AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. Delist seeds of CYCADACEAE spp. and ZAMIACEAE spp. from Appendix II.

B. PROPONENT

The United States of America.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Cycadopsida

12. Order: Cycadales

13. Family: Zamiaceae

14. Genus and Species: All in Appendix II

141. Part: Seeds only

15. Common Names: English: cycads
French: cycades
Spanish:

16. Code Numbers:

2. Biological Data

The following four points are interrelated:

21. Wild Plants vs. Wild Seeds: The only group in Appendix II to have their seeds regulated at present is the cycads. This has a deleterious effect on wild populations: many collectors instead of applying to collect only seeds, which requires the same effort to obtain a (similarly restrictive) permit as for whole plants, simply apply to collect the whole mature female plant(s). If a permit to export the whole plant(s) (rather than just seeds) is considered not detrimental and is issued, this collection effectively and permanently removes breeding individual(s) from the wild population. Furthermore, individual cycad plants are long lived [the life span is so great that it is unknown, but certainly exceeds 50 years in all cycad species; individuals of some species have been estimated as at least 500 years old (Giddy, 1974)]. The result of removing a mature seed-bearing plant is the effective loss of many years of potential seed production. In contrast, the removal of only seeds or a seed cone eliminates only part of or up to the crop of that year. Removing the plant may in fact have been detrimental to the survival of the species; removing the seeds is likely to have been not detrimental.

22. Wild Plants vs. Artificially Propagated Seeds: Many amateurs and commercial dealers are now trying to raise cycads from seeds produced in cultivation, i.e. artificially propagated. Some cycad

societies (e.g. the American Cycad Society and the Cycad Society of South Africa) are taking the position, and encouraging their memberships, to raise plants from seed rather than obtaining or collecting wild plants. Because cycads are dioecious (male and female individual plants), some people go to great effort to store pollen, establish pollen banks, and exchange pollen with others who have receptive female plants. However, if they then produce seed, they are beset with regulatory problems (e.g. delays) when trying to exchange the seed with others in other countries. Consequently, these people often no longer bother to try to produce seed by artificial pollination. They would only end up with extra seed, and germinate more plants than they could grow or have space for. So again the international market for wild-collected plants is not diminished, because artificially propagated seeds are not easily available.

23. Wild Plants vs. Non Compliance in Regulating Wild Seeds: Cycads as a rule produce copious quantities of seeds: from 1,000 per cone in species with large cones (e.g. Macrozamia moorei F. Muell.) or with many megasporophylls (e.g. Cycas spp.), to 100 per cone in species with small cones (e.g. Zamia pygmaea Sims). The successful germination of the seeds of one cone could produce enough plants to supply the world demand for some of the most highly sought after cycad species. Providing the cultivated plants would effectively reduce the pressure on taking wild plants.

However, the fact that cycads produce such copious quantities of seeds has led one (confirmed) to several countries to conclude that the seeds do not need protective regulation. Therefore, they do not issue export permits for cycad seeds or regulate the exports at all. Consequently, when people order seeds from nurseries or have seeds sent by friends from these countries -- the seeds are confiscated at ports of entry because they lack documentation. (Furthermore, for the most part, confiscated seeds may be wasted if they go into a general rescue center: either the seeds do not germinate or the cycads do not live, or the cycads live but may not be put to their best use because there is no one knowledgeable about those species.) The result is deleterious to some to all wild cycads in these countries (the confirmed country has four cycad genera, three endemic with about 17 species): seeds are no longer collected or exchanged, because permits will not be issued, and unpermitted seeds may be confiscated, forfeited and misused - instead, wild plants are obtained and shipped because permits for wild plants are issued! Thus, the efforts to regulate seeds to maintain wild populations once again are counterproductive.

24. Propagation Preventing Extinction in the Wild: The efforts of individuals and botanical gardens to produce seeds of cycads have resulted in the prevention of extinction in the wild of some taxa. For example, the distribution of seed of Microcycas (Appendix I) from cultivated plants has probably done a good deal to save this monotypic genus. It effectively eliminated the extremely high prices for stolen and other illegally obtained plants, to the point where it is no longer economically feasible to obtain Microcycas by illicit means.

25. Incentives for Traders: As a final comment, the goal of having free exchange of Appendix II cycad seeds will reinforce the stand of cycad societies to encourage their members to produce seed from cultivated plants, or if not available, to grow plants from wild-collected seed, rather than to grow the wild-collected plants. It is necessary to have such viable alternatives for cycad societies and others, since the demand for cycads will continue, to reduce pressure on wild populations from which even established, reproductive individuals now are removed. This pressure is very real. For example, within 6 months after Ceratozamia norstogii D. Stevenson was described (in 1982), commercial collectors had extirpated one of the two known populations by taking in excess of 2'000 plants. Ceratozamia was uplisted to Appendix I in 1985.

3. Additional Remarks

31. Specialists' Support: The supporting evidence for these conclusions are in the main derived from the experience over the past 15 years of Dr. Dennis Wm. Stevenson (New York Botanical Garden), the Deputy Chairman of the IUCN SSC Cycad Specialist Group. These views have been discussed with the Chairman of the Cycad Group (Dr. Knut Norstog, Fairchild Tropical Garden), and on behalf of the Group were presented to and accepted by the CITES Plants Committee at its November 1988 meeting. Dr. Stevenson is considered the leading expert on the systematics and biogeography of cycads; he is preparing a monograph of the New World species. (Originally, he favored the listing of Appendix II cycad seeds in 1985 and was opposed to considering their delisting. He has changed his viewpoint as a result of: (1) further field experience, (2) his observations on the population biology of cycads, (3) recognition of the successful propagation of cycads by seed in botanical gardens and by amateurs, (4) increasing knowledge of the practices of commercial and amateur cycad collectors, and (5) observing the consequences since CITES began regulation of the seeds of Appendix II cycads on 1 August 1985).

32. Appendix I Seeds: By the definition of Appendix I species, readily recognizable parts and derivatives are included, and thus seeds are regulated. In the United States, we interpret this definition to mean that all the parts (e.g. seeds) are regulated even when the specimens are artificially propagated for commercial purposes, and therefore "deemed to be specimens of species included in Appendix II" (Article VII, paragraph 4; see also Resolution Conf. 2.12). That is, we do not believe that a part of an Appendix I species can be delisted automatically when the specimen is artificially propagated for commercial purposes, but that the part is listed again when artificially propagated for non commercial purposes (Article VII, paragraph 5), and that the part again is listed when the specimen is from the wild. Therefore, the artificially propagated seeds of Appendix I cycads will remain regulated in the United States, and are not affected by this proposal. We recognize that some Parties interpret this subject differently, and do not regulate the Appendix I seeds produced by artificial propagation for commercial purposes. Some discussion above might favor no regulation of Appendix I seeds, whether artificially propagated or from the wild, but additional considerations may apply.

4. Reference:

Giddy, C., 1974. Cycads of South Africa. Purnell, Cape Town, South Africa. 122pp. 122 pp.