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



Fourteenth meeting of the Plants Committee Windhoek (Namibia), 16-20 February 2004

THE CITES NOMENCLATURE COMMITTEE

1. This document has been prepared by both the flora and fauna members of the Nomenclature Committee.

Introduction

- 2 During the 19th meeting of the Animals Committee in Geneva (AC19; Geneva, August 2003), documents AC19 Doc. 20.1 and AC19 Doc. 20.2 were submitted for discussion by the Animals Committee. The subjects of the two documents clearly fell within the remit of the Nomenclature Committee (Zoology). The Secretariat made this clear in its comments on the documents and consequently the Nomenclature Committee discussed the documents, and subsequently informed the Animals Committee about its findings.
- 3 A number of the representatives and observers present at AC19 were not familiar with the composition or working practises of the Nomenclature Committee. In addition, they were not fully cognisant of the implications of the acceptance by the Conference of the Parties of the Nomenclature Committee's report to meetings of the Conference of the Parties. A similar situation occurred at the 13th meeting of the Plants Committee and the associated meeting of the Nomenclature Committee (Flora).
- 4 This information document has been prepared to facilitate a general understanding of the workings of the Nomenclature Committee.

Composition

The composition of the Nomenclature Committee has been spelled out in Annex 3, paragraph b) of Resolution Conf. 11.1 (Rev. CoP12) on establishment of Committees as follows:

that the Nomenclature Committee shall comprise two individuals appointed by the Conference of the Parties; one zoologist to address nomenclatural issues for animal taxa and one botanist for plant taxa;

6. From this text it is clear that the Conference of the Parties decided that the structure of the Nomenclature Committee would be different from that of the other three Committees of CITES, the Standing Committee, the Animals Committee and the Plants Committee, which all do have regional representation. For the Nomenclature Committee, the Parties decided that such a structure was not a feasible option because of the specialised and purely scientific issues dealt with in that committee and the few individuals interested in these rather technical issues.

Operation

- 7. In Resolution Conf. 11.1 (Rev. CoP12), Annex 3, paragraph c), the operation of the Nomenclature Committee is spelled out:
 - that these two scientists shall coordinate and monitor the input needed from specialists in fulfilling the responsibilities assigned by the Parties, inform the Animals and Plants Committees at each meeting about the progress made, and report to each meeting of the Conference of the Parties
- 8. This paragraph also clearly establishes the working relationships with other committees: the Nomenclature Committee informs the Animals and Plants Committees, and reports to the Conference of the Parties.

Terms of reference of the Nomenclature Committee

9. The tasks of the Nomenclature Committee are spelled out in Resolution Conf. 11.1 (Rev. CoP12) Annex 3 under paragraph a) as follows:

to re-establish the Nomenclature Committee of the Conference of the Parties, with the following terms of reference:

within the policy agreed to by the Conference of the Parties, the Nomenclature Committee shall:

- i) cause standardized nomenclatural references for animal and plant taxa, to the level of subspecies or botanical variety and including synonyms, to be prepared, or propose for adoption existing nomenclatural references, as appropriate, for all species listed in the Appendices to the Convention;
- ii) upon its acceptance of a new or updated reference (or part thereof) for a given taxon, present this to the Conference of the Parties for adoption as the standard reference for that taxon;
- iii) ensure that the highest priorities in developing the standard reference lists of animal and plant names and synonyms be:
 - A. species names of animals and plants listed at the species level in the Appendices;
 - B. generic names of animals and plants listed at the genus or family level in the Appendices; and
 - C. family names of animals and plants listed at the family level in the Appendices;
- iv) review the existing Appendices with regard to the correct use of zoological and botanical nomenclature;
- v) upon request from the Secretariat, review proposals to amend the Appendices to ensure that correct names for the species and other taxa in question are used;
- vi) ensure that changes in nomenclature recommended by a Party do not alter the scope of protection of the taxon concerned; and
- vii) make recommendations on nomenclature to the Conference of the Parties, other committees, working groups and the Secretariat;
- 10. The above points are clear and have been decided by the Conference of the Parties. Of course every Party has the right to propose changes to any part of this Resolution and seek to have them adopted by the Conference of the Parties.

Philosophy of the Nomenclature Committee

- 11. It might be helpful to explain the philosophy, or guiding principles, which have motivated the Nomenclature Committee since its existence.
- 12. It always has been the philosophy of the Nomenclature Committee to find the right balance between stability in nomenclature and the reality of progress and changes in taxonomy and consequent taxonomic changes. Thus, the CITES Nomenclature Committee actually "freezes" nomenclature at a certain point in time, that in some cases may be rather long time ago while in others more recent or up-to-date. In order to promote stability, transparency and uniform use of names of CITES-listed species, a system of adopting Standard References was developed in the early 1990's.
- 13. During the latest meeting of the Nomenclature Committee (Geneva, August 2003), it became clear that the philosophy and general approach of the Nomenclature Committee was not known or obvious to all. One country misunderstood the role of the Nomenclature Committee to the point that it was thinking that the Nomenclature Committee was required "to adapt the CITES Appendices to the most recent scientific nomenclatural references" [see document AC19 Doc. 20.1, paragraph 13 a)].
- 14. As the Secretariat in its comments in document AC 19 Doc. 20.1 correctly stated, there is no such requirement, and actually such a requirement would be contrary to the intention of the Nomenclature Committee to provide the Parties with a nomenclature that is an acceptable balance between taxonomic and scientific progress, and the need for a pragmatic and reasonably conservative approach when considering nomenclatural amendments to the Appendices. It should be repeated here that taxonomy is a dynamic science (as recognised in the preamble of Resolution Conf. 11.1 (Rev. CoP12) Annex 3) that constantly presents us with new insights in relationships, new approaches to species content and descriptions of newly discovered species, which all have their repercussions on the nomenclature of the groups concerned. It has been the philosophy of the Nomenclature Committee not to adopt all new changes immediately, but only after taxonomic modifications were widely accepted by the scientific community. However, CITES cannot avoid to adopt some changes to the nomenclature of the species in its Appendices. At such moments the Nomenclature Committee proposes changes in nomenclature to the Parties. Of course the Parties are free to alter or reject these proposals, but until now this has never happened. In suggesting changes to the nomenclature of CITES-listed species, one thing has been clear from the start: whatever nomenclatural changes are proposed or decide, they never may cause taxa that are covered by CITES to no longer be covered by CITES, or to alter the scope of the protection for fauna or flora under the Convention [see Resolution Conf. 12.11 on standard nomenclature, RECOMMENDS, paragraph g)]. In order to ensure this, the Nomenclature Committee always has taken into account the original intention of a successful listing proposal and proposed changes in such a way that full coverage was given to all taxa in the original proposal.

How does the Nomenclature Committee work in practice?

15. In agreement with Resolution Conf. 11.1 (Rev. CoP12) Annex 3, paragraph c), the two members of the Nomenclature Committee, also referred to as the Co-Chairs of the Nomenclature Committee, take care of correspondence that is either sent to them directly or via the Secretariat. When questions are straightforward and can be answered by consulting the pertinent literature, the answer is given directly to the Secretariat or to the Party or Parties concerned. When the guestion merits further discussion because it involves wider issues, the matter is taken to the next meeting of the Nomenclature Committee accompanied by further research on the issue. Meetings of the Nomenclature Committee always are separated into a botanical meeting, held during a meeting of the Plants Committee, and in a zoological meeting, held during a meeting of the Animals Committee. Thus, they never occur jointly for the simple reason that the basic nomenclature of plants and animals is (slightly) different and independent of each other, and there are no common matters. Meetings generally take from one to three hours, depending on the subjects on the agenda, and on the knowledge of the participants. Persons that are attending for the first time may be under the impression that CITES Nomenclature is the same as general zoological or botanical nomenclature as used in current taxonomy. It then is necessary to explain why CITES does **NOT** use the most recent and up to date nomenclature, but for the sake of clear communication between Parties adheres to (sometimes) rather old nomenclature.

- 16. Meetings of Nomenclature Committee always coincide with meetings of the Plants, respectively the Animals Committee, and are announced at the CITES website (www.cites.org) and also at the beginning of meetings of the Plants the Animals Committees. The meetings are open to everybody interested in nomenclatural matters, and invitations to all persons attending the meetings of the Plants and Animals Committees are regularly made. In the early 1990's only a few (5-10) persons attended, but since the meetings in Shepherdstown (2000), Hanoi (2001), San José (2002) and Geneva (2003) attendance has been picking up and increasing (up to 30 persons attending). However, the repeated invitations to Parties to suggest names and fields of competence of specialists who could provide input in the Nomenclature Committee have largely gone unanswered (see reports of the Nomenclature Committee to the past two meetings Conference of the Parties; document CoP12 Doc. 10.3 (Rev. 1), paragraph 2),. Only the Netherlands proposed the name of one botanist, who was gladly welcomed. Thus, attendance at meetings of Nomenclature Committee (zoology) tends to be rather varied from one meeting to the other, with only a very few (and fortunately knowledgeable) persons faithfully attending most meetings. The brief of the Committee is to "coordinate and monitor the input needed from specialists in fulfilling the responsibilities assigned by the Parties", and by having these open meetings, it tries to obtain as diverse an opinion on nomenclatural matters as possible and come up with the best compromise or preferably consensus. Apart from that, on specific issues that are outside the personal expertise of the co-chairs of Nomenclature Committee, specialists on the subject often are consulted by mail or on a personal basis. Both co-chairs are fortunate to have large institutional libraries available and to have colleagues who are trained as taxonomists and knowledgeable in the nomenclature of their respective groups. This rich source of information is tapped whenever necessary. It is up to the co-chairs to put the information in a CITES context. The number of queries relating to plants is considerable fewer than in the case of animals and these can often be dealt with very quickly.
- 17. The co-chairs keep regular contact by telephone or email in order to inform each other, and each provides the respective part of the report to the meetings of the Conference of the Parties.

Taxonomic actions and nomenclatural consequences for CITES

- 18. Progress in taxonomy can cause several changes in nomenclature that have influence on the names to be used in the CITES Appendices.
- 19. Examples of taxonomic changes and the consequences for CITES listings will be dealt with below.
 - a) Description of new species. New species are regularly described, but their origin can be different:
 - i) Really new to science (not known before).
 - ii) Upgrading of subspecies to specific status (the taxon was already known, but considered to be a subspecies of a species).
 - iii) Splitting of known species into several taxa of which some are provided with new names, or to which old synonyms may be applied (this is the same as 3b).
 - b) Change of genus. New taxonomic insights may cause a species to be considered to belong to a different genus than to which it belonged before. This can happen in two ways:
 - i) a genus is lumped with another genus, or with several other genera. The oldest available name has priority and should be applied to the new entity.
 - ii) a genus is split into several genera, of which part can be newly described and part can be based on old synonyms.
 - c) Change of species name.
 - i) Species can be described independently by several scientists in different places, and at different times. Regularly it turns out that species have been described under different names and those names then have to be synonymised. The oldest available name has priority and has to be used according to the Rules of International Nomenclature.

- ii) Species may turn out to be composites and be split (this case is identical to 1 c) into several others
- iii) It may turn out that a species name has been wrongly applied and that another name should be used.
- iv) An older synonym of a species name may be discovered which has precedence over the one used up till now.
- 20. At the moment there is a trend (especially in animals) to upgrade subspecies to species status and to describe new species on the basis of minor differences in DNA, not or hardly taking into account relevant biological and morphological characters. Within the disciplines involved there is no unanimity as yet about the validity of such actions and the Nomenclature Committee considers these changes very critically, and until now has not accepted them, awaiting for the field experts to make up their minds. Also computer based phylogenetic studies often present re-arrangements, which in the long run often turn out to be untenable. These developments are again not followed immediately, but could be once that the opinions within the field have stabilised. Until now changes as mentioned in this paragraph have not been mentioned in the reports by the Nomenclature Committee.

Case by case explanation of taxonomic changes and nomenclatural consequences for CITES

- 21. Bellow, different cases regarding changes in CITES nomenclature are outlined, and the actions of the Nomenclature Committee for each is explained and commented upon.
 - a) **Species really new to science.** In case such species are described in a genus (e.g. *Phelsuma*), family (*Psittacidae*) or higher taxon (*Primates*) that in its entirety has been listed on CITES, the new species is automatically added to the list of species on the CITES Appendices. The fact will be mentioned by the Nomenclature Committee in its report to the Conference of the Parties.

In its last report to Conference of the Parties [document CoP12 Doc. 10.3 (Rev.1) Annex 1] the Nomenclature Committee provided an overview of new species of animals having been described recently that should be added to the database. This was done as a service to those countries that need those names for their legislation. This service was possible thanks to an extra effort of WCMC who provided the input for this.

In case relatives of a new species are already listed on CITES (but not the higher taxon category) and there is a chance of look-alike, or when a newly described species is considered to be endangered or threatened, a proposal to list such a new species should be developed on its own merits and presented to the Conference of the Parties. This of course is up to Parties to decide. The Nomenclature Committee has no say in this.

b) Upgrading of a subspecies to species status. If the subspecies by itself is listed on CITES Appendix I or II, nothing in its CITES status changes, only the taxon will be listed as a full species. If the subspecies is part of a species that in its entirety is listed by CITES, in order to maintain the original intent of the listing of the species to which it originally belonged, the "new" species will have to be added to the list of CITES listed species and the Nomenclature Committee will inform the CITES Secretariat of this. No action of Parties or the Conference of the Parties is necessary for this. The Nomenclature Committee will mention the fact in its report to the Conference of the Parties. In case the whole species was listed, the upgrading of one of its subspecies will have consequences for the distribution area of the taxon now listed.

If the original taxon concerned was on CITES Appendix III, the change of the distribution area of the taxon will have consequences. If, for instance, country X listed taxon A, which occurs in countries X, Y and Z, on CITES Appendix III, and the subspecies occurring in country Z is upgraded to specific status (species B), it would mean that taxon A no longer occurs in country Z, and that country Z does not have to provide certificates of origin for species A any longer. This fact will be communicated to the Secretariat, which will inform Parties.

c) Splitting of a species into several species. In this case the results actually do not differ from those under b). In order to maintain the original intent of the listing, the Nomenclature Committee will advise the Secretariat to add the new taxon names to the database. Again, no

- action of Parties or the Conference of the Parties is necessary. The Nomenclature Committee will mention the fact in its report to the Conference of the Parties. And again, here the same applies for CITES Appendix III listed species as under b).
- d) Lumping of genera. In case all genera concerned are CITES listed, all species in those genera remain in CITES, although the generic allocation of several has to be changed into the valid name. This is an automatic action, and the Nomenclature Committee will inform the CITES Secretariat of this and mention it in its report to the Conference of the Parties.
 - In case one or more of the genera lumped are not CITES-listed, the species concerned will not automatically be covered by CITES. Parties would have to propose new listings for them.
- e) A genus is split into several genera. In this case all species that formed part of the "old" genus will remain CITES-listed, and all new species described in any of the genera resulting from the split will automatically be listed because that would agree with the original intent of the listing proposal. An example is the split of the genus *Chamaeleo* into *Chamaeleo*, *Brachypodium*, *Calumma* and *Furcifer*. All species remained CITES listed and new species described in either of these genera were automatically added.
- f) Species has been described under several names. The oldest name generally takes priority (according to the International Rules of Zoological/Botanical Nomenclature), and all synonyms are considered part of this taxon. If one of the names was CITES-listed, the CITES listing will have to be updated to include the new valid name, and all synonyms will be considered to be covered by CITES. The Nomenclature Committee will inform the CITES Secretariat and the database will accordingly be changed. The Nomenclature Committee will mention this in its report to the Conference of the Parties.
- g) Species is a composite and is split into several species. This is actually the same case as c).
- h) **Wrongly applied name**. In this case the species name will change, but there will be no change to the content of the taxon. An example is the change of the name of *Crocodilurus lacertinus* to *C. amazonicus*. The name *lacertinus* actually indicated a completely different taxon. This is just a nomenclatural correction and the Nomenclature Committee will inform the CITES Secretariat in order that the database can be changed. Nomenclature Committee will mention this in its report to the Conference of the Parties.
- i) Older synonym discovered. In this case again the International Rules of Zoological/Botanical Nomenclature apply, and the name has to be changed accordingly (with the old synonym mentioned in the database). The Nomenclature Committee will inform the CITES Secretariat in order that the database can be changed. The Nomenclature Committee will mention this in its report to the Conference of the Parties.
- 22. The process of the adoption of Standard References ("standardized nomenclatural references") is not described further in the Terms of Reference of the Nomenclature Committee, and there is certainly no requirement that such Standard References should be "peer-reviewed' as advocated in document AC19 Doc. 20.2, paragraph 5. This process actually assures that the CITES nomenclature remains somewhat frozen in time and does not change at every Conference of the Parties. In practice most of the standard references that have been adopted by the Conferences of Parties are not peer-reviewed because this generally used for articles in certain journals only, and very rarely, if ever, for books. A number of the smaller (additional) standard references that are published in journals were indeed peer-reviewed, although that was not the reason to select them. The criterion to use certain publications as Standard Reference is that they provide a good overview of a group, that they seem to be accepted by the majority of the scientists in a certain field and that they are (relatively) easily accessible. If in addition they provide a lot of additional information, like for instance the Handbook of Birds of the World, this is considered as a positive point as well. Also the Nomenclature Committee itself can develop standard references or have contracts given out by the Secretariat to develop standard references by individuals or institutions under the guidance and responsibility of the Nomenclature Committee. The Nomenclature Committee budget that was agreed upon by the Conference of the Parties has room for this.

23. The situation with regard to the preparation and adoption of Standard Reference differs somewhat in the case of plants. As suitable published references have not been available the Nomenclature Committee has co-ordinated the production of a series of plant checklists specially commissioned and designed for CITES use. This process has received seed funding from the Nomenclature Committee and substantial support from a range of individual Parties, institutions, botanic gardens and other donors. This has allowed over 10 volumes of user friendly CITES Plants Checklists to be produced. The recognised global experts have been used in the production of the lists and the CITES Plants Committee are consulted throughout the process prior to formal adoption of the lists by the Conference of the Parties. As the checklists have been sponsored this has facilitated the policy of making them freely available to CITES Parties.

Co-chairs of the Nomenclature Committee Dr. Marinus S. Hoogmoed (Animals) Noel McGough (Plants) 27 January 2004