

Giant Guitarfishes

Family *Glaucostegidae* - Proposal 43

PROPOSED ACTION: Include in CITES Appendix II the Blackchin Guitarfish (*Glaucostegus cemiculus*) and the Sharpnose Guitarfish (*Glaucostegus granulatus*) based on population declines, and all other Giant Guitarfishes (*Glaucostegus* spp.) based on their similarity of appearance.

PROPOSONENTS

Bangladesh, Benin, Bhutan, Brazil, Burkina Faso, Cabo Verde, Chad, Côte d'Ivoire, Egypt, European Union, Gabon, Gambia, Maldives, Mali, Mauritania, Monaco, Nepal, Niger, Nigeria, Palau, Senegal, Sierra Leone, Sri Lanka, Syrian Arab Republic, Togo and Ukraine



Wedgefishes

Family *Rhinidae* - Proposal 44

PROPOSED ACTION: Include in CITES Appendix II the two species known as White-Spotted Wedgefish (*Rhynchobatus australiae*) and *Rhynchobatus djiddensis*) based on population declines, and all other species in family Rhinidae based on their similarity of appearance.

PROPOSONENTS

Bangladesh, Benin, Bhutan, Brazil, Burkina Faso, Cabo Verde, Chad, Côte d'Ivoire, Egypt, Ethiopia, European Union, Fiji, Gabon, Gambia, India, Jordan, Kenya, Lebanon, Maldives, Mali, Mexico, Monaco, Nepal, Niger, Nigeria, Palau, Philippines, Saudi Arabia, Senegal, Seychelles, Sri Lanka, Sudan, Syrian Arab Republic, Togo, and Ukraine



OVERVIEW

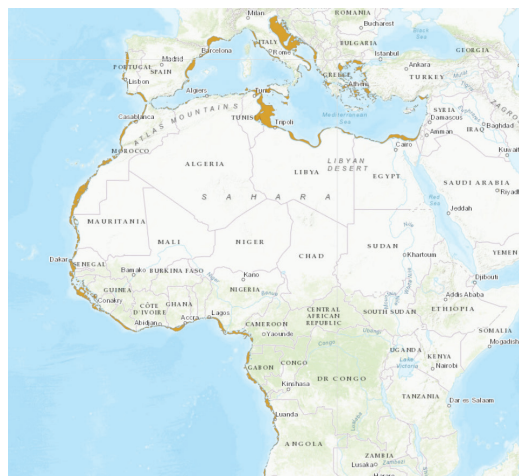
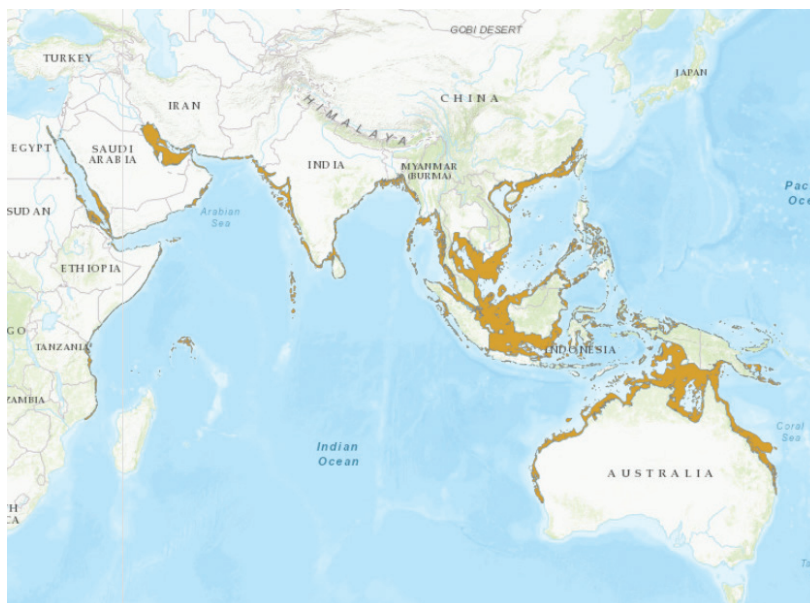
Giant Guitarfishes (family Glaucostegidae) and Wedgefishes (family Rhinidae), collectively known as Rhino Rays, have recently been deemed the world's most threatened marine fishes. All but one of these 16 shark-like ray species have been assessed as Critically Endangered based on IUCN Red List criteria. Their fins are among the most valuable in the global shark fin trade. Low reproductive rates make them inherently vulnerable to overexploitation, while the coastal fisheries that target or retain them as bycatch are poorly monitored, essentially unregulated, and increasingly intense. Parts from these species are often landed and traded together. CITES listing is warranted to limit exports, prompt urgently needed national protections, improve fisheries and trade data, and complement commitments under other international instruments, thereby increasing the chances of preventing extinction and reversing declines.

BIOLOGY & DISTRIBUTION

Giant Guitarfishes and Wedgefishes (Rhino Rays) are primarily tropical coastal species found in shallow waters, often on sandy bottoms. Although their specific life history characteristics are not well known, like most sharks and rays, they have relatively low reproductive rates that leave their populations highly susceptible to overfishing. Females typically give birth to fewer than 20 pups per litter. Giant Guitarfishes and White-Spotted Wedgefishes can grow to three meters in length. The maximum age reported for a Giant Guitarfish is 19 years.



DISTRIBUTION MAPS

*Glaucostegus cemiculus**Glaucostegus granulatus**Rhynchobatus djiddensis**Rhynchobatus australiae*

THREATS AND FISHERIES

While climate change and degradation of coastal habitats puts Rhino Rays at risk, the principal threat to these species is overexploitation from essentially unregulated fisheries across most of their range. They are targeted and retained as incidental catch (often before they are mature) in small and large-scale operations using a variety of gears. Such fishing pressure has mostly been increasing in recent decades, particularly in Mauritania, Senegal, Madagascar, India, and the Red Sea.

Rhino Rays are specifically targeted in Africa, India, and the Indo-Malay Archipelago. Guitarfishes have accounted for substantial proportions of the coastal fisheries catch of many countries, including Sierra Leone, Guinea-Bissau, Turkey, and Kuwait. FAO reports 5000t of "Guitarfish" landed globally in 2014; this is likely an underestimate given general under-reporting and misidentification of ray and shark species, as well as particular confusion associated with two overlapping species that are both called White-Spotted Wedgefish.

USES AND TRADE

Central to the fishing pressure and consequent decline of Rhino Rays is the demand for their fins (for use in celebratory Asian soup). The “white fins” produced from shark-like rays -- Guitarfishes, Wedgefishes, and Sawfishes -- are the most valuable in the global shark fin trade. In a recent study in the major shark fin hub of Singapore, *R. australiae* was the most common species found in sampled products labeled as “shark” (17%). Typically selling for hundreds of \$US/kg in Hong Kong and mainland China, “white fins” from very large rays can reportedly fetch nearly US\$1000/kg. As a result, Rhino Ray fins are sourced from all over the world for export to Asia.

Rhino Ray meat is considered good quality. It is consumed locally and sometimes also exported. Records show large, whole Wedgefishes being traded for almost US\$700 each. In Southeast Asia, particularly Singapore, Giant Guitarfish snouts are steamed; the gelatinous filling is considered a delicacy. Rhino Ray eggs are sometimes dried and consumed locally. Skins can be processed and traded internationally as a luxury leather while dorsal thorns are sometimes used for jewelry. Heads may be processed for fish meal or fertilizer.

POPULATION STATUS

Where Giant Guitarfishes and White-Spotted Wedgefishes were once common, they are now increasingly rare. Several populations around the world are estimated to have declined by 80% or more, while two species appear close to extinction. The IUCN Shark Specialist Group has recently assessed all Giant Guitarfishes and Wedgefishes according to Red List categories. Fifteen of the 16 species meet the Critically Endangered criteria, making Rhino Rays the world's most threatened marine fish.

In India, Sharpnose Guitarfish landings declined by 94% over five years from 2002. West African Blackchin and Sharpnose Guitarfish populations have declined up to 80% over the past three generation periods. Senegal's Giant Guitarfish landings fell by 80% in just seven years (1998-2005). The False Shark Ray (*Rhynchorhina mauritaniensis*), which has a very restricted range off Mauritania, appears close to extinction. Local extinctions of Blackchin Guitarfish are apparent in the northern Mediterranean. In the United Arab Emirates (UAE), the Sharpnose Guitarfish population is estimated to have declined as much as 80% over the past three generations. Giant Guitarfish and Wedgefish landings at one western India landing site declined 86% from 2002 to 2007. Anecdotal reports and fisheries data indicate serious depletion in Pakistan and Iran as well.

Scientists estimate that *R. australiae* and *R. djiddensis* populations have declined by more than 80% over the last three generations (45 years). Similar depletion has been noted throughout both species' range. The Clown Wedgefish (*Rhynchobatus cooki*), which has a very restricted range around the Indo-Malay Archipelago, appears close to extinction. Of all the Giant Guitarfishes and Wedgefishes, only Australia's Eyebrow Wedgefish (*Rhynchobatus palpebratus*) is not assessed as Critically Endangered, owing to relatively low fishing pressure and basic fisheries management.

CONSERVATION MEASURES

Globally, there are very few fishing limits specific to Rhino Rays. Only one region has an international ban for only one of these species, and it is not yet well implemented. Only eight of the 88 range states impose specific Giant Guitarfish and Wedgefish fishing restrictions, some of which are ill-designed.

The General Fisheries Commission for the Mediterranean (GFCM) has prohibited retention, transshipment, landing, storage, and sale of Blackchin Guitarfish. The 2012 ban is based on the species' 2001 listing under Annex II (Endangered or Threatened Species) of the Barcelona Convention's Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean. The European Union has issued a Guitarfish prohibition accordingly, but the GFCM measure is not yet well-implemented in north African range states.

Rhynchobatus australiae was listed on Appendix II of the Convention on the Conservation of Migratory Species (CMS) in 2017; CMS Parties have thereby committed to cooperate toward conserving the species. In 2018, *R. australiae*, *R. djiddensis*, and *R. laevis* were added to Annex I of the CMS Memorandum of Understanding on the Conservation of Migratory Sharks, which aims to facilitate conservation efforts. No specific Wedgefish measures have been adopted as a result of these listings, to date.

The UAE has protected all Rhino Rays and banned shark fin exports. South Africa protects *R. djiddensis*. India protects *G. granulatus* and *R. djiddensis*, although the latter species does not occur there; *R. australiae* and *R. laevis* are found off India but not protected. In Pakistan, all Guitarfishes and Wedgefishes are protected in Balochistan province. A 30 cm minimum size adopted for Guitarfishes and Wedgefishes caught in Sindh province, however, is below the size-at birth of all Wedgefishes and most Giant Guitarfishes, and therefore not effective to protect juveniles. Senegal has size limits of ~100 cm for Blackchin Guitarfish.

National trawling bans in the UAE, Qatar, and Oman can help conserve Rhino Rays. Seasonal and/or localized trawling bans in other range states, such as Malaysia, may also benefit the species. Northern Australia offers some refuge for *R. ancylostoma*, *R. australiae*, *R. palpebratus*, and *G. typus*, as fisheries are generally managed (including with turtle excluder devices that help reduce mortality of large rays caught in trawls) and fishing pressure is relatively low.

Several countries, including Kuwait, Israel, Saudi Arabia, and Sudan have general bans on shark and/or ray fishing. Range states that have marine protected areas that could benefit Giant Guitarfishes and Wedgefishes include Guinea-Bissau and Mauritania. These conservation efforts would benefit from enhanced enforcement and complementary actions for adjacent areas.

Bans on shark finning (slicing off a shark's fins and discarding the body at sea) have been adopted by many range states, including UAE, Oman, Iran, Israel, and Australia, in addition to much of West Africa. These bans could reduce Rhino Ray fishing mortality in cases where enforcement levels are high and interest in the species' meat is low. Many finning ban enforcement standards, however, are weak while demand for Rhino Ray meat is strong. Fins are also still traded when the animals are landed whole.



Photo Credit: Shaahina Ali and Atoll Editions

EXPERT ADVICE

The 2019 FAO expert advisory panel noted that a properly implemented CITES Appendix II listing “could be expected to result in better monitoring and reporting of the catches entering international trade” and that “improved monitoring should enable new or enhanced assessments of stock status, as well as the subsequent adoption of management measures ensuring the sustainability of harvests, where still permitted.”

The IUCN-TRAFFIC analyses for both Giant Guitarfishes and Wedgefishes conclude that “it is likely that for all of the species in this family, regulation of trade is required to ensure that harvest from the wild is not reducing populations to levels where survival might be threatened by continued harvest or other influences” and that “due to difficulties in differentiating the species in the form that they are traded in, if any of the species are considered to meet the criteria then all should be listed.” The analyses note that the Giant Guitarfishes already meet the biological criteria for Appendix I.

Because of concern over the exceptionally high extinction risk facing Giant Guitarfishes and Wedgefishes, the IUCN Shark Specialist Group prioritized the publication of the 16 updated Red List assessments and is considering a Global Conservation Strategy for the two families.

NEED FOR ACTION

Listing Giant Guitarfishes and Wedgefishes under CITES Appendix II would be:

- Essential to ending dangerously unsustainable international trade;
- Helpful for prompting the fishing limits needed to prevent extinction;
- Pivotal for improving much-needed data on fisheries and trade;
- Complementary to several national, regional, and global conservation commitments;
- In line with the listing criteria and expert advice;
- Beneficial in mitigating associated negative effects on ecosystems and economies; and
- Transformative for improving traceability, in line with pending recommendations for Parties (agenda item 42).

OUR COALITION URGES CITES PARTIES AT COP18 TO:

Support Proposals 43 & 44 to add Giant Guitarfishes & Wedgefishes to CITES Appendix II.

REFERENCES: Information in this fact sheet is based on the relevant listing proposals, analyses by IUCN and TRAFFIC, the report of the FAO expert panel, and IUCN Red List Assessments (www.iucnredlist.org).

This fact sheet was produced with support from Vulcan Inc.

