AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Transfer of Latimeria chalumnae from Appendix II to Appendix I.

B. PROPONENT

The Federal Republic of Germany.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Osteichthyes

12. Order: Coelacanthiformes

13. Family: Coelacanthidae

14. Species: Latimeria chalumnae Smith

15. Common Names:

| | |
|---|---|
| English: | coelacanth |
| French: | coelacanthe |
| Spanish: | Celacanto |
| German: | Komoren-Quastenflosser |
| Local: | Kombessa |

16. Code Numbers:

2. Biological Data

21. Distribution: The coelacanth has a narrow geographical range. Latimeria chalumnae has been caught by resident fishermen on the islands of Grande Comores and Anjouan (Comores) and in the western Indian Ocean during the last twenty years at depths of 70-600 m, but the majority between 70-300 m (Fricke, 1987; Bruton, 1988). The lower depth limit is not known (Fricke & Plante, 1988).

22. Population: Latimeria chalumnae, the largest living fossil among the vertebrates with its unique key position for the evolution of land-living vertebrates, is threatened with extinction (Fricke, 1987; Bruton, 1988).

The only known population of coelacanths is found in the Comores Archipelago (Bruton, 1988).

Along the East and West coasts of Grande Comores there is a dense screen of traditional fishing territories and first signs of over-fishing are noticed. The high fishing activity as well as the number and density of fishing territories have consequences for the fishing of Latimeria. According to Fricke Latimeria has no surviving-chance near fishing-villages.

The number of recorded specimens is too small to evaluate the size of the reproductive population.

At the moment the "Japanese Intergovernmental Aid" improves the fishing-tackle and motorizes the fishing-boats of the local fisherman. Also remote parts of the islands are exposed to increasing fishing effort: so it is also here threatened.

In spite of a more intensive fishing in the last years the number of caught Latimeria specimens has not increased proportional to the "fishing effort". It seems that the reproductive population is already decreasing (Fricke, 1987).

23. Habitat: Only little is known about the habitat of Latimeria chalumnae. Professor Fricke has studied the biology of this fish with a submersible. Latimeria lives at depths below 120 m (Fricke & Plante, 1988).

It is a nocturnal piscivorous drift-hunter which moves very slowly (Fricke & Plante, 1988). The coelacanth feeds on small, bottom-living deep reef fishes such as snappers, cardinal fishes and lanternfishes, as well as on cuttlefish (Bruton, 1988).

The coelacanths have a low fecundity, a long generation time and a specialist's life style, and evolved in a relatively stable environment. They are therefore likely to be vulnerable to unnatural perturbations, such as those caused by Man (Bruton, 1988).

3. Trade Data

31. National Utilization: Latimeria chalumnae is reputed to be unpalatable. It is caught by accident mainly during night on handlines while fishing for the oilfish Ruvettus or other food fish (Fricke, 1987; Bruton, 1988).

32. Legal International Trade: The Government of the Comores pays US$ 500-800 for each fished specimen. The FAO expert on fishing, Mr. Perrel, estimates that about 200 specimens have been caught. According to Bruton (1988) at least 130 coelacanths have been caught since 1952 (an average of 3.6 p.a.), and the number might be as high as 180. The number caught per annum has ranged from 1 to 8 but occasionally up to 12 individuals ave been caught. Although many museum-specimens are well documented, accurate catch statistics are not available (Bruton, 1988).

There is a worldwide market for coelacanths, and the Comores Government has even advertised coelacanths for sale (Bruton, 1988). Prepared Latimeria specimens have been used as official presents by the government or as trophies for tourists (Fricke, 1987).

In 1985 two specimens of Latimeria chalumnae were imported from South Africa to the USA (WTMU Trade Data). Caught specimens are usually recorded and deep frozen by the "Ministry for Production" in Moroni (GC). The sale of these specimens seems to depend on the demand of the market (Fricke, 1987).

33. Illegal Trade: According to Fricke illegal trade is likely to exist (see Annex 1).

The Comores Government enforces CITES by requiring that all coelacanths caught must be sold to the government, who are then responsible for further trade, but there is insufficient control. A black market in coelacanths has developed, particularly to Japan where there are rumours that the notochord fluid has life-preserving properties (Bruton, 1988).

34. Potential Trade Threats: There exists a great interest in this unique and rare fish especially for the museums. According to Fricke there in not only a vigorous trade for museums but also for aquariums which are interested to keep coelacanths for public displasy. Increasing trade can be expected if Latimeria chalumnae would become more available.

Recently an American group from the Explorers Club, in collaboration with the New York Aquarium, has placed an advertisement in the International Game Fish Association newsletter calling for volunteers (who have to pay $ 4,000 each) to participate in an expedition to cath a live coelacanth and take it bach to the USA (Bruton, 1988).

In November 1988 a Japanese expedition has visited the Comores. They will try to catch a coelacanth in 1989 (Fricke in lit., 1988).

It is said that a Japanese expedition of a medical-technical college buys specimens for pharma-medical research. If a pharmaceutic importance of Latimeria chalumnae could be substantiated the price and the illegal trade in this species would go up.

Coelacanth specimens fetch $ 500 to $ 1,000 on the open market although Comoran fichermen are only paid about $ 150 by the government. The latter sum nevertheless equals 3 or more years income for a fisherman and is therefore a considerable incentive for him to catch a coelacanth. Therefore, we suspect that coelacanths may now be targetted by Comoran fishermen. They modify their gear and fishing techniques to increase the likelihood of catching coelacanths, while still relying on the oilfish Ruvettus pretiosus and other food fish for their normal income (Bruton, 1988).

4. Protection Status

41. National: Latimeria chalumnae may be exported with a permit of the Government.

42. International: The species is included in Appendix II of CITES since the Washington Conference.

43. Additional Protection Needs: Also in the future Latimeria chalumnae will be caught by deep sea fishery. The fishes are pulled to the surface from 200-300 m depth. Within few hours they will die as the result of decompression and respirational stresses. A few may survive if they are given back into the water at once. But as long as caught specimens are officially bought by the government no fisherman will give them back into the water.

Latimeria chalumnae should be included in Appendix I of CITES and all sale and trade in this species should be stopped.

5. Information on Similar Species

6. Comments from Countries of Origin

7. Additional Remarks

The American Society of Ichthyologists and Herpetologists, meeting at the New York State Museum, Albany, New York, 21-26 June 1987 unanimously recommended to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) that the coelacanth should be retained on Appendix II of CITES, with prudent consideration given to placing the coelacanth on Appendix I of CITES (American Society of Ichthyologists and Herpetologists, 1987).

8. References

American Society of Ichtyologists and Herpetologists, 1987. Annual Business Meeting, 24 June 1987. Copeia, No. 4: 1112.

Bruton, M.N., 1988. The conservation of the coelacanth. (unpublished).

Fricke, H., 1987. Massnahmen und Vorschläge für den Schutz des Quastenflossers Latimeria chalumnae. Report to WWF-Germany and to the Zoological Society, Frankfurt.

Fricke, H. (Max-Planck-Institut für Verhaltensphysiologie, Seewiesen) in lit. to L. Klös, 14 December 1988.

Fricke, H. & R. Plante, 1988. Habitat Requirements of the Living Coelacanth Latimeria chalumnae at Grande Comore, Indian Ocean. Naturwissenschaften 75: 149-151.

Annex 1 — List of unpublished records of the coelacanth (*Latimeria chalumnae*) (Fricke, 1987; Fricke in lit., 1988):

| | | |
|---|---|---|
| 1. | 1 specimen | "Haus der Natur", Salzburg, Austria |
| 2. | 1 specimen | Naturkundemuseum, Wien, Austria |
| 3. | 1 specimen | Geologisch-Palaeontologisches Institut Basel, Switzerland |
| 4. | 2 specimens | CNDRS Institut, Moroni, Comores |
| 5. | 3 specimens | private house, Mudsamudu, Comores (seen by H. Fricke) |
| 6. | 1 specimen | private house, Moroni, Comores (seen by H. Fricke) |
| 7. | 2 specimens | bought from Lindblad Explorere Club, USA in July 1986 witness: Jean Pierre Geraud, Moroni, Comores (Address known to H. Fricke) |
| 8. | 1 specimen | private property of a French captain, oral communication by port captain of Mudsamudu, Anjouan witness: P. Ansfield, H. Fricke, R. Plante |
| 9. | 3 specimens | bought from Japanese Scientific Coelacanth Expedition (published record in 1985) |
| 10. | 1 specimen | restaurant in Anjouan, Comores |
| 11. | 1 specimen | owned by the President of the Comores |

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Sehr geehrte Frau Klös !

Haben Sie Dank für Ihren Brief. Das Beste ist, ich sende Ihnen einen Schrieb von Mike Bruton über conservation of the coelacanth. Bitte, senden Sie mir dieses Papier wieder zurück. Darin sind sehr viel interessante Daten, die Sie einbringen sollten. Ich kann Ihnen auch mitteilen, daß eine japanische Vorexpedition im November auf den Comoren war und jetzt im nächsten Jahr mit aller Macht versuchen will, einen Quastenflosser zufangen. Zur Liste der unrecorded specimens ist zu addieren, daß in einem Restaurant auf Anjouan ein Exemplar aushängt. Auch ist ein Exemplar im Besitzt des Präsidenten. Über das Habitat vom Latimeria ist jetzt eine Arbeit von mir erschienen. Ich bin gerne bereit, Ihre evidierte Version durchzusehen. Gut, daß jetzt etwas in Bewegung gerät. Ich grüße Sie sehr herzlich und wünsche Ihnen schöne Festtage.

Ihr

14.12.88