

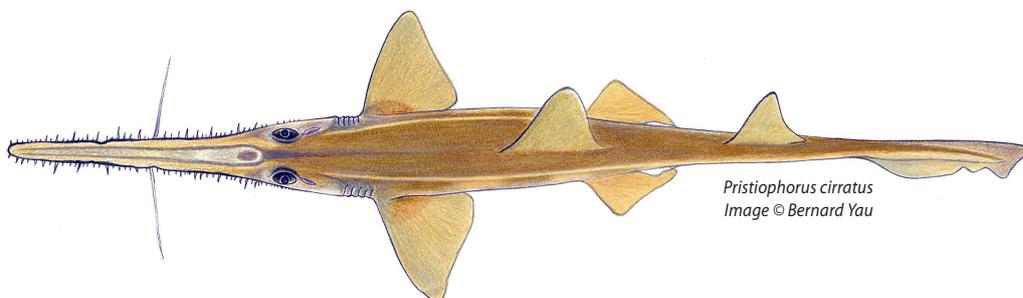
Sawsharks

(*Pristiophorus* spp.)

EXPLOITATION STATUS UNDEFINED

Little information is available to assess stock status. Biological information from local populations should be collected.

SCIENTIFIC NAME	STANDARD NAME	COMMENT
<i>Pristiophorus cirratus</i>	common sawshark	The majority of NSW catch.
<i>Pristiophorus nudipinnis</i>	southern sawshark	Occurs from southern NSW to central SA.



Background

Sawsharks (family Pristiophoridae) are relatively small sharks (< 150 cm total length (TL)) characterised by a narrow blade-shaped snout with numerous slender, sharp spines along its margins. Sawsharks should not be confused with the large tropical sawfishes which also possess a long saw-like snout; sawfishes live in shallow seas, estuaries and rivers, and can grow to seven metres in length.

Of the three Australian sawshark species, two are distributed around southern Australia, and the third is found in deepwater off northern Queensland. The common sawshark (*Pristiophorus cirratus*) is the main species caught in NSW waters. It is found mainly in outer shelf and upper slope depths (40-630 m), and its known distribution is from northern NSW (Coffs Harbour) to Jurien Bay (WA), including Tasmania. The southern sawshark *P. nudipinnis* occurs from central NSW to Eyre (WA) in the Great Australian Bight, in depths to at least 110 m.

Biological data collected off NSW for the common sawshark showed that males matured at about 80 cm TL while the largest measured was 112 cm TL weighing about 2.7 kg. Females matured at about 90 cm and grew to a maximum of about 125 cm (~3.5 kg).

Sawsharks are viviparous (trophodermic – the developing young receive some nutrients through the mother's uterine epithelium) and give birth to fully developed young after a gestation period of at least 12 months. Common sawsharks generally give birth to about 11 pups (range 6 to 22) which vary in size between 35 and 38 cm TL. Southern sawsharks also average about 11 pups (range 7 to 14) but they are smaller (30 to 35 cm TL).

Sawsharks are a minor component of the Commonwealth managed Southern Shark Fishery, where their status is considered to be 'uncertain' - landings by Commonwealth fishers in 2008 were about 250 t.

The small NSW catch is taken almost totally by trawling. Sawsharks are only occasionally taken by recreational fishers.

Additional Notes

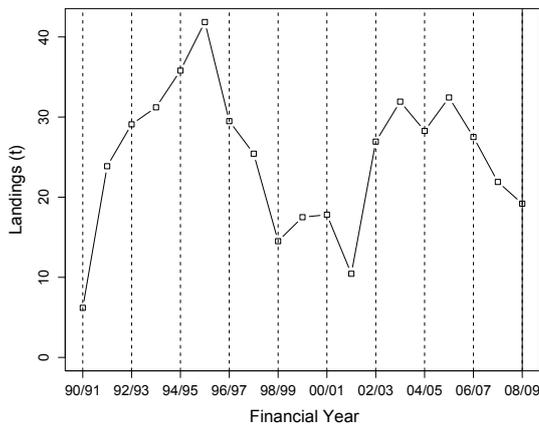
- *P. cirratus* is the main species taken off NSW - annual landings have fluctuated between 10 and 30 t in recent years.
- This group should not be confused with the sawfish family (Pristidae).
- The Commonwealth has imposed a total allowable catch (312 t in 2008) on sawsharks taken in the Southern Shark Fishery.
- Sexed length frequency data are available from *Kapala* (Fisheries Research Vessel) data, but there are no useful size composition data from the commercial fishery.

Catch

Recreational Catch of Sawsharks

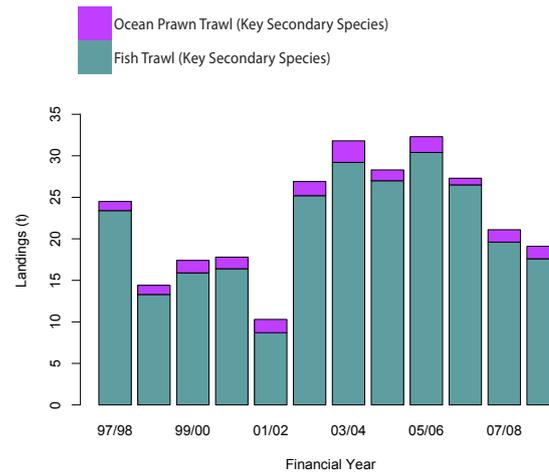
The annual recreational harvest of sawsharks in NSW is likely to be less than one tonne.

Historical Landings of Sawsharks



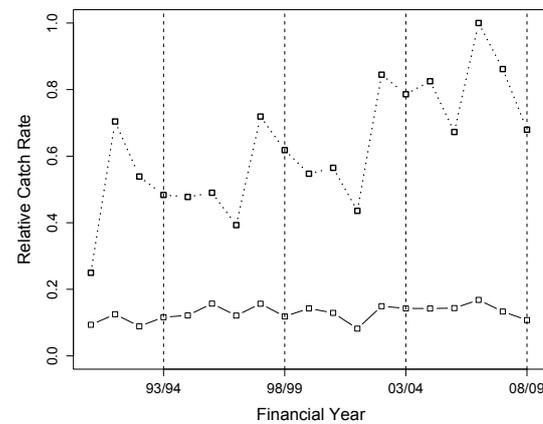
Commercial landings (including available historical records) of sawsharks for NSW from 1990/91 to 2008/09 for all fishing methods.

Landings by Commercial Fishery of Sawsharks



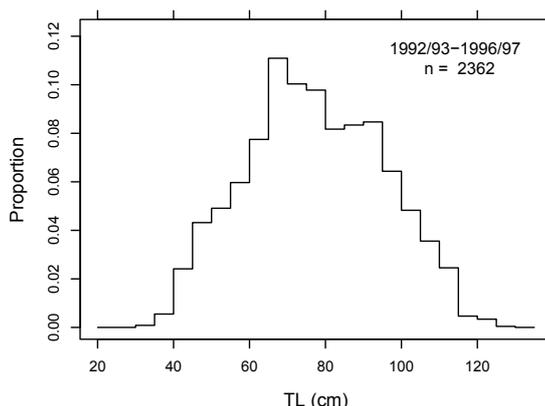
Reported landings of sawsharks by NSW commercial fisheries from 1997/98. Fisheries which contribute less than 2.5% of the landings are excluded for clarity and privacy.

Catch Per Unit Effort Information of Sawsharks Harvested by Fish Trawling in NSW



Catch rates of sawsharks harvested using fish trawling for NSW. Two indicators are provided: (1) median catch rate (lower solid line); and (2) 90th percentile of the catch rate (upper dashed line). Note that catch rates are not a robust indicator of abundance in many cases. Caution should be applied when interpreting these results.

Length Frequency of Sawsharks



The length distribution of sawsharks caught during trawl surveys by the Fisheries Research Vessel *Kapala* was comprised mainly of sharks between 40 and 120 cm total length (TL - including the length of the 'saw'). There is no minimum legal length for sawsharks in NSW.

Wilson, D., R. Curtotti, G. Begg and K. Phillips, Eds. (2009). Fishery Status Reports 2008: status of fish stocks and fisheries managed by the Australian Government. Canberra, Bureau of Rural Sciences & Australian Bureau of Agricultural and Resource Economics.

Yearsley, G.K., P.R. Last and R.D. Ward (1999). Australian Seafood Handbook. Hobart, CSIRO Marine Research.

Please visit the CSIRO website, <http://www.marine.csiro.au/caab/> and search for the species code (CAAB) 37 023003, 37 023002 and 37 023001, common name or scientific name to find further information.

Further Reading

Gomon, M.F., J.C.M. Glover and R.H. Kuitert (1994). The Fishes of Australia's South Coast. Adelaide, State Print.

Hutchins, B. and R. Swainston (1999). Sea Fishes of Southern Australia - Complete Field Guide for Anglers and Divers. Smithfield, NSW, Gary Allen Pty Ltd.

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

Punt, A.E., T.I. Walker and A.S. Gason (2004). Initial assessments of sawshark (*Pristiophorus cirratus* and *P. nudipinnis*) and elephant fish (*Callorhynchus milii*). In: G. N. Tuck and A. D. M. Smith (eds), Stock assessment for South East and Southern Shark Fishery Species FRDC Project No 2001/005. Hobart, Tasmania, CSIRO Marine Research: 335-369 pp.

Walker, T.I. and R.J. Hudson (2005). Sawshark and elephant fish assessment and by-catch evaluation in the Southern Shark Fishery. Final Report, FRDC project 1999/103. Victoria, Primary Industries Research.

