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



Seventeenth meeting of the Conference of the Parties Johannesburg (South Africa), 24 September - 5October 2016

# Species specific matters

# Maintenance of the Appendices

# STANDARD NOMENCLATURE: REPORT OF THE ANIMALS AND PLANTS COMMITTEES

1. This document has been prepared by the Animals and Plants Committees in collaboration with the CITES Secretariat.

#### Introduction

- 2. At its 14th meeting (CoP14, The Hague 2007), the Conference of the Parties appointed Ms Ute Grimm of the Federal Agency for Nature Conservation, Bonn, Germany, as the nomenclature specialist of the Animals Committee and Mr Noel McGough, then of the Royal Botanic Gardens, Kew, United Kingdom of Great Britain and Northern Ireland, as the nomenclature specialist of the Plants Committee.
- 3. Following the 16th meeting of the Conference of the Parties (CoP16), nomenclature issues were considered at the 27th and 28th meetings of the Animals Committee (AC27, Veracruz, April 2014; AC28, Tel Aviv, September 2015) and the 21st and 22nd meetings of the Plant Committee (PC21, Veracruz, May 2014; PC22, Tbilisi, October 2015). Nomenclature Working Groups were formed and met at AC27, AC28, PC21 and PC22. The documents from these meetings, together with the working group reports, are available on the CITES Website.
- 4. In addition to a short section on the revision and publication of the CITES Appendices, this report includes an introduction and sections of both fauna and flora nomenclature. Each covers the main activities conducted since CoP16 and the proposed work program for the next period.
- 5. Nomenclatural recommendations of the Animals and Plants Committees, calling for the amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP16) on *Standard nomenclature*, are included in Annex 2 to this document.
- 6. As in the past, the nomenclature specialists of the Animals and Plant Committees have continued to provide timely services to the Parties and the Secretariat. These included: responding to enquiries regarding the nomenclature of taxa listed in the Appendices; designating appropriate taxonomic authorities for the nomenclature of taxa listed in the Appendices that are not included in standard references adopted by the Parties; reviewing the nomenclature of the taxa listed in the Appendices, in consultation with the Secretariat; reviewing the nomenclature of species proposed for listing in the Appendices prior to their consideration at the meetings of the Conference of the Parties; and advising the Secretariat of recommended changes in nomenclature that should be used in the Appendices.

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

# General issues

#### New layout for the Annex of Resolution 12.11 (Rev. CoP 16)

7 Over the last ten years, the number of publications that the Parties adopted concerning the nomenclature for different animal groups has increased tremendously. It has become quite difficult to identify which is the reference literature for separate groups such as Cetacea, Primates, Iguanidae, Boidae, Elapidae or Trionychidae. Adopting new overall checklists for higher taxa such as birds or Testudines only solves this problem temporarily. Annex 1 shows a modified layout for presenting the standard nomenclature references in the Annex to Resolution Conf. 12.11 (Rev. CoP16). This new layout is recommended by the Animals Committee, in collaboration with the Secretariat, in order to facilitate the future use of this source of information. All changes indicated in paragraphs 11-13, 16-19 and 21 of this report have already been integrated in this revision. Annex 2 gives an overview of the recommended changes to the Annex of Resolution Conf. 12.11 (Rev. CoP16) in its current layout.

# <u>Fauna</u>

#### Nomenclatural tasks referred to the Animals Committee at CoP15 and CoP16

8. Corals

Decision 15.64 (a) requires the Animals Committee to "identify existing coral reference materials that could be adopted as standard nomenclatural references for CITES-listed corals". As it had not been possible to identify references serving this purpose between CoP15 and CoP16, a coral species list provided by UNEP-WCMC was adopted at CoP16 as an interim solution, leaving the task still open. This issue has been discussed at AC27 and AC28. Two different reference sources have been identified by the Animals Committee that might serve as a basis for general nomenclature reference for corals: 1) a time-specific version of the WoRMS database, and 2) a new website for Corals of the World by John VERON, which is in preparation. For the time being, it is recommended to continue using the interim nomenclature reference for corals, and explore further possibilities to use the databases indicated above in the hope that a new standard nomenclatural reference for CITES-listed corals may be adopted at the 18th meeting of the Conference of the Parties (CoP18).

The tasks in Decision 15.64 (b), for the Animals Committee to "update its list of coral taxa for which identification to genus level is acceptable, but which should be identified to species level where feasible," and to "provide the updated list to the Secretariat for dissemination", remain uncompleted because it requires the prior adoption of new standard nomenclature references for corals.

Decision 15.65 calls upon the Secretariat, when receiving the updated list from the Animals Committee, to transmit this information to the Parties through a Notification to the Parties, and to publish the list on the CITES website. The list of coral taxa in CITES Notification 2013/35 - with changes indicated - is in line with the currently adopted interim nomenclature reference for corals. Therefore, Decision 15.65 can be regarded as fulfilled for the time being. An update will only be necessary once a new standard nomenclature references for corals will have been adopted. The Animals Committee therefore recommends the adoption of new decisions, found in Annex 3 of this report, and the deletion of Decisions 15.64 and 15.65.

### 9. Hippocampus

At CoP16, Australia asked for the recognition of a number of *Hippocampus* species. As this request had been made after Annex 6 (Rev.1) of document CoP16 Doc 43.1 (Rev.1) had been adopted, it was agreed to refer the discussion of this issue to the next Animals Committee meeting. It was addressed at AC27 and AC28, especially with inputs from the Australian Scientific Authority on the one hand, and the IUCN/SSC Seahorse, Pipefish and Stickleback Specialist Group on the other. However, there remained differences of opinion between these two sides which could not be resolved during the AC meetings, and further information is needed. The Animals Committee therefore recommends further discussion of this issue and any additional available information at CoP17.

Lack of standard nomenclature references for broad animal groups, and not only for species currently listed in <u>CITES Appendices</u>

10. At AC27, the unfortunate situation was discussed that for new species proposed for inclusion in the CITES Appendices, it often happens that the taxa concerned are not covered by the nomenclature references listed in Resolution Conf. 12.11 (Rev. CoP16) (e.g. new shark species included in Appendix II at CoP16). The Committee recommended that this problem be addressed by requesting the CITES Secretariat to approach the copyright holders for the databases currently serving as source for the downloaded checklists of amphibians, fish and spider species, and to request for a time-specific version of these databases. These could then be used as nomenclatural standard reference for these taxon groups in case of CITES discussions of taxa not currently listed in the Appendices, for example in the context of new listing proposals. At AC28, the Secretariat reported to have contacted the copyright owners of the relevant databases. At the time of writing (June 2015), it had received two replies. In the case of the World Spider Catalogue(http://wsc.nmbe.ch), a biannually generated archive version would be available for use as a time-specific version. For the Amphibians of the World database (http://research.amnh.org/vz/herpetology/amphibia/), there was no such version available for the time being. The Secretariat indicated that it will continue to reach out to the relevant copyright holders and, upon request, provide an oral update on this matter at the Animals Committee meeting.

The Animals Committee commended the CITES Secretariat to continue its efforts to explore the possibilities for time-specific versions of the databases for amphibians, fish and spider species and requested the Secretariat to report back on its progress at CoP17.

The nomenclature specialist prepared a draft decision for continued work on this issue in case this matter remains unresolved at CoP17 (see Annex 4).

# New or updated nomenclature checklists for CITES listed species

11. Chamaeleonidae and the genus *Phelsuma* 

The number of standard nomenclature references for chameleon species and species of the genus *Phelsuma* has increased significantly (only for chameleons, there are now 32 single standard nomenclature references). It has become difficult to keep track of them. Therefore, the German Scientific Authority contracted Frank Glaw to compile a taxonomic checklist for all species of the family Chamaeleonidae as well as the genus *Phelsuma*. These checklists have been published in volume 2 of Vertebrate Zoology in 2015:

- <u>http://www.senckenberg.de/files/content/forschung/publikationen/vertebratezoology/vz65-</u> 2/01\_vertebrate\_zoology\_65-2\_glaw\_167-246.pdf; and
- <u>http://www.senckenberg.de/files/content/forschung/publikationen/vertebratezoology/vz65-</u> 2/02\_vertebrate\_zoology\_65-2\_glaw-roesler\_247-283.pdf

Similar to the main standard nomenclature reference for Testudines, the new checklists include all species and subspecies; list the most common synonyms; and show the distribution of the taxa concerned. The Animals Committee recommends the adoption of these checklists as standard nomenclature reference for the whole family of Chamaeleonidae and the genus *Phelsuma*, thereby also adopting the changes outlined in document AC28 Doc. 21.1, Annex 6.

12. Taxonomic checklist of Amphibian species listed by CITES

The Animals Committee recommends the adoption of the new download from the online-database from FROST, D.R. (2015): "Amphibian Species of the World, an online reference: Version 6.0 as of May 2015" (see document AC28 Doc. 21.1, Annex 7), as new standard nomenclature reference for Amphibian species, thus adopting the nomenclatural changes outlined in document AC28 Doc. 21.1, Annex 9. The checklist is presented in Annex 5 to this document.

13. Fish species listed by CITES (except the genus *Hippocampus*)

The Animals Committee recommends the adoption of the new download from the online-database "Eschmeyer & Fricke's Catalog of Fishes" (see document AC28 Doc. 21.1, Annex 8), as new standard nomenclature reference for fish species, with the exception of the genus *Hippocampus*. This also includes

a few changes in higher level taxonomy. The genus *Manta* is now placed in the family Myliobatidae and the order Myliobatiformes. The Class Actinopterygii is changed to Actinopteri, and the class Sarcopterygii has been dissolved into the class Coelacanthi (including the order Coelacanthiformes) and the class Dipneusti (including the order Ceradontiformes). The checklist is presented in Annex 6 to this document.

#### Other nomenclature changes identified

14. General standard nomenclature reference for birds

The current general nomenclature reference for bird species is:

- DICKINSON, E.C. (ed.) (2003): The Howard and Moore Complete Checklist of the Birds of the World. Revised and enlarged 3rd Edition.1039 pp. London (Christopher Helm).

in combination with:

 DICKINSON, E.C. (2005): Corrigenda 4 (02.06.2005) to Howard & Moore Edition 3 (2003). http://www.naturalis.nl/sites/naturalis.en/contents/i000764/corrigenda%204\_final.pdf (available on the CITES website).

Since CoP16, a fourth addition of this checklist has been published, with volume 1 (2013) covering the Non-Passerines, and volume 2 (2014) covering the Passerines.

In 2014, another checklist for Non-passerines was published by Lynx and Birdlife International: BBW and BirdLife International: Illustrated Checklist of the Birds of the World, volume 1, Non-passerines. This checklist has been adopted by CMS as nomenclature reference for non-passerines bird species in 2014.

The two publications mentioned above have only been published recently, while the volume on passerines of BBW and BirdLife International was not available until AC28. There has not been enough time to critically evaluate these publications by the international ornithological community. The Animals Committee therefore recommends to consider the possible adoption of a new standard nomenclature reference for birds at CoP18.

15. Suggested changes in bird taxonomy, proposed in document AC28 Doc. 21.2

Document AC28 Doc. 21.2 was submitted by the United States of America. It includes a proposal by the Ornithological Council to change the bird nomenclature on family level for four species currently recognized by CITES as being in the family Paradisaeidae. While the Animals Committee recognizes that the current standard nomenclature reference for bird taxonomy on family and order level needs to be reviewed and updated, it does not support the request outlined in the document, which refers to just four single species among all bird species covered by the CITES Appendices. The Animals Committee emphasizes that these species are clearly covered by CITES, as demonstrated by the Index of CITES Species on the CITES homepage as well as the Species+ database.

Correctly assessing the nomenclature of birds at the family and order names is a highly complex issue and requires a deep and detailed knowledge. Therefore, the Animals Committee recommends to the CITES Secretariat that it should – subject to the availability of funds – commission an analysis of the implications of adopting a new standard nomenclature reference for birds at the level of family and order names, and taking into account the ongoing discussion on a new nomenclature standard reference for birds on genus and species levels as outlined in this paragraph and in document AC28 Doc. 21.1 (paragraph 7). The Animals Committee therefore recommends the adoption of the draft decision in Annex 7.

16. Poicephalus robustus

In document AC27 Doc. 25.2, South Africa requested the Committee to consider split-listing of the *Poicephalus robustus - suahelicus - fuscicollis* complex, which so far were considered to be three subspecies of one species, *Poicephalus robustus*. It was suggested to follow the results of genetic research and split this group into *Poicephalus robustus* (without separate subspecies) and *Poicephalus fuscicollis* (with the subspecies *P. f. fuscicollis* and *P. f. suahelicus*). At AC28, South Africa provided a peer-reviewed publication for this change as well as identification guidelines.

The Animals Committee recommends the adoption of a split-listing of the *Poicephalus robustus – suahelicus – fuscicollis* complex as outlined above, and based on the publication:

- COETZER, W.G., DOWNS, C. T., PERRIN, M.R. & WILLOWS-MUNRO, S. (2015): Molecular systematics of the Cape Parrot (*Poicephalusrobustus*): implications for taxonomy and conservation. - PLOS ONE, DOI:10.1371, http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0133376

# 17. Cordylidae, Naultinus and Hoplodactylus

The Animals Committee recommends the adoption of the publication by STANLEY & al.  $(2011)^1$  in combination with GREENBAUM & al.  $(2012)^2$  as new standard nomenclature references for the whole family of Cordylidae, thus adopting the nomenclatural changes outlined in the annex of document AC28 Com. 10.

The Animals Committee also recommends the adoption of the publication of NIELSEN & al. (2011)<sup>3</sup> as new standard nomenclature reference for the gecko genera *Naultinus* and *Hoplodactylus*, thus adopting the nomenclatural changes outlined in the annex of document AC28 Com. 10.

18. Other changes as outlined in document AC28 Doc. 21.1, Annex 9

The Animals Committee recommends the adoption of a number of changes as outlined in the annex of document AC28 Com. 10.

During the discussions of document AC28 Doc. 21.1, Annex 9 at AC28, one issue has unfortunately been overlooked. It is described below.

When considering changes within the genus *Tupinambis*, based on the revision of the whole family Teiidae by HARVEY & al. (2012), we did not notice that in addition to the new genus *Salvator* (split from *Tupinambis*), HARVEY & al. lumped *Tupinambis cerradensis* with *Tupinambis quadrilineatus*. Together with the recognition of the new genus *Salvator*, as recommended by the Animals Committee, the nomenclature specialist recommends to also adopt the change concerning *Tupinambis cerradensis*. Together with this change, the revision will serve as new standard nomenclature reference for the Teiidae, thereby reducing the current six references for this family to just one.

19. Ateles geoffroyi

Following AC28, UNEP-WCMC informed the nomenclature specialist of the Animals Committee that the currently valid basic standard nomenclature reference for mammals, covering the species *Ateles geoffroyi*, was not in line with the subspecies concept used for listing *Ateles geoffroyi frontatus* and *Ateles geoffroyi panamensis* in Appendix I in 1975. UNEP-WCMC also pointed out that it would not be possible to align it by simply changing both subspecies names because the subspecies concept used in 1975 was different to that of the current standard nomenclature reference. The nomenclature specialist analysed the situation and now proposes to adopt the publication of Rylands & al. (2006)<sup>4</sup> as new standard nomenclature reference for the species *Ateles geoffroyi ornatus*.

Harmonization of nomenclature with other biodiversity-related multilateral environmental agreements (MEAs)

20. General

<sup>&</sup>lt;sup>1</sup> STANLEY, E. L., BAUER, A. M., JACKMAN, T. R., BRANCH, W. R. & P. LE F. N. (2011): Between a rock and a hard polytomy: rapid radiation in the rupicolous girdled lizards (Squamata: Cordylidae). – Molecular Phylogenetics and Evolution, **58**(1): 53-70.

<sup>&</sup>lt;sup>2</sup> GREENBAUM, E., STANLEY, E. L., KUSAMBA, C., MONINGA, W. M., GOLDBERG, S. R. & CHA (2012): A new species of Cordylus (Squamata: Cordylidae) from the Marungu Plateau of south-eastern Democratic Republic of the Congo. – African Journal of Herpetology, **61** (1): 14-39.

<sup>&</sup>lt;sup>3</sup> NIELSEN, S. V., BAUER, A. M., JACKMAN, T. R., HITCHMOUGH, R. A. & DAUGHERTY, C. H. (2011): New Zealand geckos (Diplodactylidae): Cryptic diversity in a post-Gondwanan lineage with trans-Tasman affinities. – Molecular Phylogenetics and Evolution, **59** (1): 1-22.

<sup>&</sup>lt;sup>4</sup> RYLANDS, A. B., GROVES, C. P., MITTERMEIER, R. A., CORTES-ORTIZ, L. &HINES, J. J. (2006): Taxonomy and distributions of Mesoamerican primates. - In: A. ESTRADA, P. GARBER, M. PAVELKA and L. LUECKE (eds), New Perspectives in the Study of Mesoamerican Primates: Distribution, Ecology, Behavior and Conservation, pp. 29–79. Springer, New York, USA.

The Secretariat, in close collaboration with the nomenclature expert, has continued its efforts to ensure harmonization of nomenclature with other MEAs. This is for example reflected in the CMS-CITES Joint Work Programme 2015-2020. Joint activities in the area of "Harmonization of species-specific information" relate to updating the species-specific information for species listed in the respective Appendices, and relevant databases of the two Conventions and aligning nomenclature in the Appendices to ensure compatibility. The envisaged joint activities are to: (i) harmonize and link databases containing species-specific information (such as taxonomy, nomenclature, species common names, range states, conservation and legal status), taking into account the respective requirements of the two Conventions: and (ii) pursue efforts to harmonize the nomenclature in the Appendices of the two Conventions with the long-term aim of complete alignment across all taxa. Current actions in this regard include the proposed alignments for references for non-passerine bird species (see paragraph 14 above), and for the genus *Ovis*, as reflected below.

21. Genus Ovis

When adopting the 3rd edition of WILSON & REEDER (Mammal species of the world, publ. 2005) as general nomenclature reference for mammal species, *Ovis vignei* was exempted from this reference because it was difficult to align the species, which is split-listed in the Appendices, with the new taxonomy outlined in this 3rd edition. The taxonomy of *Ovis vignei* therefore remained based on the 2nd edition of 1993. The CMS Convention, which lists many Asian sheep species in its appendices, has adopted the 3rd edition for the genus *Ovis*.

The nomenclature specialist has tried to track down the history of the different nomenclature references for this genus, in combination with information from the original CITES listing proposals. The result has been presented to the Animals Committee in document AC28 Doc. 21.1, Annex 3. It shows the possibility for adopting the 3rd edition of WILSON & REEDER for the genus *Ovis* because all CITES-listed taxa or populations of this genus can be linked between both editions. The change from the 2nd to the 3rd edition of WILSON & REEDER as nomenclature reference for the whole genus *Ovis* would bring the nomenclature reference for the genus *Ovis* would bring the nomenclature reference for the genus in line with the one adopted by CMS.

During the meeting of the Nomenclature Working Group, the representative of the IUCN pointed out that the taxonomy in WILSON & REEDER (2005) is not in line with the taxonomy currently accepted by the IUCN/SSC Caprinae Specialist Group. However, CMS has adopted this publication as standard nomenclature reference for the *Ovis* species listed in the CMS appendices. In the spirit of harmonizing the nomenclature used in the CMS and CITES Appendices as far as possible, the Animals Committee recommends to adopt WILSON & REEDER (2005) for all *Ovis* species included in the CITES Appendices.

The impacts of the changes recommended in paragraphs11-13, 16-19 and 21 concerning names of genera, species and subspecies listed in the CITES Appendices, are outlined in Annex 8. Valid names under CITES for new species or genus names not recommended for adoption are summarized in Annex 9.

# <u>Flora</u>

# Status of Checklists

- 22. The economic downturn and its on-going global impact on scientific institutions has continued to affect the development of standard references for flora. Adequate published references are often not available for the taxa for which the Parties seek most guidance, and many institutions have cut back on research on CITES-listed flora. Unfortunately, this is most often the case in frequently traded taxa or in the case of new listings. Fortunately, with the aid of a small amount of external funding and substantive amounts of time given "pro bona" by individual experts, a number of critically needed new references have been prepared in time to be put to this meeting of the Conference of the Parties for formal adoption. We are therefore extremely grateful to all the institutions that provided resources and the specialists who freely offered their time and expertise to ensure that CITES Parties have access to the tools that they need to adequately implement the Convention for flora. The lack of an appropriate and stable standard taxonomy can severely impact the effective implementation of CITES listings.
- 23. Cycad Checklist

An updated version of the Cycad Checklist has been prepared in association with a guide on CITES and Cycads. The list replaces the current standard reference that was published in 1995. The major change is the formal recording of some 130 new species. These new species were and are regulated by CITES due

to the higher taxon listing, but the accepted names and synonyms were not readily available to CITES Parties. The adoption of this list also results in the change of one taxon name listed on Appendix I. No changes in Appendix II are required. The updated checklist is now available as The World List of Cycads: CITES and Cycads: Checklist 2013 (Roy Osborne, Michael A. Calonje, Ken D. Hill, Leonie Stanberg and Dennis Wm. Stevenson) in *CITES and Cycads a user's guide* (Rutherford, C. *et al.*, Royal Botanic Gardens, Kew. UK 2013). Based on feedback received from the Parties, the checklist has been formatted to match that used for other CITES flora checklists. This publication would not have been possible without "pro bono" support from the checklist authors, support from the relevant institutions and funding from the CITES Authorities of Italy. The combination of the guide with a training manual on CITES and with the material available as published documents, on CD-Rom and on the web, all adds to its utility. It is hoped that future checklists follow this trend.

# 24. Cactus Checklist

The CITES Cactaceae Checklist 1999 is the current standard reference for this family. Since 1999, considerable work had been carried out on the taxonomy of this group and considerable debate has arisen on the results of the application of a range of new techniques. Queries on the taxonomy and nomenclature of this group are the most frequent to the nomenclature specialist of the Plants Committee. Its update was delayed by funding issues but completed in 2016 as a result of financial support from the Royal Botanic Gardens, Kew, UK, and also significant "pro bona" contributions from the editor and specialists from across the globe. The editor has been conscious of the need to maintain as much stability as possible in the plant references proposed to the Parties - both to avoid excess confusion and to reduce the need for large scale changes in permit databases held by CITES Authorities. For this reason, the editor has made innovative use of the concept of "alternative" names. To draw attention to proposed or potential changes in the list of cacti genera, without accepting them for the purpose of this edition of the Checklist, the editor has listed generic names proposed or reinstated by authors in the light of molecular or other evidence as "alternative names", and these alternative names are clearly indicated in the checklist. This is a practical response to significant changes, giving Parties access to these changes while keeping stability, utility and effective use of resources in mind. In addition, it should ensure that the Checklist has as long a "shelf life" as possible. This checklist is also innovative in its linkages to the New Cactus Lexicon (Hunt et. al. 2006; hereinafter 'NCL'). The alphabetical listing of names of species, subspecies and synonyms that forms the core of the Checklist are individually linked to detailed NCL entries by a 5-digit reference number. The Checklist also includes the plate numbers of the illustrations in the NCL illustration volume giving Parties access to expert validated photographs of over 90% of Cacti species - that is some 2500 images - an invaluable resource. This is the most comprehensive access to information for Parties from any CITES flora checklist and the issue of access to validated photographs is one that has been raised by a significant number of Parties since the second edition of the checklist was published in 1999. It is recommended that the Parties take all these issues into account when considering the CITES Cactaceae Checklist 3rd Edition for adoption at this meeting of the Conference of the Parties.

#### 25. Dalbergia and Diospyros

Decision 16.152 includes "that the Plants Committee shall recommend and facilitate the preparation of a standard reference for the names of *Diospyros* spp. (populations of Madagascar) and *Dalbergia* spp. (populations of Madagascar) to be adopted, if appropriate at the 17<sup>th</sup> meeting of the Conference of the Parties". Interaction with experts confirmed that *The Catalogue of the Vascular Plants of Madagascar* (http://www.tropicos.org/project/mada) is the most appropriate source of such checklists. Based on the *Catalogue* two lists (in PDF format) have been prepared to be adopted as standard references for these two groups. It is emphasised these are preliminary lists, in particular in the case of *Diospyros* where significant numbers of new taxa remain to be included in the *Catalogue*. Significant work has been carried out on these genera and continues to be carried out, while the resources needed to produce a comprehensive *Catalogue* treatment remain to be secured. The proposed checklists would not be available without the full and free cooperation of the compilers of the *Catalogue*.

#### 26. Two species of endemic Malagasy palms

The USA brought to the attention of the Plants Committee (see document PC22 Doc.21.4) that the names used in the Appendices for *Chrysalidocarpus decipiens* and *Neodypsis decaryi* were now outdated and gave rise to some confusion among their plant inspection authority. Therefore, it is proposed to update the names to that included as accepted in *The Catalogue of the Vascular Plants of Madagascar* (<u>http://www.tropicos.org/project/mada</u>). The revised names are *Dypsis decipiens* and *Dypsis decaryi*. These names are now the most widely used in the trade and seen on permit applications by CITES

Authorities. An update of the Appendices is therefore appropriate. The US Fish & Wildlife Service prepared a PDF for adoption based on the *Catalogue* treatment.

27. Orchid Checklists

A substantive range of standard reference checklists, available both on-line and as hard copies, have been produced for use by the CITES Parties. However, a number of these checklists are now dated and there still remain a number of gaps in coverage of the orchid family. The Parties, and in particular the CITES enforcement community, have indicated in the past that they prefer both on-line checklists and hard copy publications. However, it is becoming increasingly difficult to access funding to produce hard copy publications specifically formatted for the CITES community. At AC22, the Plants Committee recommended that the Nomenclature Specialist continue to work with major botanical institutions to access databases that may provide datasets that can form the basis of CITES standard references for orchids.

28. List of standard references for flora

Recommendations based on paragraphs 23-26 calling for the amendment of the Annex to Resolution Conf. 12.11 (Rev. CoP16) on *Standard Nomenclature* are included in Annex 2 to this document.

# Proposed work plan

- 29. The major task for the coming period will be to review the requirements for the provision of new and/or updated standard references for taxa currently listed on the Appendices or for those listed at CoP17. Prime among these will be to move beyond preliminary checklists for *Diospyros* spp. (populations of Madagascar) and *Dalbergia* spp. (populations of Madagascar).
- 30. As outlined in paragraph 27, the Nomenclature Specialist continue to work with major botanical institutions to access databases that may provide datasets that can form the basis of CITES standard references for orchids. Innovative funding mechanisms for such initiatives will also need to be explored to allow timely provision of such references to the Parties.
- 31. The Plant-Book, second edition, [D. J. Mabberley, 1997, Cambridge University Press (reprinted with corrections 1998)] is the standard reference for the generic names of all plants listed in the Appendices of the Convention, unless they are superseded by standard checklists adopted by the Conference of the Parties). This reference was maintained to ensure stability in CITES plant names during a time when molecular and other techniques were resulting in wide ranging changes in taxonomy. This reference is now dated and a review is required with regard to an appropriate generic reference/s for groups where no standard reference be adopted.
- 32 Species+ (http://www.speciesplus.net/about) has become an important tool for CITES Authorities providing, *inter alia*, information on all species that are listed in the Appendices of CITES. It is important that Parties make use of this vital resource. In addition, there are other databases, often covering discrete groups that may be help to CITES Parties in their day-to-day work or that may form the basis of future standard references. One example is *The Catalogue of the Vascular Plants of Madagascar* (http://www.tropicos.org/project/mada), an important resource on the flora of Madagascar and an example of a country/region based checklist. Another example is the Medicinal Plant Names Service (www.kew.org/mpns) which includes an online portal which enables you to search the MPNS using a scientific name, pharmaceutical, common or trade name and find all the plants that the name may refer to, their current taxonomy and other names by which that plant is known in the medicinal plant literature. This aces to non-scientific name data linked to valid names is an important resource. It is important that Parties know that such resources exist and have an opportunity to gain knowledge of their potential. It is planned to ask Parties to provide information on databases that they find useful and also to encourage database and website managers to provide information documents on their data tools on how they may be of use to CITES Parties.

# **Recommendations of the Animals and Plants Committee**

- 33. The Animals and Plant Committees recommend that the Conference of the Parties adopt the revisions to the presentation of nomenclature references within Resolution Conf. 12.11 (Rev. CoP16), as well as the proposed changes to nomenclature references found in Annex 1 and 2 of this report.
- 34. The Animals Committee recommends that the Conference of the Parties adopt the Decisions found in

Annex 3, 4 and 7 of this report, and delete Decision 15.64 and 15.65.

# COMMENTS FROM THE SECRETARIAT

- A. The Secretariat supports the recommendation of the Animals and Plants Committees in Annex 1 concerning a new layout for presenting the CITES nomenclature references in Resolution Conf. 12.11 (Rev. CoP16). The proposed tabular format provides more clarity and practicality, and is easier to search and use. The authors of the report indicate that all the changes that they propose to the current nomenclature (see paragraph B) have already been integrated in the new layout shown in Annex 1.
- B. The Secretariat supports the changes to standard nomenclature that are proposed in paragraphs 11 to 13 (Chamaeleonidae and the genus *Phelsuma*; Amphibians; fish except the genus *Hippocampus*), 16 to 19 (*Poicephalus robustus*; Cordylidae, *Naultinus* and *Hoplodactylus*; the genus *Tupinambis*; *Ateles geoffroyi*), 21 (the Genus *Ovis*), and 23 to 26 (Cycads; Cactuses; *Dalbergia* and *Diospyros*; Malagasy palms). Their adoption would require amendments to the Annex of Resolution Conf. 12.11 (Rev. CoP16), which are shown in Annex 2 to the current document (Annex 2 presents the proposed changes in the current format and layout of the resolution). The impact of the recommended changes in nomenclature are detailed in Annexes 8 (for fauna) and 10 (for flora). The Secretariat notes that Annex 9 contains a selection of CITES-listed species of fauna, for which newly proposed species or genus names are not recommended for adoption.
- C. The Secretariat supports the draft decisions in Annexes 3, 4 and 7 to the current document. To allow a bit more flexibility in timing with regard to tasks directed to the Secretariat and the Animals Committee, it offers some amendments, as indicated in strikeout and underlining below:

# Annex 3: Nomenclature and identification of corals

# Directed to the Secretariat

The Secretariat shall:

- a) seek, if possible, a time-specific version of (i) the WoRMS database, and (ii) the new Corals of the World website by John VERON (currently in preparation) that serves the needs of a CITES nomenclature reference, and
- b) to-report its progress to the Animals Committee AC29.

#### Directed to the Parties

The Parties shall undertake an internal assessment of the WoRMS database with regard to consistency with their own internal coral nomenclature databases, and report their findings to the <u>Secretariat for communication to</u> the 29th meeting of the Animals Committee.

#### Directed to the Animals Committee

The Animals Committee shall:

- a) consider the report of the Secretariat and the responses of the Parties at its 29th meeting and recommend a way forward to identify a standard nomenclature reference for CITES-listed corals: and-
- b) update its list of coral taxa for which identification to genus level is acceptable, but which should be identified to species level where feasible, once a new standard nomenclature reference for CITES-listed coral species has been identified and provide the updated list to the Secretariat for dissemination.

# Annex 4: Use of time-specific versions of online-databases as standard nomenclature references

#### Directed to the Secretariat

The Secretariat shall:

- a) reach out to copyright-holders of relevant online-databases that might serve as standard nomenclature references and explore the possible use of time-specific versions for CITES services; for example, relevant databases include but are not limited to WoRMS, Fish Base, ESCHMEYER& FRICKE's Catalog of Fishes, and Amphibian Species of the World; and
- b) report the results of its consultations to the 29th meeting of the Animals Committee.

#### Directed to the Animals Committee

The Animals Committee shall:

- a) evaluate the results of the Secretariat's consultation and
- b) develop recommendations on the use of time-specific online-databases as standard nomenclature references for decision by CoP18.

#### Annex 7: Bird family and order names

#### Directed to the Secretariat

The Secretariat shall:

- a) subject to the availability of funds, commission an analysis of the implications of adopting a new standard nomenclature reference for birds at the family and order level, taking into account the 3rd and 4th editions of *The Howard & Moore complete checklist of the birds of the world*, and the non-passerine and passerine volume of the *HBW and BirdLife International illustrated checklist of the birds of the world* as well as the Animals Committee discussion regarding a new nomenclature standard reference for birds at the genus and species levels; and
- b) report back the results to the 29th meeting of the Animals Committee.

#### Directed to the Animals Committee

The Animals Committee shall:

- a) evaluate the results of the analysis and
- b) develop a recommendation for decision by CoP18
- D. According to Resolution Conf. 4.6 (Rev. CoP16) on Submission of draft resolutions, draft decisions and other documents for meetings of the Conference of the Parties, the Conference of the Parties decided that any draft resolutions or decisions submitted for consideration at a meeting of the Conference of the Parties that have budgetary and workload implications for the Secretariat or permanent committees must contain or be accompanied by a budget for the work involved and an indication of the source of funding.
  - The Secretariat expects that the costs for implementing the proposed amendments to Resolution Conf. 12.11 (Rev. CoP16) on *Standard nomenclature*, including the development of a new layout for its Annex, can be absorbed within regular budgets.
  - The draft decisions concerning the nomenclature and identification of corals, and online-databases for standard nomenclature references, can be implemented with existing budgets.
  - The implementation of the draft decisions regarding the nomenclature for birds would be the subject of a consultancy, requiring an estimated 10,000 to 15,000 USD in external funding.