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TAXONOMIC CHANGES IN STANDARD REFERENCES

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Background

- 1. In the course of the implementation of CMS, it has been decided to formally chose a standard taxonomic reference for the nomenclature of each zoological taxonomic group, and to conform to that reference whenever the name of an animal has to be quoted, either in the Convention appendices or in any other legal or administrative document issued within the framework of the Convention.
- 2. This decision was motivated by the recognition that nomenclature is a communication tool, and that, for international conventions with legal implications at national level, stability and reference to a universally accessible standard were essential. The initial recommendation for the choice of standards was made by the 9th Meeting of the Scientific Council (Cape Town, 4-6 November 1999; paragraphs 141-146 of the Report).
- 3. Adoption of a nomenclatural reference does not imply endorsement of the taxonomic decisions that underpin its nomenclatural choices. Strict adherence to such a reference for regulatory purposes in no way precludes the use of the best available and most recent taxonomic information in selection of which populations are to be emphasized in conservation efforts, listed on appendices or made the object of concerted actions and other initiatives.
- 4. Selection of the standard nomenclatural reference for each taxonomic group is decided by the COP, on the recommendation of the Scientific Council. The choice may be modified from time to time, to acknowledge changes in most common use or to accommodate newer versions of previously selected works. This happened, for instance, with the decision of COP 9 to adopt, for terrestrial mammals, Wilson & Reeder 2005 instead of the previously used Wilson & Reeder 1993 and for marine mammals, Perrin W.F., Wursig B. and Thewissen 2009 instead of Rice 1998. When such a change occurs, five types of consequences may occur for appendix listings:
- a. A taxon listed changes name because of a different interpretation of priority rules, but without changing the content.
- b. A taxon listed is split into two or more taxa of the same rank (e.g. a group of populations treated as one species in the former reference is now regarded as constituting several species).

- c. A taxon listed is merged with one or more unlisted taxa, but retains its name (e.g. an unlisted species is now regarded as conspecific with a listed species, but the name of the listed species has nomenclatural priority, so that it becomes the name of the enlarged species).
- d. A taxon listed is merged with another listed taxon.
- e. A taxon listed is merged with one or more unlisted taxa, but the name of the extended taxon, at its former rank, becomes that of one the taxa with which it is merged (e.g. an unlisted species is now regarded as conspecific with a listed species, but the name of the unlisted species has nomenclatural priority, so that it becomes the name of the enlarged species). The recent case of the Bukhara Deer provides an example of the problem, at subspecies rank; CMS had listed the Central Asian subspecies of *Cervus elaphus*, in the sense of Wilson & Reeder 1993, *Cervus elaphus bactrianus* but not the Chinese subspecies, *Cervus elaphus yarkandensis*. The new reference Wilson & Reeder 2005 no longer recognises two distinct subspecies and merges them under *Cervus elaphus yarkandensis*, so the Convention has to decide how to deal with the Chinese, unlisted, populations of the expended renamed *Cervus elaphus yarkandensis*.
- 5. Case a. is a case of objective synonymy. It has never been seen as a problem, and corrections can be made automatically. Case d. entails no change of status for any population and adjustments can also be made automatically.
- 6. In case b. above, the Council and the Convention have established a clear rule for dealing with appendix listings. When a listed taxon is split into two or more, each of the resulting taxa retains the listing status of the former aggregate taxon. The case of *Saiga tatarica* s.l. provides an example. The proposal by Mongolia to extend the listing of *Saiga tatarica tatarica* to *Saiga tatarica* was made in the framework of the old reference, since the new one had not been adopted yet. It thus covered *Saiga tatarica* in the sense of Wilson & Reeder 1993, thus *Saiga tatarica* s.l. Wilson & Reeder 2005 split *Saiga tatarica* into two species, *Saiga tatarica* and *Saiga borealis*. According to our rules, it is those two species that should be listed and there is no reason to restrict the second one to *Saiga borealis mongolica*.
- 7. No such rules were ever established in cases of "lumping" (cases c. and e. above). Both case c. and case e. raise conflicting issues:
- 8. If one of the components of the aggregate taxon qualified for appendix listing, it is clear that, according to both the letter and the spirit of the Convention, the whole aggregate taxon qualifies. Indeed, the criteria of being "migratory" or "endangered" (for Appendix I) need only apply, in the terms of Article 1, to "a significant proportion of [the] members [of the taxon]" (for "migratory") and "a significant portion of its range" for "endangered". This was confirmed by the First Meeting of the Scientific Council (Geneva, 10 October 1988) the report of which states (paragraph 13) that "It was further agreed that where a particular geographic population of a species is endangered and this represents a significant proportion of the range of that species, then in principle the whole species may be listed on Appendix I". The same applies, *mutatis mutandi*, for Appendix II listing, "endangered" being replaced by "unfavourable conservation status".
- 9. It may however be difficult always to include automatically all populations added, as in some cases; it could result in very broad changes of status involving non-threatened, exploited populations. Thus, paragraph 13 of the Report of the First Meeting of the Scientific Council (Geneva, 10 October 1988) completes the above sentence with "However, it was acknowledged

that there may be a need for geographic limitations for scientific, administrative or political reasons". Thus in the case of the Bukhara Deer mentioned above, the Secretariat considered that the COP had not decided to extend the Convention's coverage and introduced in the appendix a geographical limitation, citing only the Central Asian range states relevant to the old Bukhara listing.

- 10. To introduce such a limitation may in some cases convey a very regrettable signal. Thus, again in the case of the Bukhara Deer, the population that is excluded by the geographical restriction, *Cervus yarkandensis* s.s., is a very small population listed as endangered and subject to conservation measures. Its range may be separated from that of *Cervus bactrianus* s.s., though the 2008 IUCN map shows the aggregate range as continuous across the Kazakh-Chinese border, and the historical ranges of *bactrianus* and *yarkandensis* s.s., prior to their present very severe restriction, are imperfectly known. Excluding *yarkandensis* s.s will inevitably suggest that the Convention does not regard *yarkandensis* s.s. as qualifying for inclusion, especially as geographical restrictions have usually been resorted to precisely to exclude populations that did not require conservation measures.
- 11. To introduce such a restriction automatically in case e. above creates a distortion between cases c. and e., as there are probably occurrences of case c. where the lumping went unnoticed, because it entailed no change of nomenclature.
- 12. As a way to avoid these difficulties and ambiguities, a rule for aggregation cases as clear as the rule that exists for division cases must be agreed upon. This rule, like the previous one, should be proposed by the Scientific Council and submitted to the COP for adoption, preferably with retroactive effect to cover the 2008 changes, which otherwise would necessitate a revised listing proposal to correct the adverse conservation effects outlined above. Its principle is outlined below.

Proposed rule

13. If, as a result of a change of standard nomenclatural reference adopted by the Conference of the Parties, a taxon listed in either Appendix I or Appendix II of the Convention is merged with one or more unlisted taxa, under its name or that of one of the unlisted taxa, the entire aggregate taxon will be listed in the Appendix that included the originally listed, narrower, taxon in all cases where the unlisted entity thus added has the same conservation status as, or a worse one than, that of the previously listed taxon. In all other cases, a taxonomic or geographical restriction will be introduced, pending consideration by the Scientific Council and the Conference of the Parties of possibly adequate extended listing proposals.

Action requested:

• The Scientific Council is asked to examine the proposed rule for cases of "lumping" of taxa when there are changes of taxonomic references and see whether it can be endorsed.