

Threatened Species of the Northern Territory

NORTHERN RIVER SHARK NEW GUINEA RIVER SHARK

Glyphis garricki

Conservation status

Australia: Endangered

Northern Territory: Endangered



Description

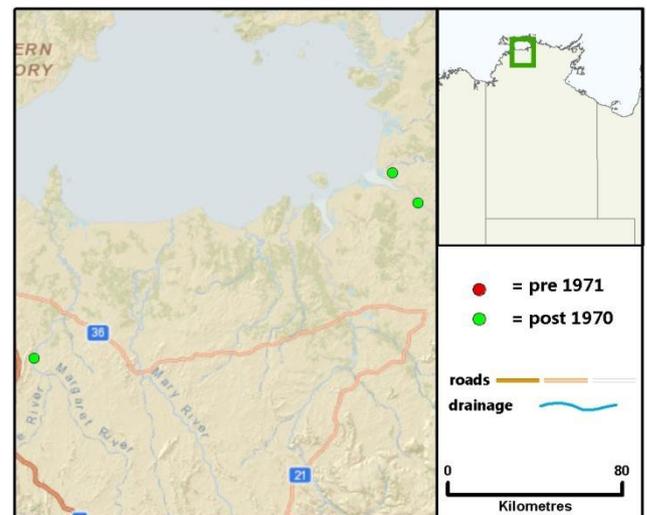
The northern river shark is similar to the more common bull shark that occurs in similar habitats and range. However, this species is a steely-grey colour and may achieve a length of over two meters. The northern river shark also has a triangular shaped first dorsal fin, and a second dorsal fin that is two thirds the height of the first dorsal fin. Its small eye is located in the grey shaded part of the head (Last & Stevens 1994). The snout is relatively longer and flatter than in *G. glyphis* (Compagno *et al.* 2008).

The taxon was formerly referred to as *Glyphis* sp. C, but recent taxonomic assessment has established its identity (Compagno *et al.* 2008; Wynen *et al.* 2009).

Distribution

In Australia the northern river shark is known from few records, including in the Northern Territory (NT) from the Adelaide and East and South Alligator River systems. It is also known from the Kimberley coast and King Sound in Western Australia (Thorburn and Morgan 2004, Compagno *et al.* 2008). It is possible that the East Alligator population is at the easternmost limit of its Australian range. The

species also occurs in the Fly River of Papua New Guinea, where it is possibly more common.



Known locations of the northern river shark

Conservation reserves where reported:

Kakadu National Park.

Ecology

Little is known of the ecology of the northern river shark but it is probably restricted to shallow, brackish reaches of large rivers. This conclusion is based on the fact that it has not yet been caught in the coastal marine areas despite considerable fishing and collecting

activity in these habitats (Thorburn *et al.* 2003; Larson *et al.* 2004).

Conservation assessment

The species is listed as Critically Endangered C2a(i) worldwide on the International Union for the Conservation of Nature (IUCN 2011) Red List of Threatened Species, noting that this “species is presumably very rare. Surveys targeting freshwater and estuarine elasmobranchs in Northern Australia ... in mid- late 2002 collected no *Glyphis* specimens, despite sampling in 136 sites in 38 rivers. It is inferred that the population contains fewer than 250 mature individuals and no subpopulation contains more than 50 mature individuals, further that it is presumably threatened by bycatch in commercial and recreational fishing activities and by possible habitat degradation” (IUCN 2011). Pogonoski *et al.* (2002) recommended that its status in Australia should be Endangered.

The northern river shark has a limited distribution in the NT, similar to the spartooth shark (*G. glyphis*). It was only relatively recently that these two species were recognised as both occurring in the NT. The northern river shark probably has a small population size. The Fisheries Division of the NT Department of Primary Industry and Fisheries is currently studying the distribution and abundance of the species. The recent recognition that the species is primarily estuarine, rather than freshwater, should lead to more records.

In the NT, this species is listed as **Endangered** (under criteria B1ab(v)+2ab(v)) due to :

- extent of occurrence <5 000 km²;
- area of occupancy <500 km²;
- known to occur at no more than 10 locations; and
- continuing decline, observed inferred or projected in number of mature individuals).

Threatening processes

Considerable progress has been made to reduce the impacts of commercial fishing (gill nets) and recreational fishing on *Glyphis* species. Commercial net fishing is prohibited in the mouth of the Adelaide River to protect *Glyphis* spp. However, threats from illegal fishing remain and some illegal use of juveniles as bait for crab fisheries (H. Larson *pers. comm.*). Deliberate capture and destruction of northern river shark is illegal in the NT.

Conservation objectives and management

The managing authority for this species is the Fisheries Division of the NT Department of Primary Industry and Fisheries. A recovery plan for Sawfish and *Glyphis* species is currently being developed by the Australian Government Department of Sustainability, Environment, Water, Population and Communities.

Current recovery priorities are to:

- i. determine the distribution, abundance and status of the species across the NT;
- ii. monitor and limit the impacts of fishing in estuarine areas, and increasing compliance as any take of this species is illegal; and
- iii. education of fishers on the identification and protection of the northern river shark as a degree of illegal take is probably due to misidentification and ignorance.

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References

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