

# SPECIES SURVIVAL NETWORK (SSN)

BRIEFING FOR

## THE CITES STANDING COMMITTEE

GENEVA (SWITZERLAND), 15-19 MARCH 2004

## AND THE CITES ANIMALS COMMITTEE

JOHANNESBURG (SOUTH AFRICA), 29 MARCH - 2 APRIL 2004

### PROPOSED REVISION OF RESOLUTION CONF. 9.24 (COP12 COM. I. 3) CRITERIA FOR LISTING SPECIES ON APPENDIX I AND APPENDIX II

#### GENERAL COMMENTS

Decision 12.97 directs the Animals and Plants Committees to coordinate an open, transparent and broadly consultative process to consider the revision of the CITES listing criteria, and to report to the Standing Committee. In the spirit of that decision, the Species Survival Network (SSN) welcomes this opportunity to present its views to the Standing and Animals Committees. This document is a revised version of one distributed as an Inf. document to the Plants Committee in Namibia.

Decision 12.97 also states that the draft text prepared by the Criteria Working Group (CWG) at CoP12 in Santiago, Chile (Chairman's Text), will form the basis of further discussions. SSN agrees that the Chairman's text takes into account many of the concerns raised by Parties over previous drafts. It is the basis of the present submission, though we have taken into account the changes proposed in February 2004 by the Plants Committee.

In general, we believe that, to be broadly accepted, **any revision of Resolution Conf. 9.24 must not alter the spirit of compromise**, arrived at after long deliberations and achieved by consensus, which marked the adoption of the original resolution at CoP9 in Fort Lauderdale. In this respect, SSN regards the Chairman's text as a significant improvement over earlier drafts. Nonetheless, **SSN remains concerned about some of the proposed changes**. We have set out our specific concerns below, under the relevant sections of the Chairman's Text.

Decision 12.97 also called for review of the draft criteria against a broad range of taxa – one of the reasons for supporting the revision of the criteria in the first place. These reviews have now been completed. Although **most reviewers found that the criteria could be applied to the taxa under review**, many suggested further revisions to the draft text. Some of the suggestions were broadly supported by the reviewers, and deserve serious consideration by the Committees.

In particular, **there was strong objection from many reviewers to the use of specific numbers**, even as guidelines, in definitions of such terms as "decline" and

"area of distribution". When Resolution Conf. 9.24 was adopted in 1994, there was also broad opposition, particularly from the scientific community, to the use of numerical guidelines on the grounds that **any number that purported to be relevant to all animal and plant taxa would almost certainly be misleading and/or inapplicable in a vast number of cases**. The comments from scientific reviewers of the current draft show that these objections are still valid and broadly held. **We strongly recommend that the advice of these reviewers be followed, and that numerical guidelines be removed from the criteria**. Their inclusion, even as "examples", is misleading and unnecessary.

SSN commends the reviewers for their careful and thorough work, and welcomes many of their suggestions. However, **we urge the Committees to keep in mind that these were scientific, rather than legal, reviews**. Many of the reviewers' recommendations relate to such issues as the kind of data that should be presented, and the potential sources of information that could be used. Although these considerations are extremely important, they may not always be relevant to the wording of criteria whose purposes are to interpret the language of the Convention, and to provide a basis for the Parties to judge proposals to amend the Appendices after they have been submitted. At least some of them, however, are relevant to Annex 6, the format for proposals to amend the Appendices. We recommend that they be considered in that context.

Nonetheless, the reviewers' comments relating to data collection do have a direct bearing on the revision of the criteria. One of the most frequently-repeated comments refers to the absence of necessary information and/or to the difficulty of collecting it. SSN believes that these comments add up to a **powerful argument for a strong precautionary approach** when considering amendments to the Appendices. **SSN prefers the precautionary language in Resolution Conf. 9.24 to the language in the current draft**. We believe the original language reflects more directly the concerns and context of CITES.

It may also be highly advisable, given the range of comments provided by reviewers, to consider the **preparation of a user's guide** to the criteria once they

have reached their final form. Such a document, which would not be legally binding, could assist the Parties in the general considerations that should go into a high-quality, thoroughly-researched proposal. It would also be an ideal document to discuss specific issues relating to individual taxonomic groups. SSN notes that the idea of a user's guide was favourably received by the Plants Committee.

In whatever form revised criteria are finally adopted, it is vital for the reputability and effectiveness of CITES that all Parties feel that they have been adequately consulted and their views properly considered. Resolution Conf. 9.24 was adopted unanimously in 1994. Its successor, surely one of the most crucial resolutions to the operation of CITES, must also be in a form that all Parties can endorse.

## SPECIFIC COMMENTS

The following section includes the complete Chairman's Text (omitting explanatory notes), including the additions proposed by the Plants Committee, with SSN's recommendations in numbered, boxed paragraphs. Although the Animals Committee will undoubtedly concentrate on the reviews of animal species, we believe it is important when considering changes to the proposed draft resolution, which will apply to both animals and plants, to consider comments from all the reviewers. We recommend that members of the Animals Committee consider, before recommending any changes, whether these changes might make the criteria more difficult to apply for plant species. We have therefore included reference to both animal and plant reviews in the following comments.

### ***DRAFT RESOLUTION OF THE CONFERENCE OF THE PARTIES*** ***Proposed revision of Resolution Conf. 9.24***

#### ***Criteria for amendment of Appendices I and II***

*RECALLING that Resolution Conf. 9.24, adopted by the Conference of the Parties at its ninth meeting (Fort Lauderdale, 1994) recommended that the text and the annexes of this Resolution be fully reviewed before the 12th meeting of the Conference of the Parties with regard to the scientific validity of the criteria, definitions, notes and guidelines and their applicability to different groups of organisms;*

*RECALLING that the Conference of the Parties at its 11th meeting (Gigiri, 2000), approved procedures for this review, laid down in Decision 11.2;*

*CONSIDERING the fundamental principles in paragraphs 1 and 2 of Article II of the Convention, which specify the species to be included in Appendices I and II;*

*RECOGNIZING that to qualify for inclusion in Appendix I a species must meet biological criteria and trade criteria;*

*RECALLING that Article II, paragraph 2(a), provides for the inclusion of species which may become threatened with extinction in Appendix II, in order to avoid utilization incompatible with their survival;*

*RECOGNIZING that for the proper implementation of this provision it is necessary to adopt appropriate criteria, considering both biological and trade factors;*

*RECALLING that paragraph 2(b) of Article II provides only for the inclusion in Appendix II of species which must be subject to regulation in order that trade in specimens of certain species included in Appendix II in accordance with Article II, paragraph 2(a), may be brought under effective control;*

*CONSIDERING, however, that this provision should also apply where there is a need to bring under effective control trade in specimens of species included in Appendix I;*

*RECOGNIZING that the range States of a species subject to an amendment proposal should be consulted by the proponent, or on its behalf by the Secretariat, in accordance with the relevant Resolutions of the Conference of the Parties, and that all Parties shall be consulted by the Secretariat in accordance with Article XV, paragraph 1(a), of the Convention;*

*RECOGNIZING further that the Secretariat, in accordance with the same Article, shall consult intergovernmental bodies having a function in relation to marine species;*

*CONSIDERING the Secretariat should also consult other intergovernmental bodies having a function in relation to any species subject to a proposal for amendment;*

*RECALLING that the international trade in all wild fauna and flora is under the purview of the Convention;*

*EMPHASIZING the importance of Resolution Conf. 3.4, adopted at the third meeting of the Conference of the Parties (New Delhi, 1981), regarding the need to provide to developing countries technical assistance in matters relating to the Convention, and specifically in the application of the criteria for amendment of Appendices I and II;*

*NOTING the objective to ensure that decisions to amend the Convention's Appendices are founded on sound and relevant scientific information, take into account socio-economic factors, and meet agreed biological and trade criteria for such amendments;*

**1. SSN recommends deleting the phrase *take into account socio-economic factors*.** Article II of the Convention requires that the Appendices include all species that satisfy biological and trade criteria. Socioeconomic factors are not mentioned. Since the purpose of the criteria is strictly to interpret the treaty, they should not be used to introduce concepts not reflected in treaty language. There is nothing in CITES that requires or permits socioeconomic factors to be taken into account when

determining whether to list a species on a given Appendix. The inclusion of this language would constitute an impermissible narrowing of the treaty text. Particularly, when read in conjunction with the first *Resolves* below, this language opens the door to Parties opposing otherwise necessary listings on the basis of economic or cultural arguments. Adding socioeconomic factors will further politicize the listing process, rather than making it more objective. Socioeconomic factors are extremely difficult to define, let alone assess, in a CITES context, especially if aspects of religion or traditional culture are included. Including them could reduce the precautionary impact of Appendix II listings, and make it more difficult to use Appendix II to prevent species from becoming Appendix I candidates in future.

*RECOGNIZING the importance of the application of Rio Principle 15, the Precautionary Approach, in cases of uncertainty;*

**2. SSN recommends that the original wording of Resolution Conf. 9.24 [*RECOGNIZING that by virtue of the precautionary principle, in cases of uncertainty, the Parties shall act in the best interest of the conservation of the species when considering proposals for amendment of Appendices I and II*] be restored in full here.** The proposed text is inadequate and unclear. Rio Principle 15 is a broad general statement on precaution that does not explain specifically what precaution means in the context of CITES. The original language is stronger, clearer and, importantly, more specific to CITES and to the purpose of these criteria.

*THE CONFERENCE OF THE PARTIES TO THE CONVENTION*

*ADOPTS the following Annexes as an integral part of this Resolution:*

*Annex 1: Biological criteria for Appendix I;*

*Annex 2a: Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2(a), of the Convention;*

*Annex 2b: Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2(b), of the Convention;*

*Annex 3: Special cases;*

*Annex 4: Precautionary measures;*

*Annex 5: Definitions, explanations and guidelines; and Annex 6: Format for proposals to amend the Appendices;*

*RESOLVES, that when considering proposals to amend Appendix I or II, the Parties shall, by virtue of the precautionary approach and in case of uncertainty either as regards the status of a species or the impacts of trade on the conservation of a species, act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species;*

**3. SSN recommends deleting the phrase *and adopt measures that are proportionate to the anticipated risks to the species*.** This phrase is ambiguous and, at best, unnecessary when Parties have already been directed to act in the best interests of the conservation of the species. Further, applying it specifically in cases of uncertainty weakens the precautionary approach. It is precisely in cases of uncertainty that information is not available to determine the precise level of “anticipated risks to the species.” Thus, the requirement that measures adopted be proportionate will lead to circular arguments about precisely what the anticipated risks are. From a practical standpoint, moreover, it will be difficult to apply this language in most proposals, when all that the Parties are being asked to do is to vote “yes” or “no” on whether a species should, or should not, be listed, delisted or transferred between Appendices. Appendix I is more stringent than Appendix II, and applies to species at greater risk. Thus, the measures applied under the Convention are already designed to ensure that CITES actions are proportionate to the risk to the species.

*RESOLVES that, when considering proposals to amend Appendices I and II, the following applies:*

*a) species that are or may be affected by trade should be included in Appendix I in accordance with Article II, paragraph 1, if they meet at least one of the biological criteria listed in Annex 1;*

**4. SSN does not support changing “trade” to “international trade” as recommended by reviewers.** We agree with the Plants Committee that the word “international” is redundant and unnecessary. Listing criteria should reflect the actual treaty language. They should adhere to the terminology of the Convention, which uses the phrase “are or may be affected by trade”. For greater clarity, Article I of CITES expressly defines the term “trade”. This definition properly defines the scope of the treaty. The insertion of an additional qualifier such as “international” could result in unnecessary confusion about whether a specific form of trade is relevant to a listing consideration. In fact, information regarding all forms of trade is relevant to assessing whether overall levels of extraction for a species are sustainable over the long term—a fact recognized in Annex 6. Further, for many species (e.g. birds, turtles) international trade is linked to often heavy domestic trade, making the impact of one over the other difficult to assess.

*b) species should be included in Appendix II under the provisions of Article II, paragraph 2 (a), if they satisfy the criteria listed in Annex 2a;*

**5. SSN recommends restoring the words *any species* to both this and the preceding paragraph [“any species should be included...”].** The original language is preferable because it makes clear that *any species* that meets the criteria should be protected from trade.

- c) *species should be included in Appendix II under the provisions of Article II, paragraph 2 (b), if they satisfy the criteria listed in Annex 2b;*
- d) *species should be included in more than one Appendix at the same time, and higher taxa should be included in the Appendices, only if the species or higher taxa concerned satisfy the relevant criteria listed in Annex 3;*
- e) *species of which all specimens in trade have been bred in captivity or artificially propagated should not be included in the Appendices if there is negligible probability of trade taking place in specimens of wild origin;*

**6. SSN recommends adding *unless they qualify for listing under Article II, paragraph 2 (b)*.** Trade in some species in this category may need to be regulated for look-alike reasons.

- f) *species included in Appendix I for which sufficient data are available to demonstrate that they do not meet the criteria listed in Annex 1 should be transferred to Appendix II only in accordance with the relevant precautionary measures listed in Annex 4;*
  - g) *species included in Appendix II in accordance with Article II, paragraph 2(a), that do not meet the criteria listed in Annex 2a should be deleted only in accordance with the relevant precautionary measures listed in Annex 4; and species included in accordance with Article II, paragraph 2(b), because they look like the species subject to the deletion, or for a related reason, should also be deleted only in accordance with the relevant precautionary measures;*
  - h) *the views, if any, of intergovernmental bodies with competence for the management of the species concerned should be taken into account;*
- RESOLVES that proposals to amend Appendices I and II should be based on the best information available, and when appropriate, presented in the format in Annex 6;*

*ENCOURAGES proponents that submit proposals to transfer species to Appendix I or to establish zero export quotas for species under review in accordance with the provisions of the Significant Trade Review process, to take account of the applicable findings of that review.*

*RESOLVES that annotations to proposals to amend Appendix I or Appendix II should be made in accordance with the applicable Resolutions of the Conference of the Parties, be specific and accurate as to affected parts and derivatives and should, to the extent possible, be harmonized with existing annotations;*

*ENCOURAGES Parties, when sufficient relevant biological data are available, to include a quantitative evaluation in the supporting statement of the amendment proposal;*

*RESOLVES that, to monitor the effectiveness of protection offered by the Convention, the status of species included in Appendices I and II should be regularly reviewed by the range States and proponents, in collaboration with the Animals Committee or the Plants Committee, subject to the availability of funds;*

*URGES Parties and co-operating organizations to provide financial and technical assistance, when requested, in the preparation of proposals to amend the Appendices, the development of management programmes, and the review of the effectiveness of the inclusion of species in the Appendices. Parties should be open to using other available international mechanisms and instruments for these purposes in the broader context of biodiversity; and*

*REPEALS Resolutions Conf. 9.24 (Fort Lauderdale, 1994) - Criteria for Amendment of Appendices I and II.*

#### **Annex I** **Biological criteria for Appendix I**

**NOTE: The operability of the various sub-criteria under Criteria A & B below will be determined by the definitions, explanations and guidelines set out in Annex 5. For this reason, the comments below must be read in conjunction with our comments on the relevant terms in Annex 5.**

*The following criteria must be read in conjunction with the definitions, explanations and guidelines listed in Annex 5, including the footnote with respect to application of the definition of “decline” for commercially exploited aquatic species.*

*A species is considered to be threatened with extinction if it meets, or is likely to meet, at least one of the following criteria.*

- A. *The wild population is small, and is characterized by at least one of the following:*
  - i) *an observed, inferred or projected decline in the number of individuals or the area and quality of habitat; or*

**7. See comments 35-40 under Annex 5 on the definition of “decline”.**

- ii) *each sub-population being very small; or*

**8. See comments 46-49 under Annex 5 on the definition of “population”.**

- iii) *a majority of individuals, during one or more life-history phases, being concentrated in one sub-population; or*

**9. SSN supports broadening this criterion** as suggested by the reviewer (US/Mexico) for *Eschrichtius robustus* (eastern population) [a majority of individuals, during one or more life-history phases or age classes, being concentrated in one sub-population or a majority of individuals being concentrated in some geographic region of its distribution area during some specific time; or]. We note that a number of the reviewers of plant species found this criterion inapplicable. However, as it remains useful (particularly if amended as suggested) for animals, and is only one of a number of alternatives, we would not support its deletion.

*iv) large short-term fluctuations in the number of individuals appropriate to measuring* [Plants Committee: replace “appropriate to measuring” with “required to measure the”] *population size for the species concerned;*

**10. See comment 42 under Annex 5 on the definition of “fluctuations”.**

*v) a high vulnerability due to the species' biology or behaviour (including migration).* [Plants Committee: replace with “a high vulnerability due to the species' particular susceptibility to either intrinsic or extrinsic factors”.

**11. SSN supports the amendment proposed by the Plants Committee.** We believe that this rewording is more broadly applicable and better reflects the conservation realities facing many species. **See comment 51 on Annex 5.**

*B. The wild population has a restricted area of distribution and is characterized by at least one of the following:*

**12. SSN agrees with the reviewer for *Eudypetes pachyrhynchus*** that area of occupancy is a more useful measure than area of distribution. However, area of occupancy is not always known and may be difficult to assess. With the clarification proposed by the Plants Committee, which we support (see Comment 34), we suggest that the sense of this term is already captured in the Annex 5 definition of “area of distribution”. **We therefore recommend that “area of distribution” be retained.** We note also the comment of the reviewer for *Probarbus jullieni* that area of distribution is difficult to assess for species that live along long linear habitats such as rivers; this comment would also relate to riverine plant species.

**SSN does not support the recommendation of the reviewers for *Amazona spp.*** that “area of distribution” be defined in relation to other species of the same taxonomic group. SSN agrees that information on the status of related taxa may be useful to consider in some cases; in many other cases, however, the population size and distribution of related taxa will not be relevant to assessing the status or vulnerability of species under consideration for listing. For example, a species may suffer extensive declines in population and area of distribution yet still appear abundant and widely distributed when compared to a related taxon that is endemic to a confined region. The status of related taxa, therefore, is not a sufficiently reliable indicator of species status to be incorporated as a criterion of general application. For the same reason, SSN cannot support the recommendation by the reviewer of *Python anchietae* that the word “restricted” be defined based on the minimum, maximum and mean range sizes of all species in a taxonomic group. We note, moreover, that gathering such information could be an extremely cumbersome task where large genera are involved.

*i) fragmentation or occurrence at very few locations; or*

**13. See comment 43 under Annex 5. SSN supports retaining this text, and disagrees with the recommendation of the reviewer for *Python anchietae* that a quantitative figure be given here** [e.g. 20% of population exists in fragmented populations]. Numerical guidelines should be avoided throughout these criteria. Any number that purports to be relevant to all animal and plant taxa will almost certainly be misleading and/or inapplicable in a vast number of cases.

*ii) large fluctuations in the area of distribution or the number of sub-populations; or*

**14. SSN notes that a number of reviewers suggest deleting this sub-criterion (ii).** We would not object to this, because fluctuations of this kind would fall within the scope of sub-criteria (iii) and (iv).

*iii) a high vulnerability due to the species' biology or behaviour (including migration* [Plants Committee: replace with “a high vulnerability due to the species' particular susceptibility to either intrinsic or extrinsic factors”]; *or*

**15. See comment 51 under Annex 5 on the definition of “vulnerability”.** We support the amendment proposed by the Plants Committee.

*iv) an observed, inferred or projected decrease in any one of the following:*

- the area of distribution; or*
- the area of habitat; or*

**16. SSN does not support the suggestion of the reviewers for *Amazona spp.*** that would define “area of distribution” and “area of habitat” in relation to other species of the same taxonomic group. See comment 12 above.

- the number of sub-populations; or
- the number of individuals; or
- the quality of habitat; or
- the recruitment.

**17. SSN supports adding -areas of critical habitat or of high concentration of the species (e.g. seasonal, of certain life stages, etc.)** as suggested by the reviewers for *Amazona* spp.

C. A marked decline in the population size in the wild, which has been either:

- i) observed as ongoing or as having occurred in the past (but with a potential to resume); or
- ii) inferred or projected on the basis of any one of the following:

**18. SSN does not support the revision proposed by the reviewer for *Pseudophoenix ekmanii*** [Using the checklist provided at the end of this table (and accompanying definitions in the glossary) as a guide, please explain which vulnerability factors affect this species/population/sub-population and why.]. This language is better suited either to Annex 6 or to a “user’s manual” as proposed in our general comments above.

- a decrease in area of habitat; or

**19. SSN recommends amending this to read a decrease in area of habitat or habitat use**, to take into account the comments by the reviewer (US/Mexico) for *Eschrichtius robustus* (eastern population).

- a decrease in quality of habitat; or
- levels or patterns of exploitation; or
- threats from extrinsic human-induced [Plants Committee: delete “human-induced”] factors such as competition/predation by introduced species or the effects of hybridization, toxins and pollutants [Plants Committee: “as well as naturally-occurring stochastic events”]; or

**20. SSN supports the amendments proposed by the Plants Committee.** This change was also recommended by a number of reviewers. From a biological perspective, it is irrelevant (and often difficult to determine) whether an extrinsic threat, such as an epidemic or a change in climate, is anthropogenic or natural in origin. When a population has been significantly reduced, it becomes more vulnerable to overexploitation regardless of the cause of the reduction.

**SSN also recommends adding disease and climate change to the list of factors. As both of these factors, and particularly climate change, could be the result of human activities, they are not fully covered by the words “naturally-occurring stochastic events”.** At least three reviews (for *Rhacodactylus leachianus*, *Amazona finschi* and *Amazona oratrix*) also recommended adding climate change.

- a decreasing recruitment.

D. The status of the species is such that if the species is not included in Appendix I, it is likely to satisfy one or more of the above criteria within a period of five years.

**21. SSN believes that the five-year period is too short**, given that Meetings of the Conference of the Parties will now take place at three-year intervals. We would prefer to replace *within a period of five years* with *within the near future*, with the term “near future” being interpreted as case- or taxon-specific. At the shortest it should represent at least two intervals between Meetings of the Conference of the Parties (six years), but might more appropriately be longer for long-lived species. **See comment 38 to Annex 5 below (definition of near future).** We agree with the suggestion made by the reviewers for *Corallium rubrum* and *Probarbus jullieni* that this criterion should apply only to transfers to Appendix I, to avoid inconsistency between this and criterion A of Annex 2a. As this is part of Annex 1, which only relates to inclusion in Appendix I, we believe its text already reflects this. We do not agree, as the reviewers suggest, that this criterion should only apply to species already listed on Appendix II, and we note that the Plants Committee was of the same opinion. It should also be available for the direct listing of unlisted species on Appendix I.

#### **Annex 2a**

#### **Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2(a), of the Convention**

The following criteria must be read in conjunction with the definitions, explanations and guidelines listed in Annex 5, including the footnote with respect to application of the definition of “decline” for commercially exploited aquatic species.

A species should be included in Appendix II when, on the basis of available trade data and information on the status and trends of the wild population(s), at least one of the following criteria is met:

*A. It is known, or can be inferred or projected, that the regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future; or*

**22. SSN recommends retaining the original wording** [*It is known, inferred or projected that unless trade in the species is subject to strict regulation, it will meet at least one of the criteria listed in Annex 1 in the near future*]. The original language is clearer and more precise than the draft text. **See comment 44 to Annex 5 below on the definition of near future.**

**SSN does not support the revision proposed by the reviewer for *Pseudophoenix ekmanii*** [*Using the checklist provided at the end of this table (and accompanying definitions in the glossary) as a guide, please explain which vulnerability factors affect this species/population/sub-population and why.*]. This language is better suited either to Annex 6 or to a “user’s manual” as proposed in our general comments above.

*B. It is known, or can be inferred or projected, that* [**Plants Committee:** replace remainder of text with: “regulation of trade in the species is required to ensure that the harvest of specimens from the wild is sustainable and is not reducing the wild populations to a level at which its survival would be threatened by other influences”.] *harvesting of specimens from the wild for international trade has, or may have, a detrimental impact on the species by either*

*i) exceeding, over an extended period, the level that can be continued in perpetuity; or*

*ii) reducing it to a population level at which its survival would be threatened by other influences.*

**23. SSN prefers the original wording, which was also the wording in Resolution Conf. 9.24.** This wording is clearer than the amendment proposed by the Plants Committee; we note that the word “sustainable” has not been defined.

#### *Annex 2b*

#### *Criteria for the inclusion of species in Appendix II in accordance with Article II, paragraph 2(b), of the Convention*

*Species may be included in Appendix II in accordance with Article II, paragraph 2(b), if either one of the following criteria is met:*

*A. The specimens of the species in the form in which they are traded resemble specimens of a species included in Appendix II under the provisions of Article II, paragraph 2 (a), or in Appendix I, such that* [**Plants Committee:** replace “a non-expert with reasonable effort, is” with “enforcement officers who encounter specimens of CITES-listed species are”] *non-expert, with reasonable effort, is unlikely to be able to distinguish between them; or*

**24. SSN supports the amendment proposed by the Plants Committee;** the new language is considerably clearer than the old.

*B. There are compelling reasons other than those given in criterion A above to ensure that effective control of trade in currently listed species is achieved.*

#### *Annex 3 Special cases*

##### *Split-listing*

*Listing of a species in more than one Appendix should be avoided in general in view of the enforcement problems it creates. When split-listing does occur, this should generally be on the basis of national or regional populations, rather than subspecies. Split-listings that place some populations of a species in the Appendices, and the rest outside the Appendices, should normally not be permitted.*

*For species outside the jurisdiction of any State, listing in the Appendices should use the terms used in other relevant international agreements, if any, to define the population. If no such international agreement exists, then the Appendices should define the population by region or by geographic co-ordinates.*

*Taxonomic names below the species level should not be used in the Appendices unless the taxon in question is highly distinctive and the use of the name would not give rise to enforcement problems.*

[**Plants Committee:** “In instances where the proponent wishes, as part of the proposal, to include populations other than the wild populations (as defined in Annex 5), this should be clearly indicated.”]

**25. SSN does not support the addition of the language proposed by the Plants Committee.** Although meant as a clarification to prevent the recurrence of the problem that arose with *Araucaria araucana*, it could be interpreted to exclude non-wild populations. Listings should apply to all specimens of a species unless clearly indicated by means of an annotation to the listing.

##### *Higher taxa*

*If all species of a higher taxon are included in Appendix I or II, they should be included under the name of the higher taxon. If some species in a higher taxon are included in Appendix I or II and all the rest in the other Appendix, the latter species should be included under the name of the higher taxon, with an appropriate annotation made in accordance with the provisions of the relevant resolutions on the use of annotation in the Appendices.*

**[Plants Committee:** “Parties contemplating preparing a proposal to transfer an individual plant species from a higher-taxon listing in Appendix II to a separate listing in Appendix I consider:

- i) the ease with which it can be propagated artificially;
- ii) the extent to which it is currently available in cultivation from artificially propagated specimens; and
- iii) any practical problems in identifying the species, particularly in the form in which it may be traded;”]

**26. SSN notes that the language proposed by the Plants Committee has been transferred from Resolution Conf. 11.11, Regulation of Trade in Plants, as part of a section recognizing the value of higher taxon listings of Orchidaceae and Cactaceae. It specifically relates to trade in plants alone, and, if included here, it would be inappropriate to broaden it to refer to animal species.**

*Annex 4*  
*Precautionary measures*

*When considering proposals to amend Appendix I or II, the Parties shall, by virtue of the precautionary approach and in case of uncertainty either as regards the status of a species or the impacts of trade on the conservation of a species, act in the best interest of the conservation of the species concerned and adopt measures that are proportionate to the anticipated risks to the species.*

**27. SSN recommends deleting the phrase *and adopt measures that are proportionate to the anticipated risks to the species*.** As explained in comment 3 above, this phrase is ambiguous and unnecessary when Parties have already been directed to act in the best interests of the conservation of the species. Further, applying it specifically in cases of uncertainty weakens the precautionary approach. The reference to measures “proportionate” to risks inserts inappropriate ambiguity, and incorrectly assumes that the level of risk can be accurately identified even when complete information is lacking. By definition, the principle will be most relevant when information is not available to determine the precise level of “anticipated risks to the species.” Thus, the requirement that measures adopted be proportionate will lead to circular arguments about precisely what the anticipated risks are. From a practical standpoint, moreover, it will be difficult to apply this language in most proposals, when all that the Parties are being asked to do is to vote “yes” or “no” on whether a species should, or should not, be listed, delisted or transferred between Appendices. This voting process, combined with the structure of the Appendices themselves, provides sufficient insurance that measures adopted under CITES are proportionate to the risk to the species.

*A.*

*1. No species listed in Appendix I shall be removed from the Appendices unless it has been first transferred to Appendix II, with monitoring of any impact of trade on the species for at least two intervals between meetings of the Conference of the Parties.*

*2. Species included in Appendix I should only be transferred to Appendix II if they do not satisfy the relevant criteria in Annex 1 and only when one of the following precautionary safeguards is met:*

*a) the species is not in demand for international trade, nor is its transfer to Appendix II likely to stimulate trade in, or cause enforcement problems for, any other species included in Appendix I; or*

*b) the species is likely to be in demand for trade, but its management is such that the Conference of the Parties is satisfied with:*

*i) implementation by the range States of the requirements of the Convention, in particular Article IV; and*

*ii) appropriate enforcement controls and compliance with the requirements of the Convention; or*

*c) an integral part of the amendment proposal is an export quota or other special measure approved by the Conference of the Parties, based on management measures described in the supporting statement of the amendment proposal, provided that effective enforcement controls are in place; or*

**28. SSN recommends deleting the phrase *or other special measure*.** It is unclear what “other special measures” are permitted under the Convention that are not otherwise covered by (b), (c), or (d).

*d) a ranching proposal is submitted consistent with the applicable Resolutions of the Conference of the Parties and is approved.*

*3. No proposal for transfer of a species from Appendix I to Appendix II shall be considered from a Party that has entered a reservation for the species in question, unless that Party agrees to remove the reservation within 90 days of the adoption of the amendment.*

*4. No species should be deleted from Appendix II if such deletion would be likely to result in it qualifying for inclusion in the Appendices in the near future.*

*5. No species should be deleted from Appendix II if, within the last two intervals between meetings of the Conference of the Parties, it has been subject to a recommendation under the provisions of the Significant Trade Review process to improve its conservation status.*

*B. The following review procedures shall apply when a species is transferred to Appendix II pursuant to paragraph A2c) above.*

*1. Where the Plants Committee, the Animals Committee or a Party becomes aware of problems in compliance with the management measures and export quotas of another Party, the Secretariat shall be informed and, if the Secretariat fails to resolve the matter satisfactorily, it shall inform the Standing Committee which may, after consultation with the Party concerned, recommend to all Parties that*

they suspend trade with that Party in specimens of CITES-listed species, and/or request the Depositary Government to prepare a proposal to transfer the population back to Appendix I.

**29. SSN suggests adding the phrase *within a reasonable period of time after if the Secretariat fails to resolve the matter satisfactorily*.** Adding these words gives the Standing Committee discretion to decide at what point the Secretariat should conclude that a compliance problem has not been dealt with and further action is necessary.

2. If, on review of a quota and its supporting management measures, the Animals or Plants Committee encounters any problems with compliance or potential detriment to a species, the relevant Committee shall request the Depositary Government to prepare a proposal for appropriate remedial action.

C. With regard to quotas established pursuant to paragraph A2c) above.

1. If a Party wishes to renew, amend or delete such a quota it shall submit an appropriate proposal for consideration at the next meeting of the Conference of the Parties;

2. When a quota has been established for a limited period of time, after that period the quota will become zero until a new quota has been established.

D. Species that are regarded as possibly extinct should not be deleted from Appendix I if they may be affected by trade in the event of their rediscovery; these species should be annotated in the Appendices as "p.e." (i.e. possibly extinct).

#### **Annex 5** **Definitions, explanations and guidelines**

##### Species

In Article I of the Convention the term species is defined as "any species, subspecies or geographically separate population thereof".

Species and subspecies refer to the biological concept of a species, and do not require any further definition.

The two terms also cover varieties.

**30. SSN notes the recommended revisions to this definition** proposed by the reviewers of *Pseudophoenix ekmanii* and *Python anchietae*. We are concerned, however, that the expanded definition of the term "varieties" proposed by the reviewer for *Pseudophoenix ekmanii* may be confusing, as the term is used differently by botanists and zoologists. **We do not support including phenotype or genotype** in this definition, as recommended by the reviewer for *Python anchietae*. Inclusion of these terms could be confusing, and may be very difficult to apply in populations containing individuals with different phenotypes or genotypes. Further, the Parties have already rejected a proposal to differentiate certain species of birds by color variety, on the grounds that such a distinction is not helpful in clearly differentiating captive-bred from wild-caught specimens.

'Geographically separate population' refers to parts of a species or a subspecies within particular geographical boundaries. This can also refer to populations or subpopulations, or, for the sake of convenience in certain cases, to 'stocks' as the term is understood in fisheries management.

Until now, the Conference of the Parties has interpreted 'geographically separate populations' as populations delimited by geopolitical boundaries, whereas they have rarely used the other option of geographical boundaries.

**31. SSN recommends that the second paragraph in the definition of 'Geographically separate population' be deleted.** The language is unnecessary and restrictive. Implicit in the statement that the Conference of the Parties has "rarely used the other option of geographical boundaries" is the fact that the Parties have, *on occasion*, used this option and defined geographically separate populations by reference to geographical boundaries. The Parties' rights to apply the phrase in this manner should not be needlessly limited.

##### Affected by trade

A species "is or may be affected by trade" if:

1. it is known to be in trade [**Plants Committee:** "(using the definition of 'trade' in Article 1 of the Convention)"], and that trade has or may have a detrimental impact on the status of the species; or

**32. SSN does not support restricting the application of the term "affected by trade" to detrimental effects only.** Doing so makes the resolution language more restrictive than the Convention text. Determining the precise nature of trade impacts may be impossible in many cases. In addition, requiring a determination of this sort is likely to lead to arguments based on the net impact of trade. Attempting to assess net impacts of trade, especially when trade occurs in a variety of ways, is extremely difficult, and debate on the subject is likely to be divisive. The term "affected by trade" is used as a general, preliminary consideration of applicability for listing, before the individual criteria are looked at in detail. It should therefore be as broadly and simply worded as possible. **We recommend that the word "detrimental" be deleted.**

**SSN does not support the addition proposed by the Plants Committee.** The addition is unnecessary as all terms of art not defined in this Resolution should be defined according to the Convention text.

2. it is suspected to be in trade, or there is [Plants Committee: “demonstrable”] potential international demand for the species, that may be detrimental to its survival in the wild.

**33. SSN agrees with the Plants Committee that “trade” should not be changed to international trade” as recommended by reviewers.** See comment 4 in operative section above.

**SSN does not support adding *demonstrable* as recommended by the Plants Committee.** The word is redundant as any criterion must be demonstrated to apply before a species is listed, and in the case of a potential demand it is not clear what sort of evidence would be required.

**SSN also opposes removing the words *in the wild* here** as some have suggested; the size of captive populations should have no bearing on the importance of conserving species in the wild. As the title of the Convention suggests, wild populations are CITES’ primary focus.

**SSN supports adding a third paragraph, 3. It is known that the species was subject to trade in the past and therefore there is a potential for the trade to be reinitiated.** This is similar to the language proposed by the reviewers for *Strombocactus disciformis* and *Turbinicarpus pseudomacrolele*, except that the word *international* has been deleted; **see comment 4 in operative section above.** We do not support the wording *subject to and affected by...* as suggested by the reviewer for *Pygoscelis adeliae*, because assessing the effect of trade in the past may be extremely difficult.

#### Area of distribution

*Area of distribution of a species is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of occurrence, excluding cases of vagrancy and introductions outside its natural range (though inferring and projecting area of occurrence should be undertaken carefully, and in a precautionary manner). The area within the imaginary boundary should, however, exclude significant areas where the species does not occur, and so in defining an area of distribution, account should be taken of discontinuities or disjunctions in the spatial distribution of species. [Plants Committee: “This encompasses the concept of area of occupancy.”] For migratory species, the area of distribution is the smallest area essential at any stage for the survival of that species (e.g. colonial nesting sites, feeding sites for migratory taxa, etc.). [Plants Committee: Delete the remainder of the definition and replace with “The determination that a species has a restricted area of distribution is taxon-specific and should take into account considerations such as habitat specificity, population density and endemism.”] For some species for which data were available to make an estimate, a figure of less than 10,000 km<sup>2</sup> has been found to be an appropriate guideline (not a threshold) of what constitutes a restricted area of distribution. However, this figure is presented only as an example, since it is impossible to give numerical values that are applicable to all taxa. There will be many cases where this numerical guideline does not apply.*

**34. SSN supports the amendments proposed by the Plants Committee.** See our general comments above; the second amendment follows the recommendation of a number of reviewers. Any number that purports to be relevant to all animal and plant taxa will almost certainly be misleading and/or inapplicable in a vast number of cases. The figure of 10,000 km<sup>2</sup> is meaningless at best and counterproductive at worst. Although the penultimate sentence says this figure is presented only as an example, the final sentence calls it a guideline. In either case, the figure is inappropriate.

#### Decline

*A decline is a reduction in the abundance, or area of distribution, of a species. Decline can be expressed in two different ways: (i) the overall long-term extent of decline or (ii) the recent rate of decline.*

*The long-term extent of decline is the total estimated or inferred percentage reduction from a baseline level of abundance or area of distribution. The recent rate of decline is the percentage change in abundance or area of distribution over a recent time period. The data used to estimate or infer a baseline for extent of decline should extend as far back into the past as possible.*

[Plants Committee: “The judgement that a decline is marked is taxon-specific and can be justified by a number of considerations. For example, the population dynamics of a related taxonomic group.” ]

**35. SSN does not support adding the phrase *For example, the population dynamics of a related taxonomic group.***

Concern about decline should relate to the risk of potential extinction it poses to a population, and this has nothing to do with whether related species are equally at risk, more at risk, or not at risk at all. The significance of the single example given here is unclear; either a number of factors should be listed, with some explanation of their significance, or the examples should be removed from the text for inclusion, with further explanations, in a user’s guide.

*A general guideline for a marked historical extent of decline is a percentage decline to 5%-30% of the baseline, depending on the reproductive biology of the species. The extremes of 5% and 30% will be applicable to only a relatively small number of species, but some species may even fall outside of these extremes. However, both these figures are presented only as examples, since it is impossible to give numerical values that are applicable to all taxa because of differences in their biology (\*see footnote with respect to application of decline to commercially exploited aquatic species)*

*A general guideline for a marked recent rate of decline is a percentage decline of 50% or more in the last 10 years or three generations, whichever is the longer. If the population is small, a percentage decline of 20% or more in the last 5 years or 2 generations (whichever is the*

longer) may be more appropriate. However, these figures are presented only as examples, since it is impossible to give numerical values that are applicable to all taxa because of differences in their biology.

**36. SSN recommends that the preceding two paragraphs be deleted.** See our general comments on numeric guidelines at the beginning of this document. For the vast majority of species, it is unreasonable to suggest that a decline should not be of concern until the baseline population has been reduced by 70%. This level of decline completely ignores demographic inertia, density dependent effects, impacts on species with complex social structures and the important role that species play in their ecosystems. It is more useful to define decline (in abundance, at least) by reference to the baseline population size and reproductive characteristics of the species.

*The historical extent of decline and the recent rate of decline should be considered in conjunction with one another. In general, the higher the historical extent of decline, and the lower the productivity of the species, the more important a given recent rate of decline is.*

*In estimating or inferring the historical extent of decline or the recent rate of decline, all relevant data should be taken into account. A decline need not necessarily be ongoing. If data are available only for a short period and the extent or rate of decline based on these data are cause for concern, the guidelines above (extrapolated as necessary or relevant) should still apply. However, natural fluctuations should not normally count as part of a decline, but an observed decline should not necessarily be considered part of a natural fluctuation unless there is evidence for this. A decline that is the result of legal activities carried out pursuant to a harvesting programme that reduces the population to a planned level, not detrimental to the survival of the species, is not covered by the term “decline”.*

**37. SSN recommends that the last sentence of this paragraph be deleted.** The sentence ignores the fact that legal harvesting programmes frequently prove unsustainable. When assessing the conservation status of a species on a scientific basis, any decline should be considered, whatever its cause. This provision could, as written, be used to oppose the listing of any fish species that is managed by another body.

[**Plants Committee:** “The assessment of decline by reference to area of habitat may be more appropriate where there are intrinsic difficulties in measuring the number of individuals”.]

**38. SSN supports this addition by the Plants Committee, which should make the criteria easier to use.**

*Footnote: Application of decline for commercially exploited aquatic species:*

*In marine and large freshwater bodies, a narrower range of 5-20% is deemed to be more appropriate in most cases, with a range of 5-10% being applicable for species with high productivity, 10-15% for species with medium productivity and 15-20% for species with low productivity. Nevertheless some species may fall outside this range.*

**39. SSN recommends that the paragraph above be deleted.** See our general comments on numeric guidelines at the beginning of this document. These paragraphs completely ignore interspecific interactions. If a population of a keystone predator like a shark (even a relatively prolific shark species), or a foundation species like krill, is reduced to 10% of its baseline population level (assuming the initial baseline can be accurately determined), the ecosystem may be severely disrupted.

*In general, historical extent of decline should be the primary criterion for consideration of listing in Appendix I. However, in circumstances where information to estimate extent-of-decline is limited, rate-of-decline over a recent period could itself still provide some information on extent-of-decline.*

*For listing in Appendix II, the historical extent of decline and the recent rate of decline should be considered in conjunction with one another. The higher the historical extent of decline, and the lower the productivity of the species, the more important a given recent rate of decline is.*

*A general guideline for a marked recent rate of decline is the rate of decline that would drive a population down within approximately a 10-year period from the current population level to the historical extent of decline guideline (i.e. 5-20% of baseline for exploited fish species). There should rarely be a need for concern for populations that have exhibited an historical extent of decline of less than 50%, unless the recent rate of decline has been extremely high.*

*Even if a population is not declining appreciably, it could be considered for listing in Appendix II if it is near the extent-of-decline guidelines recommended above for consideration for Appendix I-listing. A range of between 5% and 10% above the relevant extent-of-decline might be considered as a definition of ‘near’.*

*A recent rate-of-decline is important only if it is still occurring, or may resume, and is projected to lead to the species reaching the applicable point for that species in the Appendix I extent-of-decline guidelines within approximately a 10-year period. Otherwise the overall extent-of-decline is what is important. When sufficient data are available, the recent rate-of-decline should be calculated over approximately a 10-year period. If fewer data are available, annual rates over a shorter period could be used. If there is evidence of a change in the trend, greater weight should be given to the more recent consistent trend. In most cases, listing would only be considered if the decline is projected to continue.*

**40. SSN recommends that the three preceding paragraphs (from A general guideline...) be deleted, except for the following text: A recent rate-of-decline is important only if it is still occurring, or may resume. Otherwise the overall extent-of-decline is what is important. If there is evidence of a change in the trend, greater weight should be given to the more recent consistent trend. In most cases, listing would only be considered if the decline is projected to continue.** See our

general comments on numeric guidelines at the beginning of this document. Though this text is part of a footnote relating to commercially-exploited aquatic species, we agree with the reviewer for *Taxus brevifolia* who noted that a ten-year interval is poorly suited to evaluating long-lived tree species; it is also unsuitable for long-lived animal species, including aquatic species such as sea turtles, great whales and some fishes.

Extended period

The meaning of the term extended period will vary according to the biological characteristics of the species. Selection of the period will depend upon the observed pattern of natural fluctuations in the abundance of the species and on whether the number of specimens removed from the wild is consistent with a sustainable harvesting programme that is based on these natural fluctuations.

**41. SSN does not support removing this definition, as suggested by the Plants Committee.** The removal was proposed because the amended language in Annex 2a Criterion B does not use the term “extended period”; however, SSN prefers the original wording (See comment 23 above).

Fluctuations

Fluctuations in population size or area of distribution are considered large when the population size or areas in question vary widely, rapidly or frequently. [Plants Committee: “The judgement that there are large short-term fluctuations in the number of individuals is taxon-specific. For instance, it depends on the generation length of the taxon.”] Where data exist to make an estimate, one order of magnitude has been found to be an appropriate guideline (not a threshold) for population size. Similarly, fluctuations can be considered ‘short term’ if the period of fluctuation is about two years. However, this figure is presented only as an example, since it is impossible to give numerical values that are applicable to all taxa. There will be many cases where this numerical guideline does not apply.

**42. SSN supports the additional words proposed by the Plants Committee, but recommends that the numerical example following it, referring to a two-year fluctuation period, be deleted.** See our general comments at the beginning of this document. As a number of reviewers have pointed out, a two-year period is inappropriate for many plant and animal species with longer life cycles and slow maturation times. It makes no biological sense to suggest that a single absolute number can be relevant to species with widely-varying generation times, or that a fluctuation need reach an order of magnitude before being large in relation to population size. The text from *Similarly* to the end should be removed.

Fragmentation

Fragmentation refers to the case where most individuals within a taxon are found in small and relatively isolated sub-populations, which increases the probability that these small sub-populations will become extinct and the opportunities for re-establishment are limited. For some species in trade where data exist to make an estimate, an area of distribution of 500 km<sup>2</sup> or less for each subpopulation has been found to be an appropriate guideline (not a threshold) of what constitutes fragmentation. However, this figure is presented only as an example, since it is impossible to give numerical values that are applicable to all taxa. There will be many cases where this numerical guideline does not apply.

**43. SSN agrees with the reviewer for *Bufo boreas*** that reference to habitat fragmentation be included here for clarity; the definition should cover both fragmentation due to fragmented habitat and fragmented distribution within continuous habitat. We recommend that the phrase *whether or not this is the result of fragmentation of habitat* be added after *relatively isolated sub-populations*.

**SSN recommends that the numeric guideline be deleted.** See our general comments at the beginning of this document. A number of reviewers of plant species also suggested that the numeric guideline be deleted. The text from *For some species for where data exist* to the end of the paragraph should be removed.

Generation length

Generation length is the average age of parents of the current cohort (i.e. newborn individuals in the population). Generation length therefore reflects the turnover rate of breeding individuals in a population. Generation length is greater than the age at first breeding and less than the age of the oldest breeding individual, except in taxa that breed only once. Where generation length varies under threat, the more natural, i.e. pre-disturbance, generation length should be used.

Near future

Refers to a time period in which it can be projected or inferred that a species would satisfy one (or more) of the criteria in Annex I unless it is included in Appendix II. [Plants Committee: delete remainder of definition and replace with “This period will be taxon- and case-specific.] Clearly this period will be taxon- and case-specific, however 5-10 years may be considered a useful guideline. However, this figure is presented only as an example, since it is impossible to give numerical values that are applicable to all taxa. There will be many cases where this numerical guideline does not apply.

**44. SSN supports the amendment proposed by the Plants Committee.** See our general comments on numeric guidelines at the beginning of this document. Now that future Meetings of the Conference of the Parties will be held only at three-year intervals, and taking into account the often considerable lag time between listing and action at the national and subnational level, five years does not represent a useful or precautionary guideline for “near future” in the sense in which it is used in this Convention.

[Plants Committee: “Inferred or projected

Projection is a statistical concept that in scientific research connotes that measurements have been made and extrapolated in time towards the future. On the other hand inference connotes measurement using indirect evidence.”]

#### 45. SSN supports this addition.

##### Population issues

##### Population

Population refers to the total number of individuals of the species (as "species" is defined in Article 1 of the Convention and in this Annex).

##### Sub-population

Sub-populations are defined as geographically or otherwise distinct groups in the population between which there is limited genetic exchange.

##### Population size

When providing details on the size of a population or sub-population, it should be made clear whether the information presented relates to an estimate of the total number of individuals or to the effective population size (i.e. individuals capable of reproduction, excluding individuals that are environmentally and behaviourally or otherwise reproductively suppressed in the wild) or other appropriate measure or component of the population.

**46. SSN notes the comments** made by the reviewers of *Panax quinquefolius* and other plant species that this definition is often difficult to apply, in particular with reference to the terms "total" and "effective". If these terms are to be retained, the words *where possible* should be added after the words *it should be made clear*.

*In the case of species biologically dependent on other species for all or part of their life cycles, biologically appropriate values for the host or co-dependent species should be chosen.*

##### **[Plants Committee: "Wild population**

Wild population refers to the total number of individuals of the species within its area of distribution, as defined in this annex."]

#### 47. SSN supports the inclusion of the definition of *wild population* proposed by the Plants Committee.

##### Small wild population

**[Plants Committee:** "The judgement that a wild population is small is taxon-specific and can be justified by a number of considerations. For example, the population of a related taxonomic group."] *For some species where data exist to make an estimate, a figure of less than 5,000 individuals has been found to be an appropriate guideline (not a threshold) of what constitutes a small wild population. However, this figure is presented only as an example, since it is impossible to give numerical values that are applicable to all taxa. There will be many cases where this numerical guideline does not apply.*

**48. SSN recommends that this definition be deleted.** See our general comments on numeric guidelines at the beginning of this document. We note that a number of reviewers were unhappy with this definition, and suggested alternatives. We remain unconvinced that this definition, and the following definition of *Very small wild sub-population*, are necessary at all, or that any definition could be derived for them that would be broadly applicable.

**SSN does not agree that the definition of "small wild population" is improved by the addition proposed by the Plants Committee.** We do not agree that "small" should be defined in relation to other species of the same taxonomic group. To the extent that the term is useful at all, it relates to the vulnerability of a population, and this has nothing to do with whether related species are equally vulnerable, more vulnerable, or not vulnerable at all. If this definition must be retained, it should be restricted to the words *The judgement that a wild population is small is taxon-specific and can be justified by a number of considerations.*

##### Very small wild sub-population

**[Plants Committee:** "The judgement that a wild sub-population is very small is taxon-specific."] *For some species where data exist to make an estimate, a figure of less than 500 individuals has been found to be an appropriate guideline (not a threshold) of what constitutes a very small sub-population. However, this figure is presented only as an example, since it is impossible to give numerical values that are applicable to all taxa. There will be many cases where this numerical guideline does not apply.*

**49. SSN recommends that this numeric guideline be deleted.** See our general comments at the beginning of this document. This definition should be modified or removed. See our Comment 48 on the definition of *Small wild population*. We note that the reviewer for *Panax quinquefolius* considered that this definition may not be applicable to most plant taxa. As pointed out by the reviewer for *Eudypetes pachyrhynchus*, degree of gene flow between subpopulations may be as critical as actual subpopulation size.

If this definition must be retained, it should be restricted to the words *The judgement that a wild population is small is taxon-specific* proposed by the Plants Committee.

##### Possibly extinct

*A species is possibly extinct when exhaustive surveys in known and/or suspected habitat, and at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Before a species can be declared possibly extinct, surveys should take place over a time-frame appropriate to the species' life cycle and life form.*

### Recruitment

Recruitment is the total number of individuals added to any particular demographic class of a population by either sexual or asexual reproduction.

### Threatened with extinction

Threatened with extinction is defined by Annex 1. The vulnerability of a species to threats of extinction depends on its population demographics, biological characteristics, such as body size, trophic level, life cycle, breeding structure or social structure requirements for successful reproduction, and vulnerability due to aggregating habits, natural fluctuations in population size (dimensions of time and magnitude), residency/migratory patterns. This makes it impossible to give numerical threshold values for population size or area of distribution that are applicable to all taxa.

**50. SSN recommends adding the words *and the nature and extent of extrinsic factors threatening the species* after residency/migratory patterns.**

### Vulnerability

Vulnerability can be defined as the susceptibility to intrinsic or external effects which increase the risk of extinction. There are a number of taxon- or case-specific biological and other factors that may affect the extinction risk associated with a given percentage decline, small population size or restricted area of distribution. These can be, but are not limited to, aspects of any of the following:

#### [Plants Committee: "INTRINSIC FACTORS"]

- Life history (e.g., low fecundity, slow growth rate, high age at first maturity, long generation time)
- Low absolute numbers or biomass or restricted area of distribution
- Population structure (age/size structure, sex ratio)
- Behavioural factors (e.g., social structure, migration, aggregating behaviour)
- Density (for sessile or semi-sessile species)
- Specialized niche requirements (e.g., diet, habitat, endemism)
- Species associations such as symbiosis and other forms of co-dependency
- Fragmentation and habitat loss
- Reduced genetic diversity
- Depensation (prone to continuing decline even in the absence of exploitation)
- Endemism

#### [Plants Committee:

- Seed dispersal mechanism
- Specialized pollinators

#### EXTRINSIC FACTORS

- Selectivity of removals (that may compromise recruitment)
- Threats from exotic species (hybridisation, disease transmission, depredation, etc.)
- Habitat degradation (contamination, soil erosion, alteration by invasive species etc.)
- Habitat loss / destruction
- Habitat fragmentation
- Harsh environmental conditions"]
- Threats from disease or invasive species
- Rapid environmental change (e.g., climate regime shifts)
- Selectivity of removals (that may compromise recruitment)

**51. SSN supports separating this list into intrinsic and extrinsic factors** if the amendment to Annex 1, paragraph A(v), proposed by the Plants Committee is adopted. **See comment 11 under Annex 1 above. SSN supports including the additional factors proposed by the Plants Committee.** We do not agree with the reviewers of the two cactus species that *endemism* should be replaced by *a relatively high level of endemism*, as it is unclear what a relatively high level is, and this is simply a list of aspects to be considered rather than a qualitative or quantitative rating of such aspects; the Plants Committee rejected this suggestion.

### **Annex 6**

#### **Format for proposals to amend the Appendices**

The following provides information and instructions for the submission of a proposal to amend the Appendices and the appropriate supporting statement. Proponents should be guided by the need to provide to the Conference of the Parties sufficient information, of sufficient quality and in sufficient detail, to allow it to judge the proposal against the criteria established for the proposed action. Parties are reminded that proposals should normally be limited to 12 pages (exclusive of references cited). If the proposal is longer than 12 pages, the proponent should provide translations into the working languages of the Convention. This means that the relevant published and unpublished sources of information should be used, although for some species the amount of scientific information will be limited. Where research has been undertaken specifically to obtain information for the proposal, it should be presented in sufficient detail to be assessed by the Parties. Furthermore, this means that it may not be possible to address all elements of the proposal format.

**52. SSN recommends that the 12-page limit for proposals be extended.** Given that the format for proposals is itself more than six pages long, it does not seem reasonable to limit parties to 12 pages in the proposals they submit. Particularly for species that are heavily traded or which occur in several range states, it may be extremely difficult to include all the information necessary to adequately justify the proposal. Requiring Parties to provide their own translations of proposals that exceed 12 pages could discourage them from producing well-documented,

well-supported proposals. If a page limit must be imposed for purposes of economy, perhaps 20 pages would be more reasonable, particularly if parties are expected to follow the proposal format.

#### *A. Proposal*

*The proponent should indicate the specific amendment to the Appendices and any relevant annotations or qualifications. [Plants Committee: “The proponent should justify the basis on which the species meets the relevant criteria.”]*

*- Inclusion in Appendix I or transfer from Appendix II to Appendix I. Specify which of the criteria in Annex 1 of the Resolution are satisfied*

*- Inclusion in Appendix II*

*- in accordance with Article II 2(a)*

*- specify which of the criteria in Annex 2a of the Resolution are satisfied*

*- in accordance with Article II 2(b)*

*- for reasons of look-alike problems (criterion A of Annex 2b). In this case, the names of the similar species already included in the Appendices should be given in section C11, “Additional remarks”*

*- for other reasons (such as those referred to in Annexes 2a, paragraph B and/or 3 to this Resolution)*

*Transfer from Appendix I to Appendix II in accordance with a precautionary measure specified in Annex 4 to this Resolution. Specify which of the criteria in Annex 2 of this Resolution are satisfied; specify why the criteria in Annex 1 of this Resolution are no longer satisfied; specify which of the measures in Annex 4 of this Resolution are satisfied or implemented*

- Deletion from Appendix II. Specify why the criteria in Annex 2 of this Resolution are not satisfied*
- Other action (provide explanation) (e.g. amendment of a quota)*

#### *Annotations*

*If a specific annotation to the listing in the Appendices is proposed, the proponent should:*

*- ensure that the proposed annotation is in compliance with the applicable Resolution;*

*- indicate the practical intent of the annotation;*

*- harmonize new annotations with existing annotations; and*

*- be specific and accurate as to affected parts and derivatives.*

#### *B. Proponent*

*The proponent may only be a Party to the Convention, in accordance with Article XV of the Convention.*

#### *C. Supporting statement*

##### *1. Taxonomy*

*The proponent should provide sufficient information to allow the Conference of the Parties to identify clearly the taxon that is the subject of the proposal.*

##### *1.1 Class*

##### *1.2 Order*

##### *1.3 Family*

##### *1.4 Genus, species or subspecies, including author and year*

*If the species concerned is included in one of the standard lists of names or taxonomic references adopted by the Conference of the Parties, the name provided by that reference should be entered here. If the species concerned is not included in one of the adopted standard references, the proponent should provide references as to the source of the name used.*

##### *1.5 Scientific synonyms*

*The proponent should provide information on other scientific names or synonyms under which the species concerned may be known currently, especially if these names are used in the trade in the species.*

##### *1.6 Common names (including, where appropriate, trade names)*

##### *1.7 Code numbers*

*If the species concerned is already included in the Appendices, refer to the code numbers in the CITES Identification Manual.*

#### *2. Overview*

*Provide a brief overview of key elements of the proposal. Parties should cite key sections of the supporting statement. Also explain how the species complies with the criteria in this Resolution.*

#### *3. Species characteristics*

*The information required in this section is a summary of surveys, literature searches, and relevant studies. The references used must be listed in section 12 of the proposal. It is understood that the quality of the information available will vary a lot, but these instructions indicate the type of information that is required. If the proposal relates to a geographically separate population or subspecies, it should consider, where relevant, the biological species in its entirety to provide the appropriate context.*

##### *3.1 Distribution*

*Specify the currently known range of the species. If possible, provide information to indicate whether or not the distribution of the species is continuous and, if it is not, indicate to what degree it is fragmented.*

### 3.2 Habitat

Specify the types of habitats occupied by the species and, when relevant, the degree of habitat specificity and the extent of each habitat type over the range of the species.

### 3.3 Biological characteristics

Provide a summary of general biological and life history characteristics of the species (e.g. reproduction, recruitment, survival rate, migration, sex ratio, regeneration or reproductive strategies).

### 3.4 Morphological characteristics

Provide a general description of the morphological diagnostic characteristics of the species, including colour, and information on morphological features by which the species can be differentiated from taxonomically closely related species.

### 3.5 Role of the species in its ecosystem

If available, provide information about the role of this species in its ecosystem, and other relevant ecological information, as well as the potential impact of this proposal on that role.

## 4. Status and trends

This section includes qualitative and quantitative information that allow past and present trends to be evaluated pursuant to the criteria. The sources used must be referenced in section 12 of the proposal. It is understood that the quality of the information available will vary. The instructions below indicate the type of information that should be provided if possible. If the proposal relates to a geographically separate population or subspecies, it should consider, when relevant, the biological species in its entirety to provide the appropriate context. If available, the proposal should include any relevant quantitative analyses, stock assessments, etc. The proposal should note whether conclusions are based on observations, inferences or projections.

### 4.1 Habitat trends

Give information on the nature, rate and extent of habitat change (e.g. loss, degradation or modification), noting when applicable the degree of fragmentation and discernable changes in the quality of habitat. Where appropriate, the relationship between habitat and population trends should be described.

### 4.2 Population size

Give an estimate of the current total population or number of individuals differentiated by relevant age classes where possible, or other indices of population abundance, based on the most recently available data. Provide information on the source of the data used. Where appropriate provide the number of sub-populations, and their estimated sizes.

### 4.3 Population structure

Provide basic information on the current structure of the population and any past or current changes over time in that structure (e.g. social structure, population demographics, proportion of mature individuals or sex ratio).

### 4.4 Population trends

Basic, quantitative and qualitative information, when available, should be provided on current and past trends in the species's abundance (provide sources). The period over which these trends, if any, have been measured should be indicated. If the species naturally undergoes marked fluctuations in population size, information should be provided to demonstrate that the trend transcends natural fluctuations. If generation-time has been used in estimating the trend, state how the generation-time has been estimated.

**53. This language is inconsistent with the proposed definition of decline**, which states that an observed decline should not be considered part of a natural fluctuation unless there is evidence for this. The language in 4.4 effectively reverses the burden of proof on this issue. **SSN recommends** that the sentence beginning *If the species naturally undergoes marked fluctuations...* be reworded to read *If the species naturally undergoes marked fluctuations in population size, information should be provided to support any arguments that the trend does not transcend natural fluctuations.*

### 4.5 Geographic trends

Provide information, when available on current and past trends in the species' distribution, indicating the period over which these trends, if any, have been measured. If relevant give data on the degree and periodicity of fluctuations in the area of distribution.

## 5. Threats

Specify the nature, intensity and if possible relative importance of human-induced threats (e.g. habitat loss and/or degradation; over-exploitation; effects of competition/predation by introduced species and effects of hybridization, toxins and pollutants; etc.).

**54. SSN also recommends adding disease and climate change to the list of factors. See our comment 18 to Criterion C(ii) of Annex 1 above.**

## 6. Utilization and trade

### 6.1 National utilization

Specify the types and extent of all known uses of the species, indicating trends if possible. Provide details of harvest methods. Indicate the extent to which utilization is from captive-bred, artificially propagated, or wild specimens.

Provide details of any stockpiles known to exist, and the measures that might be taken to dispose of them.

### 6.2 Legal trade

Quantify the level of international trade, identifying the source of statistics used (e.g. Customs statistics, CITES annual report data, FAO data, industry reports, etc.). Provide justification for inferences made about trade levels. Provide information about the nature of the trade (e.g. primarily for commercial purposes, primarily live specimens, primarily parts and derivatives, primarily of captive-bred or artificially propagated specimens, etc.) and about how the proposed amendment is expected to affect the nature of the trade.

**55. SSN supports the suggestion of the reviewer for *Rhacodactylus leachi* that trade information should include information on the price of the specimen both in the country of origin and in importing countries, to provide an idea of local pressure and interest in collecting the species concerned.**

### 6.3 Parts and derivatives in trade

To the extent possible, list parts and derivatives, including types of products in trade, Customs tariff codes specific to those parts and derivatives, and major importing and exporting countries that trade in those parts and derivatives.

### 6.4 Illegal trade

To the extent possible, quantify the level of illegal trade, nationally and internationally, and describe its nature. Assess the relative importance of this trade in relation to legal offtake for national use or legal international trade. Provide information on how the proposed amendment is expected to affect the nature of the trade.

### 6.5 Actual or potential trade impacts

Discuss the importance of current and/or future exploitation for international trade relative to overall use (domestic included) as a threat to the species in question.

## 7. Legal instruments

### 7.1 National

Provide details of legislation relating to the conservation of the species, including its habitat, either specifically (such as endangered-species legislation) or generally (such as legislation on wildlife and accompanying regulations). Indicate the nature of legal protection (i.e. is the species totally protected, or whether harvesting is regulated or controlled). Provide an assessment of the effectiveness of this legislation in ensuring the conservation and/or management of the species.

Provide similar information relating to legislation governing the management of trade in the species in question. Provide an assessment of the effectiveness of this legislation in controlling illegal trade in the species.

### 7.2 International

Provide details of international instruments relating to the species in question, including the nature of the protection afforded by such instruments. Provide an assessment of the effectiveness of these instruments in ensuring the conservation and/or management of the species.

Provide similar information on international instruments relating to the management of trade in the species in question. Provide an assessment of the effectiveness of these instruments in controlling illegal trade in the species.

## 8. Species management

### 8.1 Management measures

Provide details of programmes in place in the range States to manage populations of the species in question (e.g. controlled harvest from the wild, captive breeding or artificial propagation, reintroduction, ranching, quota systems, etc.). Include, where appropriate, details such as planned harvest rates, planned population sizes procedures for the establishment and implementation of quotas, and mechanisms for ensuring that wildlife management advice is taken into account.

Where applicable, provide details of any mechanisms used to ensure a return from utilization of the species in question to conservation and/or management programmes (e.g. pricing schemes, community ownership plans, export tariffs, etc.).

### 8.2 Population monitoring

Provide details of programmes in place to monitor the status of wild populations and the sustainability of offtake from the wild.

### 8.3 Control measures

#### 8.3.1 International

Provide information on measures in place, in addition to CITES, to control the movement of specimens of the species in question across international borders. Include information about marking schemes in place, if any.

#### 8.3.2 Domestic

Provide information on controls in the range States aimed at ensuring a sustainable harvest from the wild of the species in question. Include information on education, compliance and enforcement activities as appropriate and an assessment of the effectiveness of the programmes.

### 8.4 Captive breeding and artificial propagation

Where applicable, provide details of commercial captive-breeding or artificial propagation operations, including plantations, for the species in question within the country in question, including the size of captive stocks and the production, and the extent to which these operations are either contributing to a conservation programme or meeting a demand that would otherwise be met by specimens from the wild. Discuss any management implications of captive-breeding or artificial propagation programmes. Also provide information on the extent of captive-breeding or artificial propagation outside the country or countries of origin to the extent possible.

### 8.5 Habitat conservation

Provide information, where available, regarding the number, size and type of protected areas relevant to the habitat of the species, and on habitat conservation programmes outside protected areas.

### 8.6 Safeguards

*In the case of proposals to transfer species from Appendix I to Appendix II or deletion from Appendix II, or proposals involving substantive annotations, provide information on any relevant safeguards.*

*If the proposed amendment is likely to lead to an increase in trade in the species concerned, explain why this would not result in unsustainable trade in similar species.*

#### **9. Information on similar species**

*Give the names of species of which specimens in trade look very similar. Provide details on how they may be distinguished, including, in particular, details on those commodities or parts and derivatives most common in trade, and explain whether or not it is reasonable to expect an informed non-expert to be able to make a firm identification. Provide details on how to resolve potential difficulties in distinguishing specimens of the species proposed for listing from those of similar species, in particular those specimens most common in trade.*

#### **10. Consultations**

*Provide details of the consultation undertaken to secure comments on the proposal from the range States of the species, either through direct contact or via the CITES Secretariat. Comments received from each country should be provided. Where comments were sought but not received in sufficient time to enable their inclusion in the supporting statement, this should be noted, as well as the date of the request.*

*In cases of proposals to transfer Appendix-II species that are subject to actions pursuant to Resolution Conf. 8.9 (Rev.) to Appendix I the proponent should consult the affected range State(s) and, as appropriate, the Animals Committee or Plants Committee. The proponent should state the reasons to justify why the amendment proposal was made. In cases of consultation with Parties via the CITES Secretariat, information from range States and non-range States should be separated.*

*In the case of species that are also managed through other international agreements or intergovernmental bodies, provide details of the consultations undertaken to obtain the comments of those organizations or bodies, and indicate how those comments have been addressed in the supporting statement. Where comments were sought but not received in sufficient time to enable their inclusion in the supporting statement, this should be noted, as well as the date of the request.*

#### **11. Additional remarks**

#### **12. References**

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