

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



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Periodic review of animal taxa in the appendices

REVIEW OF *PROBARBUS JULLIENI*

This document is an addendum to document Doc. AC.16.8.1.

Appendix I criteria

Criteria⇒	A					B				C		D	Trade Criteria				Appendix I (Y/N)	Application problems
	The wild population is small, and is characterized by at least one of the following (i-v):					The wild population has a restricted area of distribution and is characterized by at least one of the following (i-iv):				A decline in the number of individuals in the wild, which has been either (i-ii):		If not included in AI, species would satisfy A, B or C within 5 yrs	At least one of the following (i-iv):					
Taxon ↓	i	ii	iii	iv	v	i	ii	iii	iv	i	ii		i	ii	iii	iv		
<i>P. jullieni</i>	N1	N2	N1	N3	N2	N2	N1	Y	Y	Y	Y	[Y]	Y	-	Y	Y	Y	

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Key: Y taxon satisfies the criteria
 N1 taxon does not meet the criteria: sufficient information
 N2 taxon does not meet the criteria: insufficient information
 N3 taxon does not meet the criteria: no information

Appendix-I biological 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
- ii) each sub-population being very small; or
- iii) a majority of individuals, during one or more life-history phases, being concentrated in one sub-population; or
- iv) large short-term fluctuations in the number of individuals; or
- 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:

- i) fragmentation or occurrence at very few locations; or
- ii) large fluctuations in the area of distribution or the number of sub-populations; or
- iii) a high vulnerability due to the species biology or behaviour (including migration); or
- iv) an observed, inferred or projected decrease in any one of the following:
 - the area of distribution; or
 - the number of sub-populations; or
 - the number of individuals; or
 - the area or quality of habitat; or
 - reproductive potential.

C. A decline in the number of individuals 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:
 - a decrease in area or quality of habitat; or
 - levels or patterns of exploitation; or
 - threats from extrinsic factors such as the effects of pathogens, competitors, parasites, predators, hybridization, introduced species and the effects of toxins and pollutants; or
 - decreasing reproductive potential.

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.

Review of CITES appendices: *Probarbus jullieni*

Reviewer: United Kingdom Scientific Authority (Animals)

Comments on applying the Appendix I criteria to *P. jullieni*.

Insufficient information. One of the major limitations on the assessment as a whole was the absence of recent, comprehensive information from a variety of range states. However, sufficient information was available from an adequate part of the range to complete the assessment.

A Small population size.

The population of the species is probably not small but there is little hard data on population size on which to make any assessment. However, it does not appear to make sense for this or other similar aquatic species, which may be highly fecund and give rise to thousands of eggs, fry or larvae, to make assessments on population size which include all individuals in a population. In line with the IUCN Red List criteria, it may make more sense in population terms (and in assessing vulnerability to exploitation) to make estimates of population size based on numbers of mature individuals that are able or likely to reproduce. This point was also highlighted at the FAO consultation in Rome in June 2000. Amendments to the current guidelines of what constitutes a small population would not necessarily be required.

B Restricted area of distribution

This species was considered to have a restricted area of distribution because it is confined to no more than 6 river systems or water bodies. It was not possible to measure, at an appropriate scale, the area occupied by the species in square kilometres; this assessment was made even more difficult by the linear nature of the species' river habitat. However, the guidance notes in 9.24 suggest that area of distribution should be taken as the smallest area essential at any time for the survival of the species. As the species migrates upstream to spawning grounds which are even more restricted in area these are more critical to the assessment. However, the extent of these is not known to the reviewer and, therefore, an accurate assessment of the area of distribution was not possible.

Bi. It was not possible to determine whether the species occurred at 'very few locations' (criterion Bi) for the reasons outlined above. However, guidance may be helpful to interpret this criterion, in advising on what constitutes a 'location' or what is meant by 'very few'. In this case, the IUCN Red List definition of locations was used and was used here to refer to spawning sites (but no details were available on the number of such sites). However, application of the term to linear habitats such as rivers may be problematic.

Biii. The species was judged to have a high vulnerability due to its need to migrate to upstream spawning sites.

Biv. The species was judged to meet this criterion on the basis on a decline in the area and quality of habitat (e.g. due to dams flooding spawning sites and preventing migration), the area of distribution (due to local extirpations / reductions) and a decline in reproductive potential (due to loss of spawning sites etc). However, guidance would be useful on what is meant by reproductive potential – a loss of mature breeding age animals (see earlier comments on criterion A) or breeding sites??

Criteria C & D.

No major difficulties encountered in applying these criteria. Declines were evidently not part of a managed programme to reduce the population to a planned, non-detrimental level nor attributable to natural fluctuations.

Overall

The species was judged to meet the criteria for listing under Appendix I of the Convention.

LV Fleming

UK Scientific Authority (Animals)

17 July 2000.