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

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## CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II



Proposal Summary – Freshwater Sawfish Pristis microdon

#### Proposal

Transfer of the freshwater sawfish *Pristis microdon* from Appendix II to Appendix I in accordance with Criteria A (i) and (v), B (i), (ii), (iii) and (iv), and C (i) and (ii) in Annex 1 of Resolution Conf. 9.24 (Rev. CoP15) to align its status with and complete the Appendix I listing for the entire family Pristidae.

## Proponent

Australia.

## Rationale

*P. microdon* qualifies for inclusion in Appendix I because it is a gravely threatened species that has disappeared from most of its former range but is still subject to illegal fishing and bycatch in coastal fisheries. Appendix I listing will align the species' CITES status with that of all other Pristidae species, facilitate enforcement, and potentially help to reduce global demand for live sawfish or sawfish parts that may perpetuate targeted exploitation.

## **IUCN Red List Status**

Critically Endangered globally<sup>1</sup>.

## **Description and Life History**

The freshwater sawfish is a large, shark-like fish with a distinctive 17–24cm saw-like snout, or rostrum. Adults can grow to over 6m in length, and can live at least 28 years and possibly much longer. The species inhabits the sandy or muddy bottoms of shallow coastal waters, river mouths, estuaries, freshwater rivers (up to 400km upstream) and water holes, with adults generally inhabiting marine areas.

*P. microdon* is considered to occur/have once occurred in the Indo-West Pacific throughout the coastal areas of South and Southeast Asia, Australia, and possibly the Red Sea and Southeast Africa. However, the species is today believed to be locally extinct throughout much of its former range.

*P. microdon*, along with all members of the Pristidae family, is vulnerable to both intrinsic and extrinsic factors. The species is characterized by very low

productivity, and populations are fragmented into subpopulations that display very strong female philopatry, resulting in limited opportunities for re-establishment in the event of population declines. Habitat degradation and loss are a major threat to freshwater sawfish, as they rely on a number of very specific habitat types (e.g., mangroves and estuaries) for different phases of their lives; they are very sensitive to and affected by urban development and pollution in coastal zones. In addition, the species' rostrum significantly increases its susceptibility to entanglement in fishing gear and shark nets installed around coastal bathing areas and associated incidental mortality.

## **Population Trends**

*P. microdon* has suffered severe historic declines since the 1960s. Once found in many coastal areas in the Indo-West Pacific, it is now presumed extinct over most of the region; the fragmented populations found in northern Australia are probably the only viable population of this species remaining in the world today.

There are no empirical long-term data documenting population trends in *P. microdon* anywhere in its historic range, but anecdotal evidence and landing records strongly suggest major and rapid declines across most areas where it has occurred. These include reports from Borneo, where freshwater sawfish were common in the 1970s but had practically disappeared by the 1990s. Fishermen in Indonesia have stated that they have not seen the species in the last two decades. Similar stories are told of the species' demise in Papua New Guinea, largely as a result of the shift from traditional to gillnet fishing gear, and in the Cambodian Mekong region, where once regularly seen freshwater sawfish have been absent for several decades.

## **Economic Importance**

*P. microdon* was formerly actively targeted in fishing operations but is now predominantly taken as incidental catch. Landings over most of its original range appear to be extremely rare, although official catch data are largely unavailable. Recent cumulative risk assessments of elasmobranchs in northern Australia identified the freshwater sawfish as the species most at risk, with gillnet and trawl fisheries posing the greatest threat to these last viable populations.

<sup>1</sup> The full IUCN Red List species assessment and supporting documentation for *Pristis microdon* and details of the IUCN Red List and Red List Categories and Criteria are available at: www.iucnredlist.org

The only remaining targeted fisheries are those which supply the aquarium fish trade. Since 1998, an estimated 30 to 40 individual freshwater sawfish have been collected from the wild in Australia for the aquarium trade, and most of these were traded before the species was listed in Appendix II in 2007.

### International Trade

International trade in *P. microdon* is only permitted from Australia to appropriate and acceptable aquaria, primarily for conservation purposes, in accordance with the CITES Appendix II annotation for the species. Since the time of the 2007 Appendix II listing until the cessation of exports by the Australian government in 2011, nine live specimens of the species were exported from Australia. The Australian states of Queensland and Northern Territory continue to allow very limited collection of freshwater sawfish for select domestic aquaria.

#### Illegal Trade and IUU Fishing<sup>2</sup>

Freshwater sawfish have been identified in the catches of IUU fishing vessels, and live specimens have been released from illegal fishing nets by Australian fisheries inspectors. There is understood to be some illegal trade in sawfish rostra and fins, but the extent and impact are unknown.

#### Legal Status

The current CITES Appendix II listing of *P. microdon* (allowing exports from Australia only) is the only

2 IUU fishing is defined by the FAO as: illegal, unreported, and unregulated fishing

international measure affecting this species. At the national level, management measures and legal protections for the species have been established by many countries, including Australia, Bangladesh, India, Indonesia, Malaysia, and Myanmar. In Australia, no commercial or recreational fishing of *P. microdon* is permitted in the states of Queensland and Western Australia, and specimens cannot be retained without a permit in the Northern Territory.

The Australian government is also currently preparing a recovery plan for the country's three Pristidae species with the aim of maximizing their long-term survival in the wild.

#### **CITES History**

All Pristidae sawfish species were listed in CITES Appendix I at CoP 14 (The Hague, 2007), a decision that was fully supported by the UN Food and Agriculture Organization Expert Panel that reviewed that and other CITES marine proposals. However, the listing was subsequently modified by Australia for inclusion of its populations of the species in Appendix II because it was thought that those populations were sufficiently robust to support a small off-take to provide specimens to recognized public aquaria. New information from genetic studies has since shown that any reduction in female abundance in one region is not likely to be replenished by migration from another region, indicating that these populations are more vulnerable than previously thought.

