

Green Sawfish – *Pristis zijsron*

April 2016, Primefact 7, Third edition

Threatened Species Unit, Port Stephens Fisheries Institute



Figure 1: A Green Sawfish (Image: R. Pillans)

Introduction

Green Sawfish are a large species of ray with an elongated, tooth-studded rostrum (snout). They were once widely distributed in the northern Indian Ocean, South and South-East Asia and around northern Australia and have been recorded as far south as Jervis Bay. However, the species has suffered a complete population decline as a result of fishing and accidental capture in prawn trawl and gill nets. The last confirmed sighting of Green Sawfish in NSW was in 1972 from the Clarence River at Yamba. Their large size and rostrum make them highly vulnerable to entanglement in nets and difficult to remove, consequently rarely surviving capture.

Green Sawfish were listed as an endangered species in NSW in October 2000. However, in 2008 the Fisheries Scientific Committee reviewed the conservation status of the species and subsequently determined Green Sawfish to be a **species presumed extinct** in NSW.

Description

Green Sawfish have a shark-like body and a flattened head, with a narrow blade-like rostrum studded with 24-28 pairs of 'rostral teeth'. They are greenish brown or olive in colour on their upper surfaces and pale whitish below.

Green Sawfish can grow to at least 5 metres in Australian waters.

Sawfish are similar in appearance to sawsharks, but key differences include the fact that sawfishes have the gill openings on the underside (not the side) of the head, and sawfishes do not have a pair of barbels (or whiskers) on the snout.

Habitat and ecology

- Green Sawfish are bottom dwelling rays commonly found in near-shore coastal environments, including estuaries, river mouths, embankments and along sandy and muddy beaches. They have been found in very shallow water less than 1 metre deep to offshore trawl grounds over 70 metres deep.
- They feed on slow-moving, shoaling fish such as mullet, which they stun with sideswipes of their rostrum. The rostrum is also used to sweep other prey, such as molluscs and small crustaceans out of the sand and mud.
- Green Sawfish are sexually mature after 9 years or at least 2-3 metres in length. Like all sharks and rays, they have internal fertilisation and give birth to a limited number of live young.

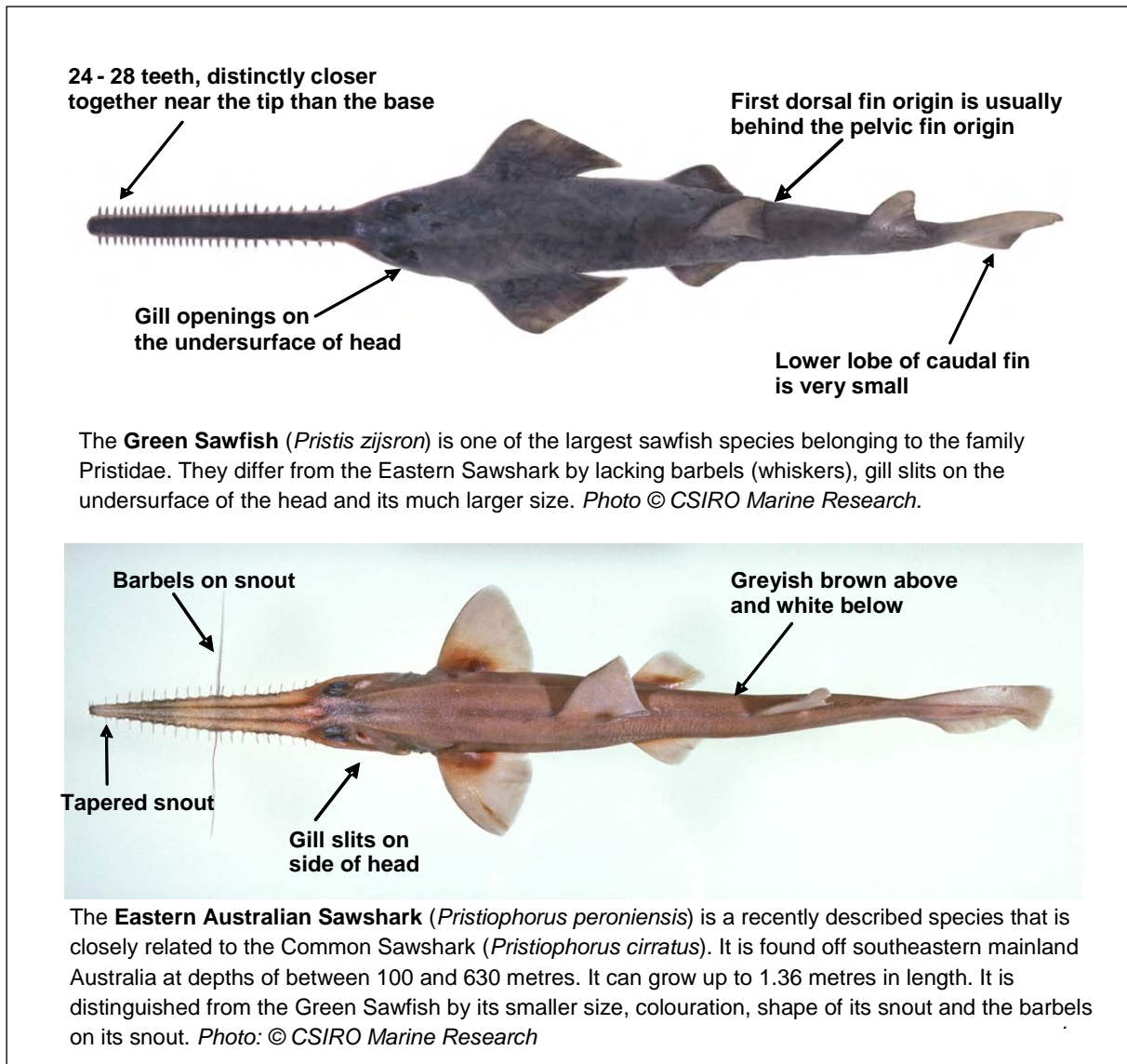


Figure 2: Differences between the Green Sawfish and the Eastern Australian Sawshark



Figure 3: A Green Sawfish tagged with a radio tracking device (Photo: S. Peverell)

Why did Green Sawfish become extinct in NSW?

- The toothed rostrum of the Green Sawfish combined with their active hunting behaviour makes them highly susceptible to capture in all fisheries that utilise nets.
- Deliberate capture for sale of the fins (for the shark-fin soup trade), flesh and saws.
- Land reclamation and degradation of the soft bottom areas that they use for feeding and breeding.
- Green Sawfish are long-lived, produce few young and mature later in life. This limits the ability for the species to recover from threats.

Legal implications

Although Green Sawfish are presumed to be extinct, there is a possibility that they may still occur in some areas. Species presumed extinct have the legal status of threatened species. As with all threatened species in NSW, it is illegal to catch, keep, buy, sell, possess or harm Green Sawfish without a specific permit, licence or other appropriate approval.

There can also be significant penalties for causing damage to the habitat of a threatened species without approval.

The impact of developments or activities that require consent or approval (in accordance with the *Environmental Planning and Assessment Act 1979*) must be assessed and considered by consent or determining authorities. Where such actions are likely to result in a significant impact on a threatened species or its habitat, a detailed species impact statement must be prepared.

How can you help?

Be on the lookout for the species in your local area.

If you think you may have found the species, report the sighting via the [NSW DPI online form](#).

Bibliography and further reading

Department of the Environment (2016). *Pristis zijsron* in Species Profile and Threats Database, [Department of the Environment, Canberra](#). Downloaded 1 March 2016.

Fisheries Scientific Committee (2008) Final Determination: *Pristis zijsron* – green sawfish.

Last, P.R. and Stevens, J.D. (1994) *Sharks and Rays of Australia*, CSIRO, Melbourne, 513pp.

Pogonoski, J.J., Pollard, D.A. and Paxton, J.R. (2002) *Conservation Overview and Action Plan for Australian Threatened and Potentially Threatened Marine and Estuarine Fishes*, Environment Australia, Canberra.

Simpfendorfer, C. (2013). *Pristis zijsron*. The IUCN Red List of Threatened Species 2013: e.T39393A18620401. <http://dx.doi.org/10.2305/IUCN.UK.2013-1.RLTS.T39393A18620401.en>. Downloaded on 29 February 2016.

For further information

See the [NSW DPI website](#).

Contact the NSW DPI Threatened Species Unit:
Locked Bag 1
Nelson Bay NSW 2315

Email: fisheries.threatenedspecies@dpi.nsw.gov.au

© State of New South Wales through the Department of Industry, Skills and Regional Development, 2016. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the NSW Department of Primary Industries as the owner.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (April 2016). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent advisor.

ISSN 1832 6668

PUB14/212