

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



Thirteenth meeting of the Plants Committee
Geneva (Switzerland), 12-15 August 2003

Follow-up of CoP12 Decisions

Review of Resolution Conf. 9.24 (Rev. CoP12) [Decision 12.97]

PROPOSAL OF TERMS OF REFERENCE AND SCHEDULE

1. This document was prepared by the Chairman of the Plants Committee, with the collaboration of colleagues from United Kingdom, United States of America and Spain.

Introduction

2. At the 12th meeting of the Conference of the Parties (CoP12) in November 2002, Parties adopted Decision 12.97 containing new terms of reference for the continued analysis and revision of Resolution Conf. 9.24, as follows:

“The Conference of the Parties adopted the following terms of reference for the review of the criteria for amendment of Appendices I and II, to be completed by the 13th meeting of the Conference of the Parties.

- a) *The revised version of Annex 4 of document CoP12 Doc. 58 compiled by the Chairman of the Criteria Working Group (CWG) formed by Committee I during the 12th meeting of the Conference of the Parties (the CWG12 Chairman’s text) will form a basis for further discussion, in recognition of the substantial and constructive efforts contributed by the Parties, the intersessional Criteria Working Group set up at the 11th meeting of the Conference of the Parties, FAO, the Criteria Working Group formed during the 12th meeting of the Conference of the Parties, and others.*
 - b) *The Animals and Plants Committees shall coordinate an open, transparent and broadly consultative process involving all Parties to consider further revision of the CWG12 Chairman’s text.*
 - c) *The process should include reviews of selected taxa, to ensure that the applicability of the criteria and guidelines to a broad array of taxa is assessed, and results of these reviews should be made widely available.*
 - d) *The Animals and Plants Committees shall report to the Standing Committee before a date to be established by the Standing Committee.*
3. At the 49th meeting of the Standing Committee (SC49) in Geneva, Switzerland (22-25 April 2003), the Standing Committee established that the Animals and Plants Committees should submit at the

50th meeting of the Standing Committee (SC50) in March 2004 a progress report on the review of the criteria for amendment of Appendices I and II. At SC49, the Standing Committee also agreed that the review should focus on the finalization of the text in CoP12 Com. I. 3 and that test of the applicability of the criteria should be conducted on a limited number of taxa to be selected by the Animals and Plants Committees.

Proposed approach for completing the review of the listing criteria

4. Given the limited amount of time available to complete the review of the criteria for amendment of Appendices I and II, the Chairman of the Plants Committee proposes the following approach to accomplish the tasks outlined in Decision 12.97, particularly the taxonomic reviews.
5. It seems prudent to conduct the "limited taxonomic review" (called for at SC49) prior to any additional discussions of changes to the criteria themselves. To accomplish this, we propose that the draft revised criteria contained in document CoP12 Com. I. 3 (see document PC13 Doc. 9.4.2) drafted by the Criteria Working Group at CoP12 be used to conduct the taxonomic reviews. This would allow the Plants Committees to identify problems with the current text in CoP12 Com. I. 3 before the document is further revised.
6. To expedite the review process, it proposed that the Plants Committee adopt at their August 2003 meeting the list of taxa contained in Annex 1 for the taxonomic review. This list of species includes taxa:
 - a) from a representative range of major taxonomic groups;
 - b) that have ranges that are geographically varied;
 - c) with diverse life histories (e.g.: timber, geophytic, epiphytic, carnivorous, succulents, parasitic);
 - d) are involved in trade to different degrees and different forms (i.e., live, parts, products, and derivatives); and
 - e) whose biology, distribution, conservation status, population trends, and trade are well-documented (e.g., for which proposals were submitted at recent Conferences of the Parties, were recently reviewed under the Significant Trade Review or Periodic Review of the Appendices processes, etc.).
7. The review would be conducted intersessionally between the meetings of the Plants Committee in August 2003 (PC13) and February 2004 (PC14) by working groups of the Plants Committee. These working groups would be comprised of the Chairman of the Plants Committee, regional representatives to Plants Committee, and observer Parties directly involved in the "limited taxonomic reviews".
8. Within of the Plants Committee, one or two Parties would conduct a coordinated review of a single species with the collaboration, if necessary, of other relevant bodies willing to assist on a voluntary basis. Regional representatives would coordinate reviews carried out by Parties within their respective regions and report to the Chairman.
9. The analyses and conclusions reached by the intersessional working groups of the Plants Committee should be reviewed at a joint meeting of the Animals and Plants Committees in February 2004 taking into account the comments received through Annex 2.
10. To help focus the reviews of the draft revised criteria contained in document CoP12 Com. I. 3, allow for comments on problem areas, and provide a mechanism for recommending specific changes to the criteria to improve them for particular taxa, the reviews should be conducted using the tables in Annex 2.
11. The following proposed timeframe would allow for completion of the tasks in Decision 12.97:

August 12-15, 2003: The Plants Committee discusses the workplan and the list of species for review at its meeting in Geneva, and achieves consensus on objectives and timelines.

16 August - 5 September, 2003: A contact group comprised by the United States, United Kingdom, and Spain finalizes edits to document CoP12 Com. I. 3 and drafts guidelines for conducting the review.

6 September - 31 October, 2003: A formal intersessional working group or groups named by the Plants Committee, along with the Committee Chairman, work toward completing the taxonomic reviews and simultaneously recommending specific changes to Doc. CoP12 Com. I. 3 criteria, if necessary, using the tables in Annex 2. If budget dictates it, this working group could conduct their business by email/post/telephone.

1 November - 30 November, 2003: The Chairmen of the Animals and Plants Committees compile in a table the results of the taxonomic reviews.

5 December 2003: The Secretariat posts the results of the taxonomic reviews on the CITES web site.

5 December 2003 - February 2004: Parties submit comments on the results of taxonomic reviews to the Animals and Plants Committees through their regional representatives.

February 2004: The Animals and Plants Committees hold a joint meeting to analyze the results of the taxonomic reviews, discuss revisions to CoP12 Com. I. 3, and prepare a draft resolution for consideration at the 13th meeting of the Conference of the Parties (CoP13) in October 2004.

March 2004 (SC50): The Chairmen of the Animals and Plants Committees submit draft resolution to the Standing Committee.

May 2004: A final draft resolution is posted on the CITES web site (by the Secretariat) by the 150-day deadline prior to CoP13.

PROPOSED LIST OF TAXA TO EVALUATE THE DRAFT REVISED CRITERIA
CONTAINED IN DOCUMENT COP12 COM. I. 3

CITES-listed Plants

Amaryllidaceae (bulbs)

1. Snowdrops (*Galanthus elwesii*) – United Kingdom (Noel McGough), The Netherlands (Chris Schurmann) and Turkey

Araliaceae (rhizomes)

2. American ginseng (*Panax quinquefolius*) – United States (Robert Gabel) and Canada (Adrienne Sinclair)

Araucariaceae (gymnosperm timber)

3. Monkey-puzzle tree (*Araucaria araucana*) – Chile (Fernando Olave) and Argentina

Bromeliaceae (epiphytes)

4. Tillandsia (*Tillandsia xerographica*) – Guatemala (Mygdalia García), The Netherlands (Chris Schurmann) and Austria (Michael Kiehn)

Cactaceae (succulents)

5. Cactus (*Strombocactus disciformis*) – Mexico (Patricia Dávila)
6. Cactus (*Turbincarpus pseudomacrochele*) – Mexico - (Patricia Dávila)

Zamiaceae (gymnosperms)

7. Cycad (*Zamia furfuracea*) – South Africa (John Donaldson)

Dicksoniaceae (fern)

8. Tree fern (*Cibotium barometz*) – China (Baoguo Zhai)

Droseraceae (carnivorous)

9. Venus flytrap (*Dionaea muscipula*) – United States (Robert Gabel) and United Kingdom (Noel McGough)

Leguminosae (timber / tree)

10. Afrosia (*Pericopsis elata*) – United Kingdom (Noel McGough) and Regional Representative from Africa (Quentin Luke)

Liliaceae (Aloaceae) (medicinal)

11. Aloe (*Aloe ferox*) – South Africa (John Donaldson)

Orchidaceae (orchids)

12. Dendrobium (*Dendrobium nobile*) – Paraguay (Fátima Mereles), China (Baoguo Zhai) and United Kingdom (Noel McGough)

Orobanchaceae (parasitic)

13. Desert cistanche (*Cistanche deserticola*) – China (Baoguo Zhai)

Palmae (palms)

14. Species to be determined – United States (Robert Gabel) and United Kingdom (Noel McGough)

Rosaceae (timber bark)

15. African cherry (*Prunus africana*) – France (Yves-Marie Allain)

Non-listed Plants

Salicaceae (temperate timber; clonal reproduction)

16. Aspen (*Populus tremuloides*) – Canada (Ken Farr)

Taxaceae (temperate timber medicinal)

17. Western yew (*Taxus brevifolia*) – Canada (Ken Farr)

Non-listed Fungi

18. Morel fungus (*Morchella* sp.) – Australia (Greg Leach) and Argentina (Milena Schmidt)

DRAFT WORKING DOCUMENT FOR PROPOSED REVISION OF
RESOLUTION CONF. 9.24 USING DOCUMENT COP12 COM. I. 3

This document has been prepared to aid in testing the proposed revision of Resolution Conf. 9.24, the criteria for amendment of CITES Appendices I and II. The tables included in this document have been designed to simplify the process of evaluating the criteria. The text in the tables has been lifted directly from the draft revised criteria contained in document CoP12 Com.I.3; drafted by the Criteria Working Group at CoP12.

All of the criteria should be read in conjunction with the proposed amendment of Annex 5, "Definitions explanations and guidelines" and a copy of Annex 5 is included in this document. [Special cases, namely the split-listing of taxa and the listing of higher taxa, have not been included in this provisional draft according to Decision 11.2.]

Annex 5

Copied from CoP12 Com. I. 3. With chairs comments removed but proposed changes underlined in explanatory paragraphs left in.

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.

'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.

Affected by trade

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

1. it is known to be in trade, and that trade has or may have a detrimental impact on the status of the species; or
2. it is suspected to be in trade, or there is potential international demand for the species, that may be detrimental to its survival in the wild.

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. 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.). For some species for which data were available to make an estimate, a figure of less than 10,000 km² 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.

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.

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.

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".

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.

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.

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.

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. 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.

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 km² 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.

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. 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.

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...(to be considered in light of any decision arising from consideration of Doc. 12.59)

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.

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.

Small wild population

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.

Very small wild sub-population

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.

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.

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:

- 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
- Threats from disease or invasive species
- Rapid environmental change (e.g., climate regime shifts)
- Selectivity of removals (that may compromise recruitment)

PROPOSED REVISION OF RESOLUTION CONF. 9.24 (COP12 COM. I. 3):
CRITERIA FOR LISTING ON APPENDIX I

Name(s) and affiliation(s) of reviewer(s): _____

If more than one reviewer involved, please provide name of a contact person: _____

Address of contact person: _____

Telephone: _____

Fax: _____

E-mail: _____

Taxon reviewed (include common and taxonomic names): _____

For the taxon under review, please indicate in **Table 1A** whether the criteria for inclusion in Appendix I (listed in Table 1B) are applicable to the taxon. The criteria should be read in conjunction with the definitions, explanations, and guidelines in the proposed amendment of Annex 5. Whenever appropriate, please indicate in **Table 1B** ways in which a criterion and definitions, explanations, and guidelines could be improved and/or quantified to better suit the taxon under review and its relatives. (If you need additional space, please use a separate sheet of paper.)

Notice to reviewers: This review should focus on whether the criteria in Annex 1, and the accompanying definitions, explanations, and guidelines in Annex 5, are biologically sound and applicable for the taxon under review. The purpose of this review is not to determine whether the current listing status of the taxon under review is appropriate.

Once completed, please send paper and electronic copies of the review to the Chair of the Plants Committee.

Proposed revision of Resolution Conf. 9.24 (CoP12 Com. I. 3): Criteria for listing on Appendix I

| Criteria ⤴ | Trade Criterion Is or may the species be affected by trade? | A) | | | | | B) | | | | C) | | D) |
|----------------|--|---|--------|---------|--------|-------|---|--------|---------|--------|---|--------|----|
| | | The wild population is small, and is characterised by at least one of the following (see definitions below): | | | | | The wild population has a restricted area of distribution and is characterised by at least one of the following (see definitions below): | | | | A marked decline in <u>population size</u> in the wild, which has been either (see definitions below): | | |
| <u>Taxon</u> ↓ | | A)(i) | A)(ii) | A)(iii) | A)(iv) | A)(v) | B)(i) | B)(ii) | B)(iii) | B)(iv) | C)(i) | C)(ii) | |
| | | | | | | | | | | | | | |

Comments from reviewer on applicability of criteria for listing on Appendix I

| Criterion | Whenever appropriate, indicate ways in which this criterion and definitions, explanations and guidelines could be improved and/or quantified to better suit this taxon and its relatives. (If you need additional space, please use a separate sheet of paper) For the following specific questions, if a point estimate is not available, please provide a likely range of values (e.g., "about 6,000 – 10,000 individuals") or some kind of rough estimate or inference (e.g., "likely to be less than 500 square kilometers"). Please try to make a numerical guess or give a verbal description and only use DNW (Do Not Know) if there is truly no information available on the quantity in question. |
|--|---|
| Trade Criterion Is or may the species be affected by trade? | |
| A) The wild population is small, and is characterized by at least one of the following (see definitions below): | What was/is the estimated size of the population? Please include units of measurement. |
| A)(i) an observed, inferred or projected decline in the number of individuals or the area and quality of habitat; or | |
| A)(ii) each sub-population being very small; or | What were/are the estimated sizes of the subpopulation(s)? Please include units of measurement. |
| A)(iii) a majority of individuals, during one or more life-history phases, being concentrated in one sub-population; or | |
| A)(iv) large short-term fluctuations in the number of individuals appropriate to measuring population size for the species concerned; | If the population was/is characterized by large short-term fluctuations in the numbers of individuals, what was/is the average magnitude in orders of magnitude? What was/is the average period of fluctuation in years? |
| A)(v) a high vulnerability due to the species' biology or behaviour (including migration). | |
| B) The wild population has a restricted area of distribution and is characterized by at least one of the following (see definitions below): | What was/is the estimated area of distribution? If listing on the basis of one or more sub-populations, what were/are the estimated areas of distribution of the subpopulation(s)? Please include units of measurement? |
| B)(i) fragmentation or occurrence at very few locations; or | |
| B)(ii) large fluctuations in the area of distribution or the number of sub-populations; or | |
| B)(iii) a high vulnerability due to the species' biology or behaviour (including migration); or | |

| | | |
|---------------|---|---|
| B)(iv) | an observed, inferred or projected decrease in any one of the following: | |
| | <ul style="list-style-type: none"> the area of distribution; or | |
| | <ul style="list-style-type: none"> the area of habitat; or | |
| | <ul style="list-style-type: none"> the number of sub-populations; or | |
| | <ul style="list-style-type: none"> the number of individuals; or | |
| | <ul style="list-style-type: none"> the quality of habitat; or | |
| | <ul style="list-style-type: none"> the recruitment. | |
| C) | A marked decline in <u>population size</u> in the wild, which has been either (see definitions below): | <p>Historical extent of decline - To what extent has the population or the area of distribution (please specify which) declined since historical times (i.e., going back 100 years or more if known; else based on whatever information is available)? (Ex. The ____ has declined down to % of the historical levels of ____ years ago.)</p> <p>Recent rate of decline - Characterize the recent (10-20 year) trends in population size or area of distribution (please specify which).</p> |
| C)(i) | observed as ongoing or as having occurred in the past (but with a potential to resume); or | |
| C)(ii) | inferred or projected on the basis of any one of the following: | |
| | <ul style="list-style-type: none"> a decrease in area of habitat; or | |
| | <ul style="list-style-type: none"> a decrease in quality of habitat; or | |
| | <ul style="list-style-type: none"> levels or patterns of exploitation; or | |
| | <ul style="list-style-type: none"> threats from extrinsic human-induced factors such as competition/predation by introduced species or the effects of hybridization, toxins and pollutants; or | |
| | <ul style="list-style-type: none"> a decreasing recruitment | |
| D) | If not included in Appendix I, is likely to satisfy one or more of criteria A-C within 5 years? | |

For criteria **A) (v)** and **B) (iii)**, please check which if any of the vulnerability factors listed below apply:

- | | | |
|---|---|---|
| <input type="checkbox"/> low fecundity | <input type="checkbox"/> specialized niche requirements (e.g. diet and habitat) | <input type="checkbox"/> high degree of endemism |
| <input type="checkbox"/> slow growth rate | <input type="checkbox"/> species associations such as symbiosis and other forms of co-dependency | <input type="checkbox"/> threats from disease |
| <input type="checkbox"/> high age at first maturity | <input type="checkbox"/> fragmentation and habitat loss | <input type="checkbox"/> threats from invasive species |
| <input type="checkbox"/> distorted age, size or sex ratio | <input type="checkbox"/> reduced genetic diversity | <input type="checkbox"/> threats from rapid environmental change (e.g. climate regime shifts) |
| <input type="checkbox"/> complex social structure | <input type="checkbox"/> depensation (prone to continuing decline, even in the absence of exploitation) | <input type="checkbox"/> selectivity of removals (that may compromise recruitment) |
| <input type="checkbox"/> extensive migratory behaviour | | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> strong aggregating behaviour (e.g., schooling) | | |
| <input type="checkbox"/> low population density (for sessile or semi-sessile species) | | |

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

Name(s) and affiliation(s) of reviewer(s): _____

If more than one reviewer involved, please provide name of a contact person: _____

Address of contact person: _____

Telephone: _____

Fax: _____

E-mail: _____

Taxon reviewed (include common and taxonomic names): _____

For the taxon under review, please indicate in **Table 2A** whether the criteria for inclusion in Appendix II (listed in Table 2B) are applicable to the taxon. The criteria should be read in conjunction with the definitions, explanations, and guidelines in the proposed amendment of Annex 5. Whenever appropriate, please indicate in **Table 2B** ways in which a criterion and definitions, explanations, and guidelines could be improved and/or quantified to better suit the taxon under review and its relatives. (If you need additional space, please use a separate sheet of paper.)

Notice to reviewers: This review should focus on whether the criteria in Annex 2, and the accompanying definitions, explanations, and guidelines in Annex 5, are biologically sound and applicable for the taxon under review. The purpose of this review is not to determine whether the current listing status of the taxon under review is appropriate.

Once completed, please send paper and electronic copies of the review to the Chair of the Plants Committee.

Proposed revision of Resolution Conf. 9.24 (CoP12 Com. I. 3): Criteria for listing on Appendix II

| Criteria \Downarrow | Trade Criterion Is or may the species be affected by trade? | A) It is known, or can be inferred, that the regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future. | B) | | C) 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 a non-expert, with reasonable effort, is unlikely to be able to distinguish between them. | D) There are compelling reasons, other than those given in C to ensure that effective control of trade in currently listed species is achieved. |
|------------------------------|--|---|---|--|---|--|
| | | | B)(i) Exceeding, over an extended period, the level that can be continued to perpetuity. | B)(ii) Reducing it to a population level at which its survival would be threatened by other influences. | | |
| <u>Taxon</u> \Downarrow | | | | | | |
| | | | | | | |

Comments from reviewer on applicability of criteria for listing on Appendix II

| Criterion | Whenever appropriate, indicate ways in which this criterion and definitions, explanations and guidelines could be improved and/or quantified to better suit this taxon and its relatives: (If you need additional space, please use a separate sheet of paper) |
|--|--|
| Trade Criterion Is or may the species be affected by trade? | |
| A) It is known, or can be inferred, that the regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future. | |
| B) It is known, or can be inferred or projected, that harvesting of specimens from the wild for international trade has, or may have, a detrimental impact on the species by either: | |
| B)(i) Exceeding, over an extended period, the level that can be continued to perpetuity. | |
| B)(ii) Reducing it to a population level at which its survival would be threatened by other influences. | |
| C) 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 a non-expert, with reasonable effort, is unlikely to be able to distinguish between them. | |
| D) There are compelling reasons, other than those given in C to ensure that effective control of trade in currently listed species is achieved. | |

For criteria **A)** and **B)**, please check which if any of the vulnerability factors listed below apply:

- | | | |
|---|---|---|
| <input type="checkbox"/> low fecundity | <input type="checkbox"/> specialized niche requirements (e.g. diet and habitat) | <input type="checkbox"/> threats from disease |
| <input type="checkbox"/> slow growth rate | <input type="checkbox"/> species associations such as symbiosis and other forms of co-dependency | <input type="checkbox"/> threats from invasive species |
| <input type="checkbox"/> high age at first maturity | <input type="checkbox"/> fragmentation and habitat loss | <input type="checkbox"/> threats from rapid environmental change (e.g. climate regime shifts) |
| <input type="checkbox"/> distorted age, size or sex ratio | <input type="checkbox"/> reduced genetic diversity | <input type="checkbox"/> selectivity of removals (that may compromise recruitment) |
| <input type="checkbox"/> complex social structure | <input type="checkbox"/> depensation (prone to continuing decline, even in the absence of exploitation) | <input type="checkbox"/> Other (please specify) |
| <input type="checkbox"/> extensive migratory behaviour | <input type="checkbox"/> high degree of endemism | |
| <input type="checkbox"/> strong aggregating behaviour (e.g., schooling) | | |
| <input type="checkbox"/> low population density (for sessile or semi-sessile species) | | |