteria may generate a list of critically endangered Appendix I species that is long and confusing. TRAFFIC proposed referring to species on the IUCN Red List and suggested that range States themselves define critically endangered species. The US said, and the Committee agreed, a species is critically endangered in the wild if: “any range State proposes it as such, and it is protected under existing national legislation by that range State.” The Committee agreed to a proposal by Israel, amended by Switzerland, to change the report title to specify the breeding of species "for commercial purposes."

**EX-SITU BREEDING OPERATIONS AND IN-SITU CONSERVATION PROGRAMMES**: On Thursday, 14 December, the Secretariat introduced a document on the relationship between ex-situ breeding operations and in-situ conservation programmes (AC.16.9.2), noting that this complicated interaction involves biology as well as rural development. The Secretariat supported conducting a global survey to obtain information on this issue. Oceania provided an overview of cooperative conservation programmes in Australia. North America supported concerns raised by the Secretariat, including the risk that captive breeding may decrease incentives for habitat conservation and increase illegal procurement of breeding stock. She also said the proposal to research socio-economic and price impacts of trade in specimens from various production systems were not relevant, but conservation impacts were. IUCN noted the importance of understanding economic consequences of captive breeding and highlighted a study underway, by the African Resources Trust, WCMA and the IUCN Crocodile Specialist Group, to examine the economics of the crocodilian skin trade.
The EU said the Secretariat’s mandate should be extended to plants and noted that the Convention on Biological Diversity (CBD) has established a panel on access to genetic resources, suggesting that perhaps the Animals Committee should be represented.

TRANSPORT OF LIVE ANIMALS
On Tuesday, 12 December, Irina Sprotte (Germany), Chair of the transport working group, summarized the group’s report (AC.16.10.1), including an update on the transport mortality monitoring process and a review of implementation of the International Air Transport Association (IATA) live animals regulations. Switzerland noted increasing problems in transit, particularly a lack of accompanying documentation. Hoogmoed requested that the group prepare terms of reference (TOR) by the next Committee meeting. The US noted that CITES guidelines for transport of animals have not been updated since 1980 and should cover ground in addition to air transport.

On Friday, 15 December, Sprotte said shipments in transit should be addressed and noted the lack of responses from major importing countries to the questionnaire on transport mortality. She also noted the need to review CITES guidelines for transport and their applicability. The Committee agreed with working group proposals to, inter alia:
- establish a standardized format for the presentation of data on mortality and injury in transit;
- conduct a systematic review of the causes of mortality and injury to animals;
- offer assistance to the Secretariat and the Animals Committee regional representatives to incorporate live animal transport into training workshops;
- conduct an evaluation of CITES guidelines for transport and preparation for shipment of live wild animals and plants; and
- liaise with IATA to expand education programmes on the transport of live animals.

SCIENTIFIC AUTHORITIES
On Wednesday, 13 December, the Secretariat underscored the need to strengthen the role of Scientific Authorities and suggested that a regional meeting of Scientific Authorities convene next year. South and Central America and the Caribbean offered to host the meeting. Mexico asked to be considered part of the South American region for this meeting. Africa underscored the valuable work carried out by Scientific Authorities. North America noted that the CITES Trust Fund supports enhancing the capacities of Scientific Authorities. The Netherlands, with Israel and Spain, stressed the need to improve communication between Scientific Authorities, particularly in sharing of non-detriments findings.

HARD CORALS
On Tuesday, 12 December, Vincent Fleming (UK), Chair of the working group on hard corals, presented the group’s terms of reference (TOR) (AC.16.12.1), which the Committee adopted. On the mariculture and propagation of corals (AC.16.12.2), Fleming identified work ahead, including defining cultured coral and source codes related to coral propagation. Israel underlined the need to distinguish between cultured and wild-taken corals in trade. The Secretariat proposed that the TOR expand to establish an inventory of Parties that practice coral mariculture.

On Friday, 15 December, Fleming highlighted the usefulness of a US guide for coral identification and recommended that it be adopted and widely used as a practical guide for CITES enforcement officials. On coral taxa, he expressed preference for accurate identification at the genus rather than species level. He stressed using the ecosystem approach to corals conservation. The working group said it would explore opportunities for synergy and collaboration with the International Coral Reef Initiative, the Marine Aquarium Council and the CBD.

TRADITIONAL MEDICINES
On Wednesday, 13 December, the Secretariat presented a document on traditional medicines (AC.16.13), whose work programme will be finalized next year. Oceania supported as highest priority the inventory of captive breeding operations for medicinal use and development of a species checklist, including derivatives and parts traded for their medicinal properties. IFAW reported on its work to establish traditional medicine vendor associations. She noted the need for a standardized product labeling system and a comprehensive list of animals traded for medicinal use, which IFAW volunteered to prepare in collaboration with TRAFFIC.

ALIEN SPECIES
Trade in alien invasive animal species (AC.16.14.1/2) was discussed on Thursday, 14 December. The Secretariat stressed the need to cooperate with the IUCN/SSC Invasive Species Specialist Group (ISSG) and the CBD to minimize impacts on biodiversity from invasive species. Oceania, with Spain, North America, the EU and the US, supported developing a list of CITES invasives and efforts to maximize synergies with ISSG and the CBD. The Secretariat asked the ISSG Programme Officer to cross-check IUCN’s list with CITES species, and said it would incorporate information from the Global Invasive Species Programme website. The Chair supported Chile’s proposal to list monk parakeets on the list of invasives. The Dominican Republic said invasives are of great concern to his country, such as pet species, giving the example of iguanas. Israel, with North America, suggested collaborating with the Plants Committee on this issue. Chair Hoogmoed established an intersessional working group on invasives. The group will be chaired by Oceania and communicate by e-mail.

CAPTIVE BREEDING, RANCHING AND WILD HARVEST PRODUCTION SYSTEMS
On Monday, 11 December, Hank Jenkins, Creative Conservation Solutions, presented an overview of captive breeding types and assessment of current CITES source codes for captive-bred Appendix II species. The Secretariat explained that this evaluation was prepared in response to the need to distinguish between captive breeding production systems. Jenkins explained different management systems, including ranching, captive rearing, wild harvesting and farming. He noted that the present range of source codes do not adequately reflect the management approaches in use around the world and suggested that the report be used as a manual for exporting range States.

North America stressed that having a source code is not in lieu of a finding of non-detriments for a species. China asked for examples to clarify terms for captive breeding systems, while IWMC stressed a need to further define ranching. The US emphasized a focus on guidelines rather than codes for determining non-detriments findings. The UK and Germany called for further clarification of proposed source codes. Wijnstekers noted that source codes allow Parties to establish trends in traded types of captive-bred species.

UNIVERSAL LABELING OF CAVIAR
On Thursday, 14 December, TRAFFIC presented a document on the universal labeling system for the identification of caviar (AC.16.16). He noted the system for caviar export applies to caviar entering international trade from the country of origin, but does not apply to re-exports of caviar, including caviar that may have been re-packaged prior to re-export. Iran added the need to consider illegal caviar exports.
On Friday, 15 December, Rod Hay, Oceania, acknowledging the contribution of TRAFFIC, recommended that exporting countries determine the precise type of label to be used, and that to avoid illegal trade, a “unique number” be used for each exported item’s permit. He said further mechanisms are needed to extend this system to caviar re-packaging and re-export. The Chair asked the working group to draft a resolution on the matter.

BLACK SEA BOTTLENOSE DOLPHIN

On Thursday, 14 December, the US introduced a document on trade in the Black Sea bottlenose dolphin (Tursiops truncatus ponticus) (AC.16.17). She noted that despite a COP-11 withdrawal of a proposal to downlist this subspecies from Appendix I to II, a working group had been established to evaluate the biological status of the species using data from range States. She added that the US was in communication with several treaty organizations, including the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) and the Bern Convention on the Conservation of European Wildlife and Natural Habitats, which indicated willingness to participate in discussions. The Secretariat suggested maintaining a contact group to gather more information. Germany suggested the group address compliance with operative requirements. Care for the Wild noted that significant information already exists on this species and deserves review.

FRESHWATER TURTLES AND TORTOISES

On Thursday, 14 December, Hoogmoed introduced a document on trade in freshwater turtles and tortoises (Inf.AC.16.13) and noted the need to convene a workshop on the issue. Africa said, although the focus is on Asian trade, it would like to be involved in any future workshop. China requested that more informational surveys be conducted before any workshop takes place. North America, with Germany, highlighted trade in freshwater turtles and tortoises as high priority and both offered funding for a workshop. The US said it was prepared to seek additional funds for a workshop and for capacity building. The Chelonian Research Foundation also pledged financial support. Conservation International highlighted its current initiatives in turtle and tortoise conservation and said it looked forward to collaborating on this issue. A working group, chaired by Asia, was established.

On Friday, 15 December, working group Chair Tonny Soehartono, Asia, identified the following priorities, which the Committee accepted: holding a technical workshop on turtle trade, including participation by importer, exporter and government representatives; reviewing unlisted Asian turtle species to determine possible need for CITES listing; developing and circulating appropriate identification materials; and evaluating species for appropriateness for significant trade review. He said that Cuora amboinensis, Cuora flavomarginata, Cuora galbinifrons and Lissaeys punctata should be reviewed. Europe proposed, and the Animals Committee accepted, adding Pyxis planicauda and Pyxis arachnoides for review, and the US noted that the former merits immediate attention.

SEAHORSES

On Wednesday, 13 December, Project Seahorse introduced a document on the conservation of seahorses (Syngnathidae) (AC.16.19). She underscored evidence of declining seahorse populations due to trade and proposed gathering information on the species’ biology, catch and by-catch, trade and relevant legislation. She said there was no intention at this time to list seahorses. North America noted significant funding provided for a technical Syngnathidae workshop.

On Friday, 15 December, Oceania noted the need for a technical workshop, preferably held in Asia. The Committee agreed on the need to gather new scientific data.

SHARKS

On Thursday, 14 December, Chair Hoogmoed introduced a COP-11 decision to monitor an international action plan on sharks. He said there was no obligation to report to the next Animals Committee on this issue, but said the Secretariat would maintain contact with the FAO on the status of the voluntary plan. He noted that many countries had already undertaken initial assessments of shark stocks.

TRADE IN TIME-SENSITIVE RESEARCH SAMPLES

On Wednesday, 13 December, Switzerland introduced a document (AC.16.21) on time-sensitive research samples, which sets the goals of: identifying various types of samples transferred internationally between research institutions; categorizing samples based on their commercial, non-commercial and conservation elements; and evaluating the need for expedited transfer of samples. Chair Hoogmoed noted input from different professional areas, such as veterinarian, pharmaceutical and zoological fields. The Secretariat recommended that the working group focus on ways to make sample transfers efficient. Chile asked that all range States be involved in discussions. The US supported the document and the need for timely movement of tissue samples shipments used exclusively for scientific purposes. Israel urged the working group to consider controls on the transfer of eggs, sperm and frozen embryos, which might be disguised as time-sensitive research samples. The European Association of Zoo and Wildlife Veterinarians noted the document’s title does not mention health monitoring or law enforcement.

On Friday, 15 December, working group Chair Tom Althaus (Switzerland) noted a change in the title, referring to “biological samples for conservation purposes,” instead of “research samples” and outlined several tasks to be undertaken, including:

- identification of various types of samples transferred internationally;
- categorization of purposes for which samples are transferred in terms of commercial, non-commercial and conservation elements;
- categorization of recipient institutions; and
- the evaluation of the need for expedited transfer of samples.

He identified future actions on this issue, including training seminars on the handling of time-sensitive biological samples by enforcement agents and streamlining the process of issuing CITES documents. The Secretariat noted that the finalized report, with several amended changes, would be referred to the Standing Committee for subsequent action.

CLOSING REMARKS

On Friday, 15 December, Chair Hoogmoed noted the occasional difficulties in the Animals Committee’s work, but expressed hope for continued cooperation in the future. The following groups will continue their work intersessionally: corals, live animals transport, turtles and tortoises, significant trade, review of Appendices, caviar labeling, and seahorses. Oceania saluted the Chair for his work, which was as difficult as “nailing a jellyfish to a tree...as long as it is not an Appendix I jellyfish!” The Chair closed the meeting at 3:00 pm.

REPORT OF THE 10TH MEETING OF THE PLANTS COMMITTEE

On Monday, 11 December, Plants Committee Chair Margarita Clemente (Spain) welcomed participants and identified topics to be addressed by the Committee. She called for budgetary caution and highlighted the need to increase regional cooperation. Several participants stressed that funding and communication problems hinder regional representatives from carrying out their duties. Willem Wijn-
stokers, CITES Secretary-General, remarked upon the Committee’s “serenity.” He called for making CITES simple and for consideration of tropical timber species.

Members proceeded to adopt the agenda (PC.10.3.1) and the rules of procedure (PC.10.3.2), admit 15 observers, and accept Malaysia’s offer to host the next meeting, probably in early September 2001. The Committee met in Plenary meetings from Monday, 11 December, to Wednesday, 13 December. A working group on the review of orchid species and the Flora Nomenclature Committee met on Tuesday, 12 December. Delegates were required to comment on agenda items and make recommendations to be forwarded to the Standing Committee. The Secretariat reminded them that no decision could be formally adopted by the Committee.

**FOLLOW UP OF COP-11 DECISIONS**

On Monday, 11 December, the Secretariat introduced a COP-11 document on establishing a Bigleaf Mahogany (Swietenia macrophylla) working group (PC.10.7.1), which would involve range and importer countries trading in Bigleaf Mahogany in “considerable volumes” according to International Tropical Timber Organization (ITTO) statistics. Chair Clemente and Bertrand von Arx, regional representative for North America, were selected as Plants Committee representatives to this group, which will meet sometime in 2001.

On Devil’s Claw (Harpagothymum spp) (PC.10.7.2), Germany described ongoing projects comparing the plant’s distribution, population status and harvesting impacts in communal areas and commercial farms in Botswana, Namibia and South Africa. Namibia cautioned that artificial cultivation of Devil’s Claw may adversely affect marginal Namibian communities. The Committee supported further Secretariat collaboration with the Southern Africa region and Germany on Devil’s Claw biological and trade status.

On Tuesday, 12 December, Mexico and South America emphasized the need to clarify the taxonomy of Guaiacum sanctum (PC.10.7.3). Costa Rica, Mexico and the US agreed to collaborate, and Germany offered to initiate a separate project to distinguish between two Guaiacum species. The Netherlands offered “seed” money for new Guaiacum research projects.

Asia and Oceania complimented TRAFFIC on their agarwood (Aquilaria spp.) trade report (PC.10.7.4) and supported the idea of listing all species. Oceania noted regional progress on data collection and policy making, but drew attention to significant illegal exports from Indonesia and an expanding market in Papua New Guinea.

**TECHNICAL PROPOSALS FOR COP-12**

On Monday, 11 December, the Secretariat introduced the discussion of the definition of “artificially propagated” in relation to timber (PC.10.8.1). He said CITES should consider a new source category to reflect actual silvicultural techniques and trade regimes for timber species listed in the Appendices. The US, with the EU, Germany and the International Wildlife Coalition (IWC), questioned motives for, and implications of, creating intermediate source codes given non-detrimental trade criteria. He highlighted the risk of CITES protecting unsustainable timber harvesting and questioned assumptions that guided natural regeneration guarantees sustainable exploitation. Chair Clemente said work on defining “artificially propagated” will continue after the Plants Committee meeting, with support from Chile, India and the Committee.

On standard exemptions for derivatives of plants species (PC.10.8.2), Asia objected to exempting seeds. The Secretariat pointed out that seeds were previously exempted because of identification difficulties. Regarding the proposed exemption of seedlings and tissues transported in solid or liquid media, Austria called for rephrasing the text in view of changes in transporting practices. The Secretariat suggested that details be worked out at the next Plants Committee meeting.

Regarding definitions of technical terms used in annotations for medicinal plants (PC.10.8.3), North America suggested using existing definitions developed elsewhere. Austria emphasized that terminology should be understandable and botanically correct. TRAFFIC called for standardizing definitions used by importers and exporters. Mexico called for a classification of medicinal plants and their derivatives. Germany, the US and China expressed willingness to participate in a working group on the annotation of medicinal plants. In a discussion on funding, the Secretariat announced a US contribution for medicinal plant projects. Austria proposed, and the Committee agreed, to revise annotations before the next meeting.

**SPECIES PROPOSALS FOR COP-12**

On Tuesday, 12 December, Chile expressed concern regarding a notification that implied an unintended split-listing of monkey-puzzle tree (Araucaria araucana) (PC.10.9.1), with the Chilean and Argentine populations in Appendix I and “other populations” in Appendix II. He said this endemic tree of Chile and Argentina first had been listed in Appendix II in 1973, then split-listed in 1979, with the Chilean population in Appendix I and the Chilean population in Appendix II. To address enforcement and conservation problems, COP-11 adopted the Committee’s proposal to place the whole population of monkey-puzzle tree on Appendix I. Participants discussed different interpretations of populations introduced or endemic and agreed that the definitions working group should tackle the notion of naturalized populations. The Committee decided that Europe, in collaboration with Chile, would ask the Standing Committee that the Appendices be amended to reflect the original intention of the proposal to list the monkey-puzzle tree.

**SIGNIFICANT TRADE IN PLANTS**

On Monday, 11 December, the Secretariat introduced a document on significant trade in plants (PC.10.10.1). Noel McGough (UK) was re-elected as coordinator on this topic. He noted problems in available trading data, notably the absence of data on many CITES-listed species where wild trade may or may not be occurring. He recommended that the Committee prioritize a review of trade in cacti, cycad, aloe and euphorb species, and endangered plants in Madagascar such as orchids.

On Tuesday, 12 December, the Secretariat suggested, and Oceania supported, prioritizing studies in 2001 on significant trade in Madagascar plants, cycads and afromium (Percopsis elata) timber taken from the wild. Africa supported prioritizing cycads before adopting a regional approach. North America and Austria preferred prioritizing Madagascar plants. Mexico proposed consideration of illegal trading in cacti, while Central and South America and the Caribbean proposed consideration of medicinal plants. The Secretariat identified a data shortage on trade of medicinal plants.

Regarding pre-COP-11 significant trade in medicinal plants, Germany reported on the completion of a project on 16 medicinal plant species listed since COP-9. Responding to a request for adoption by Oceania, the US and Europe, the Committee decided to consider adoption on Wednesday, 13 December, and to include input from China. The UK and China presented their collaborative scientific research assessing the trade and biological status of 300 Chinese orchid species, proposing a second stage of research. The Secretariat informed participants that Kew Gardens, London, would be developing a manual to conduct non-detrimental research on plant species. The US expressed concern over monitoring the sustainability of small-scale orchid nurs-
eries in association with protected areas, which may “launder” wild orchids. The Committee agreed to further research in light of such concerns.

On trade controls for valerianaceae (*Nardostachys grandiflora*) and scrophulariaceae (*Pichorhiza kurrooa*) (PC.10.10.2.3), TRAFFIC presented a finding that trade in both species is not well regulated and cited a treaty between Nepal and India, which does not require trade controls. The Committee discussed widespread problems in obtaining identification data to facilitate implementation and agreed to initiate work on Madagascan flora and cycads and to ask the WCMC to provide trade data for evaluation at the next Plants Committee.

**MEDICINAL PLANTS**

On Tuesday, 12 December, Africa reported that trade in African cherries (*Prunus africana*) in Kenya is underestimated and unsustainable. France reported on a study by its scientific authority on the tree’s physiology and options for sustainable harvesting in Cameroon. Chair Clemente suggested that studies investigate all supply sources.

On Wednesday, 13 December, the Committee congratulated Germany for an outstanding pre-COP-11 follow-up report of significant trade in medicinal plants (PC.10.2.1), which was adopted.

**REVIEW OF APPENDICES**

On Tuesday, 12 December, Chair Clemente said some species in the Appendices had not been listed according to scientific criteria. She acknowledged the technical and funding challenge of conducting scientific assessments. Regarding a review of orchid species (PC.10.12.1), the Secretariat noted the overwhelming task that lay ahead. The National Orchid Society suggested listing only traded species. The Committee established an orchids working group.

On Wednesday, 13 December, Noel McGough (UK) reported on the group’s efforts to: separate orchid taxa into various groups depending on quantities and purpose of trade; review taxa requiring checklists; initiate identification materials for frequently traded orchids; and possibly exclude non-traded hybrid orchids. He invited representatives from each region and the American Orchids Society to join the working group, in which Austria suggested including orchid traders and growers.

**CHECKLISTS AND NOMENCLATURE**

On Tuesday, 12 December, the UK presented a progress report on new plant checklists (PC.10.13.1) and requested further assistance from range State orchid experts to finalize the orchids checklist. Austria made a commitment to initiate a checklist on the orchid genus *Bulbophyllum*.

On nomenclature problems (PC.10.13.2), the Nomenclature Committee Vice-Chair reported progress on: standardizing prickly pear (*Opuntia spp*) listings; covering agar (*Aquilaria spp*) in the overall review of agarwood trade; resolving confusions in valerianaceae (*Nordastachys grandiflora*) synonyms; and recognizing scrophulariaceae (*Pichorhiza kurrooa*) as the only species listed. The Committee noted a taxonomic study of all Cactaceae, to be published in 2001.

On the Himalayan yew (*Taxus wallichiana*) (PC.10.13.3), the Nomenclature Vice-Chair said that review of nomenclature was ongoing. The US said various Eurasian species of the yew genus were hard to identify and required attention. China offered assistance to the US in continuing studies in yew species nomenclature and taxonomy.

The Committee also discussed possibilities for providing information to the public on the significance of Appendix II. Europe called for providing TRAFFIC with funding for this initiative. The Chair and North America noted a lack of knowledge regarding Appendix II’s potential to promote sustainable trade and use, notably among those trading in timber and medicinal plants. Many commented favorably on a US pamphlet, “CITES and the Woods Products Trade,” and the UK suggested it can be used as a template for materials on other taxa.

**STRATEGIC PLANNING**

On Wednesday, 13 December, Vice-Chair von Arx reported on a morning working group discussion on implementing the CITES strategic vision (PC.10.14.1). He outlined actions to:

- evaluate Party capacities, needs and opportunities to implement CITES;
- develop a simple guide to the review of significant trade in plants and a database on CITES decisions, procedures and plant species in trade;
- improve coordination between CITES authorities;
- include plant experts within Scientific Authorities;
- develop formats for permits, reporting and trade analysis of listed plant commodities; and
- promote greater awareness and cooperation among botanists regarding CITES.

The UK suggested creating a more widely accessible electronic library of presentations and publications on CITES and plants. The Netherlands placed high priority on improving the scientific basis and information sharing between Scientific Authorities on non-detriment findings in traded plants. Regarding trade in alien species, Austria noted the relevance of the Convention on Biodiversity (CBD) and suggested consultation with the CBD Secretariat. The Committee decided to entrust Chair Clemente, Vice-Chair von Arx and the Secretariat with drafting and circulating a document that prioritizes projects.

**IDENTIFICATION MATERIAL FOR PLANTS**

On Wednesday, 13 December, Germany presented a progress report on identification materials for 19 medicinal and aromatic plants (PC.10.15.1). These materials incorporated US and TRAFFIC East Asia contributions and will be included in the Secretariat’s Identification Handbook. Chair Clemente demonstrated Spain’s Cordoba University website, which contains detailed information on the distribution, trade, common names, taxonomy and microscopic characteristics of listed tree species. China submitted a recently completed identification sheet for desert-living cistanche (*Cistanche deserticola*).

**ISSUES RESULTING FROM THE 9TH PLANTS COMMITTEE**

On Wednesday, 13 December, on evaluation of tree species using the new CITES listing criteria, the Netherlands reported on its efforts in information dissemination and agreed to collaborate with the Secretariat to review trade in timber species (PC.10.17).

**TRAINING INITIATIVES**

On Wednesday, 13 December, the UK reported progress on the distribution of standard slide packages and confirmed continued funding for the project (PC.10.18.1). The US asked for cooperation from all Parties in developing future packages. The Chair reported on the International University of Andalucia’s course on all CITES aspects.

**OTHER BUSINESS**

On Wednesday, 13 December, Africa presented proposed changes to the rules of procedure, which require, *inter alia*: Scientific or Management Authorities to admit observer members; the Chair to participate in agenda drafting; the Secretariat to expedite web document postings; and changing the deadline for completing meeting records from 120 to 60 days after meetings. The Committee approved all proposed changes, except the change in deadline. The EU noted that the Plants Committee is ahead of the Animals Committee in its evolution, given its democratic procedures.
Germany presented a report on spring adonis (Adonis vernalis). The issue of the relationship between ex-situ breeding operations and in-situ conservation programmes was postponed until the next Plants Committee meeting, which will be held in Malaysia the first week of September 2001.

CLOSING REMARKS
On Wednesday, 13 December, South America remarked that the early conclusion of the meeting was a sign of efficiency. The Chair expressed satisfaction with the work of the Committee, thanked the US for its hospitality and closed the meeting at 5:25 pm.

A BRIEF ANALYSIS OF THE CITES TECHNICAL COMMITTEES MEETINGS
CITES COP-11 set a heavy work agenda for this week’s Committee meetings, particularly the Animals Committee. A notable outcome of the Second Joint Meeting, which took place one week prior to the Plants and Animals Committees, was the re-direction of the Criteria Working Group to focus specifically on definitions for use in implementation of the Convention. To tackle the ambitious Animals Committee agenda, many working groups were formed, in which much of the week’s substantive work was accomplished. The Plants Committee, on the other hand, managed to address their lighter agenda efficiently in Plenary and concluded their meeting early.

The work of the Plants Committee was primarily organizational, with the main outputs being the launching of several species-focused projects, such as Orchidaceae, Cactaceae, cycads, and Madagascan flora, which delegates noted are funded by only a handful of countries. Participants commended the collaboration between the UK and China in the case of orchids as a success story of scientific cooperation between an importer and a range State. In the Animals Committee, delegates were pleased with the creation of numerous working groups, which are increasingly viewed as the place where substantive work occurs. Progress was made on the issues of sturgeon categorization and caviar labeling, trade in freshwater turtles and tortoises, and the increasingly important issues of hard corals and seahorses. However, these three Committee meetings do not have the power for definitive decision-making, rather, proposals generated herein will be forwarded to future technical or Standing Committee meetings, or eventually to COP-12.

CONVENTIONUS TECHNICALIS CONFUSEDICUS
The meetings revealed a number of problems with the interface between science and politics. Although many tend to associate CITES with elephants and other charismatic megafauna, in reality and in implementation, the Convention is of a very technical nature. A common grievance, aired by the Secretariat in the Joint Committee meeting and by the Chair of the Animals Committee, is that not enough people involved with CITES have the technical background to fully comprehend the Convention and its implementation. With a focus on defining criteria for Appendices listings, repeated use of graphical models and population projections, and the intricacies of species taxonomy in the Joint Committee meeting were difficult for participants with a background in policy and administration to follow. On the other hand, many of the scientists involved do not have a basic understanding of the content and scope of the Convention. Many issues commonly discussed in CITES technical meetings have not been understood by all delegates and questions on definitions, criteria, listing and taxa, are often repeated, wasting valuable time. For example, one regional representative’s comments in the Plants Committee showed she had not understood whether CITES covers or exempts artificially propagated species.

In the Animals Committee, a perceived problem was the involvement of participants with inadequate scientific background. In contrast, although the Plants Committee had a strictly scientific profile, some feel the need to involve more scientific experts to pursue additional projects. Members repeatedly identified the shortage of biological and trade data as a major problem, conditioned by a shortage of funding for projects. Therefore, the problem of scientific expertise is more a question of quality in the Joint and Animals Committees, and a matter of quantity in the Plants Committee.

It is unfortunate that in such a long-standing Convention there are still lingering debates about definitions of basic concepts. This can be explained in part by the lack of continuity in Party and regional representation. Few delegates have been involved with CITES throughout its 25 years in existence, in part because of the frequent rotation in most administrations’ personnel. As a result, it may be challenging for participants to defend a consistent position or push forward a national or taxon-specific agenda. In addition, since non-COP meetings are not sponsored, many range States could not attend or be represented in these technical Committee meetings, notably Madagascar whose endemic fauna and flora are increasingly becoming CITES concerns. With a tight budget, CITES’ effectiveness relies on external funding, primarily from Western countries. Programmes such as training and species-specific workshops are dependent on solicitation of pledges from Parties and outside interests.

The three meetings highlighted the implementation challenges of the Convention. While CITES is the most important international convention for the protection of endangered species, with over 30,000 species listed, implementation can be quite burdensome. A frequently heard complaint in the technical meetings was that CITES’ implementation is plagued by rudimentary problems of communication and bureaucracy between Scientific and Management Authorities, between these Authorities and government officials, and between Parties, the Committees and the Secretariat. Both a delegate and a regional representative in the Plants Committee said they did not even know who the Scientific Authorities were within their respective regions.

WHO’S THE ALPHA MALE?
Despite the Secretariat’s self-description as “humble servants to the Parties,” many believe that it is subtly stretching its powers to a level of involvement not witnessed in other international environmental fora. In the Plants Committee, the Secretariat came under fire for having unilaterally altered the wording in listing monkey-puzzle tree populations (Araucaria araucana), with the unintended result of split-listing the species. Furthermore, it declined a private request by the Chair to restore the original wording, and the issue came out in the open during a Plenary session where the Committee decided to send a letter to the Standing Committee reaffirming the original intent of a COP-11 decision. There was a widespread feeling among participants that the “old guard” of the Secretariat, noticed for its European composition, is not fully receptive to guidance by the Parties.

CHICKEN OR THE EGG PARADIGM: TRADE VERSUS CONSERVATION
These three meetings again raised the complexities over whether CITES is about trade, permits and bans and/or a tool for conservation, cooperation and training. These differences in perception leave room for conflicting interpretations of the Convention’s role, and the specific functions of the Plants and Animals Committees. Originally, CITES was “greener;” listing and upgrading species was easier. In reality, CITES regulates trade for conservation purposes rather than acting as an effective conservation tool that allows trade.
Pro-traders continue to support sustainable use to justify trade. Although interpretations vary, in general, sustainable use asserts that when biological conditions are met and use can be monitored and controlled, trade should be allowed. Those who are pro-trade welcomed a model based on the concept of maximum sustained yield (MSY) introduced during the Joint Committee meeting to determine listing criteria. Conservationists continue to advocate use of the Precautionary Principle and cautioned against applying a fisheries-inspired model to all taxa. Although few fish species are listed, the Animals Committee’s recent interest in seaweeds, presently not proposed for listing, indicates that fish may figure prominently in future CITES discussions.

NOT OUT OF THE WOODS YET

In the face of ongoing debates, many still wonder about CITES’ role and effectiveness in conservation. Fundamentally, CITES’ focus is at the species level. Although the role of species in ecosystems is mentioned in the text of the Convention, many delegates wonder if CITES fulfills its responsibility to minimize the impacts of its actions on habitats and biodiversity. In reality, the implementation of CITES can induce adverse effects on the species. For instance, illegal trade may increase or plants may be unsustainably harvested following an Appendix I listing. When breeding and artificial propagation operations create disincentives, if not negative impacts, on conservation of wild populations in their habitats?

This issue was raised in the technical meetings during discussions on the relationship between ex-situ breeding programmes and in-situ conservation. For example, discussion behind the scenes of the Plants Committee addressed strengthening connections between sustainable trade of artificially propagated endangered plants and their conservation in the wild. However, in formal discussions, neither Committee adequately addressed this issue, which will certainly be revisited in the future.

Although these fora were reserved for discussion and launching initiatives rather than decision-making, delegates left with a sense of accomplishment as several projects were launched and numerous working groups had been formed, which will continue to meet interpersonally. Several technical workshops will be held in the coming year on critical issues including bigleaf mahogany, turtles, seahorses, and sturgeon. The three West Virginia meetings underscore what delegates cite as CITES’ main strengths, namely, its ability to stimulate cooperation and initiatives, such as training, workshops, management plans, education and national laws.

THINGS TO LOOK FOR

WORLD CONGRESS ON ENVIRONMENTAL LAW: This congress will be held from 8-12 January 2001, in San José, Costa Rica. For more information, contact: Ramón Ojeda, Secretario General, CIACA; tel/fax: +34-43-278-888; e-mail: ciacaciv@sarenet.es; Internet: http://www.greenchannel.com/icec

ERADICATION OF ISLAND INVASIVES – PRACTICAL ACTIONS AND RESULTS ACHIEVED: This conference will be held from 19-23 February 2001, in Auckland, New Zealand. For more information, contact: IUCN Species Survival Commission; tel: +61-22-999-0152; fax: +61-22-999-0015; e-mail: scc@hq.iucn.org; Internet: http://www.issg.org

ASIAN WORKSHOP ON MULTILATERAL ENVIRONMENTAL AGREEMENT SYNERGIES: An informal regional consultation and workshop on the Interlinkages, Synergies and Coordination among Multilateral Environmental Agreements will be held from 26-27 February 2001, in Kuala Lampur, Malaysia. For more information, contact: Motoyuki Suzuki, The United Nations University; tel:+81-3-3499-2811; fax: +81-3-3499-2828; e-mail: mbox@hq.unu.edu; Internet: http://www.unu.edu/capacitybuilding/index.htm

INFORMAL CONSULTATION ON THE PROPOSED GLOBAL STRATEGY FOR PLANT CONSERVATION: This consultation will be held on 11 March 2001, in Montreal, Canada. For more information, contact: the CBD Secretariat; tel: +1-514-288-2220; fax: +1-514-288-6588; e-mail: secretariat@biodiv.org; Internet: http://www.biodiv.org

SIXTH MEETING OF THE CBD’S SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE (SBSTTA-6): This meeting will be held from 12-16 March 2001, in Montreal. For more information, contact the CBD Secretariat (see above).

SIXTH INTERNATIONAL WILDLIFE LAW CONFERENCE: The American Society of International Law - Wildlife Interest Group is organizing the Sixth International Wildlife Law Conference to be held at the end of March 2001 in Washington DC. For more information, contact: Wil Burns, American Society of International Law - Wildlife Interest Group; tel: +1-650-703-3280; fax: +1-801-838-4710; e-mail: SILWildlife@pacbell.net; Internet: www.eelink.net/~asilwildlife

SIXTH INDO-PACIFIC FISH CONFERENCE: This conference will be held from 20-25 May 2001, in Durban, South Africa. It will address various aspects of the ichthyology of Indo-Pacific fishes, including evolution, genetics, systematics, ecology, biology, behavior and biogeography. For more information, contact: IPFC 2001, Oceanographic Research Institute, tel: +27-31-337 3536; fax: +27-31-337-2132; e-mail: seaworld@dnb.lia.net; Internet: http://www.seaworld.org.za

CITES STANDING COMMITTEE: The Standing Committee will meet in Paris, France, in June 2001. For more information, contact: CITES Secretariat, tel: +41 22 917 8139; fax: +41 22 797 3417; e-mail: cites@unep.ch; Internet: http://www.cites.org

INTERNATIONAL CONFERENCE OF THE ASSOCIATION OF BOTANICAL GARDENS: The Consultative Group on International Agricultural Research is organizing an International Conference of the International Association of Botanical Gardens to be held from 18-24 June 2001, in Córdoba, Spain. For more information, contact: Inmaculada López, Cordoba Botanical Gardens; tel: +34-957-200077 / 200355; fax: +34-957-295333; e-mail: jardinentcord@retemail.es; Internet: http://www.uco.es/organiza/servicios/jardin/xconfer.htm

INTERNATIONAL SYMPOSIUM ON BIODIVERSITY AS A SOURCE OF NEW MEDICINES: This symposium will be held from 16-19 August 2001, in Cali, Colombia. For more information, contact: Livia Pabon de Majid; tel/fax: +57-2-330-2461; e-mail: biofarmacongress@telesat.com.co; Internet: http://www.biofarmacongress.com