

Mackerel Tuna

(*Euthynnus affinis*)

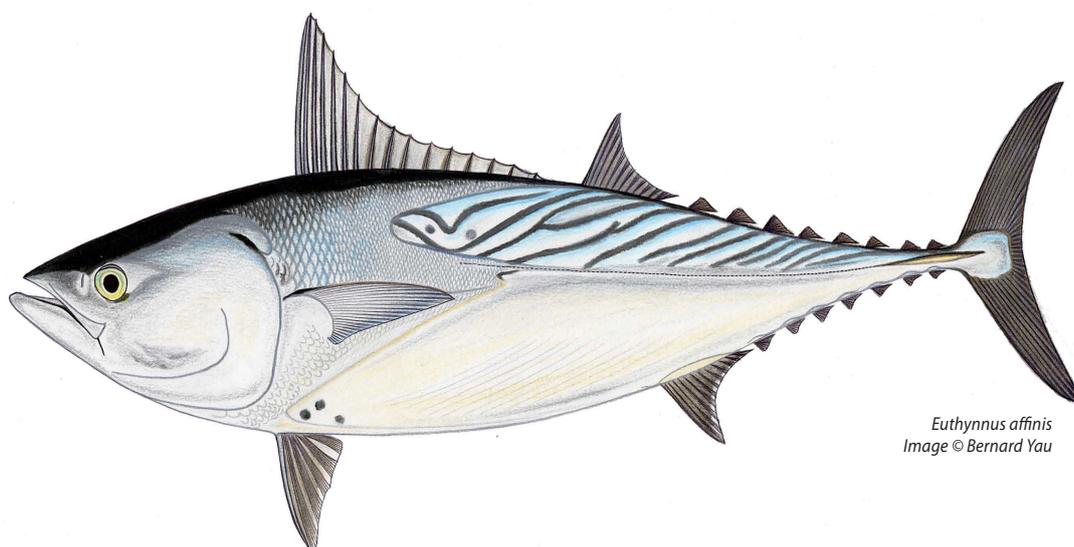
EXPLOITATION STATUS UNDEFINED

Small commercial fishery with low priority for assessment. Possibly more significant in the recreational fishery. Minimal information available.

SCIENTIFIC NAME	STANDARD NAME	COMMENT
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Euthynnus affinis

mackerel tuna



Euthynnus affinis
Image © Bernard Yau

Background

The mackerel tuna (*Euthynnus affinis*), also known as the little tuna, belongs to the family Scombridae which includes the mackerels, tunas and bonitos. It is a widespread pelagic species found in the tropical waters of the Indo-Pacific. Although also inhabiting ocean waters, mackerel tuna prefer to stay close to the coast and juveniles are even found in bays and harbours. It is a highly migratory species and frequently forms large schools which are often mixed with other scombrid species. In Australia, mackerel tuna range from Cape Leeuwin, WA, around northern Australia and Queensland to the south coast of NSW.

Mackerel tuna is a small tuna with a distinctive dark-striped pattern on its back and 2-5 dark spots above the ventral fin. It can be distinguished from similar species with striped

patterns by the spots and, in the case of frigate mackerel, the lack of space between the dorsal fins. Mackerel tuna can grow to 100 cm fork length (FL) and about 20 kg in weight but are more commonly around 60 cm and 3 kg. They feed on small fish, particularly clupeids (herrings, pilchards) and silversides, as well as on squids, crustaceans and zooplankton. Their predators include billfish and sharks.

In NSW and Queensland, mackerel tuna are usually caught on lines by fishers targeting mackerel (*Scomberomorus* spp.) and larger tunas. Annually, 10-20 t of mackerel tuna are landed for sale in NSW with almost all the catch taken by the Ocean Trap and Line Fishery. However, it has dark flesh which deteriorates quickly resulting in poor marketability. Despite this, mackerel tuna are popular with recreational fishers as a light-tackle gamefish.

Additional Notes

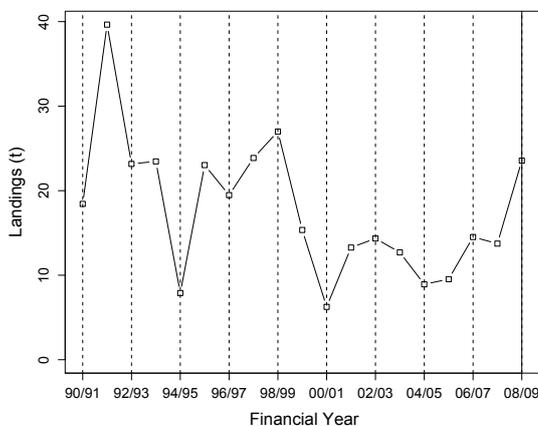
- A highly migratory small tuna species that occurs throughout the Indo-West Pacific region - NSW is at the southern extremity of its range.
- There is minimal information available on this species from fisheries in NSW waters.
- Commercial landings are low (10 to 20 t recently).
- Species may be significant in recreational catches, but accurate catch estimates are not available.

Catch

Recreational Catch of Mackerel Tuna

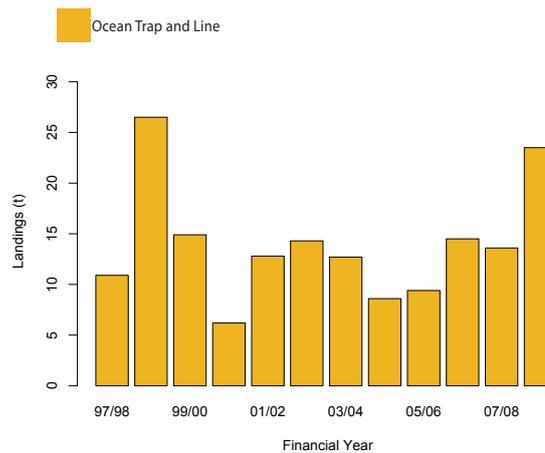
The annual recreational harvest of mackerel tuna in NSW is likely to be less than 50 t. This estimate is based upon the results of the offsite National Recreational and Indigenous Fishing Survey (Henry and Lyle, 2003) and onsite surveys undertaken by I & I NSW.

Historical Landings of Mackerel Tuna



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

Landings by Commercial Fishery of Mackerel Tuna



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

Further Reading

Collette, B.B. and C.E. Nauen (1983). *Scombrids of the World. An Annotated and Illustrated Catalogue of Tunas, Mackerels, Bonitos and Related Species Known to Date.* Rome, FAO: 137 pp.

Griffiths, S.P., P.M. Kuhnert, G.F. Fry and F.J. Manson (2009). Temporal and size-related variation in the diet, consumption rate, and daily ration of mackerel tuna (*Euthynnus affinis*) in neritic waters of eastern Australia. *Ices Journal of Marine Science* **66** (4): 720-733.

Henry, G.W. and J.M. Lyle (2003). [The National Recreational and Indigenous Fishing Survey. Final Report to the Fisheries Research & Development Corporation and the Fisheries Action Program Project FRDC 1999/158.](#) NSW Fisheries Final Report Series No. 48. 188 pp. Cronulla, NSW Fisheries.

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

Kuiter, R.H. (1993). [Coastal Fishes of South-Eastern Australia.](#) Honolulu, University of Hawaii press.

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 441010, common name or scientific name to find further information.