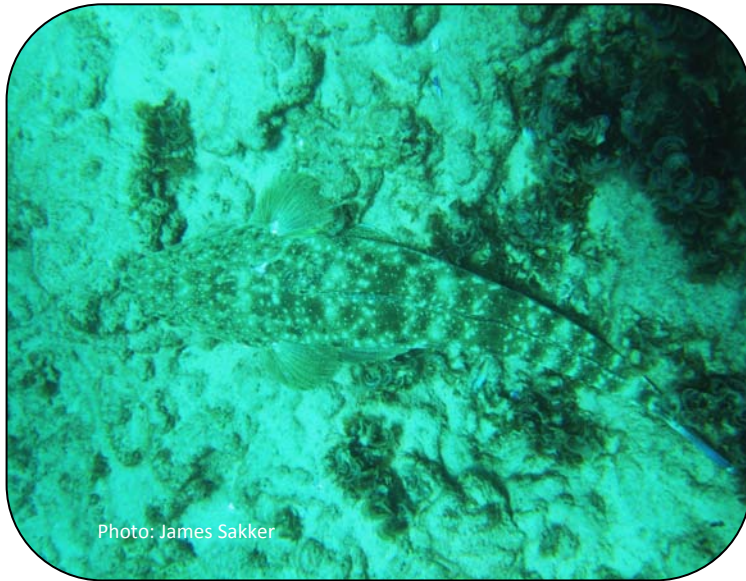


Flathead



Dusky flathead is a popular fish targeted by recreational fishers all along the east coast of Australia. If you'd like to learn more about why estuaries are important for this bottom dweller, read on...

Dusky flathead (*Platycephalus fuscus*) can be found on the east coast of Australia from Cairns in Queensland down to South Australia.



Figure 1: Distribution of dusky flathead (www.environment.gov.au)¹

Flathead Habitat Fact File

Flathead rely on healthy estuaries. This bottom dwelling fish uses different parts of an estuary at different stages of their lifecycle.

Flathead use seagrass and dips and hollows in the sand and mud both to ambush their prey and as camouflage.

Seagrass is an especially important adult feeding habitat in the summer.

The loss of seagrass affects not only flathead but also the animals they prey upon.

Dredging, bank erosion and sediment-laden runoff all level out the dips and hollows in sand and mud reduce the amount and suitability of habitat for flathead.



Flathead eat a variety of foods including small fish, crabs, squid and prawns found in **seagrass, mangroves, sand and mud**

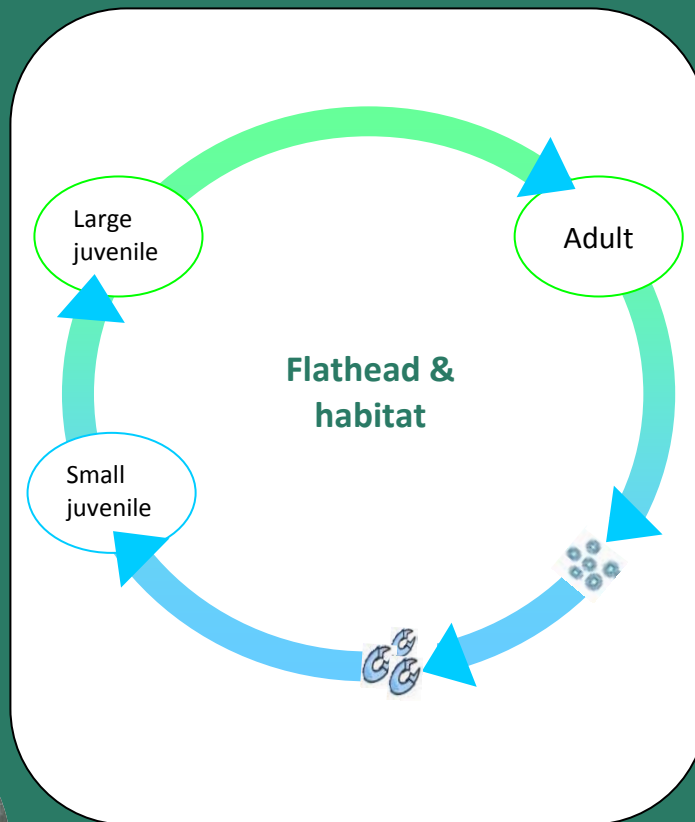


Flathead mature at around 30cm for males and 55cm for females

Adults are found within **estuaries** and sometimes in **inshore ocean waters**

Adults feed among **seagrass** in summer and **seagrass and mud** in winter ⁴

Large juveniles can be found in **deep water** overlying **mud** as well as in **shallow water** in both summer and winter⁴



Spawning occurs in the lower reaches of **estuaries** and in **adjacent coastal waters**. In NSW spawning occurs from September to March ²

Eggs and larvae move **along the coast** with the tides and currents ³

1-2 months after spawning small juveniles appear in **coastal bays** ³



Larvae and juveniles use shallow water around **mangroves, sandy channels, mudflats** and **seagrass** beds for food and shelter



Threats to flathead habitat

Flathead rely on estuaries with habitats such as seagrass, sand and mud. Adult fish are capable of moving between estuaries if the condition of the habitat is deteriorating.² Juveniles are less able to move to other areas with more suitable habitat.



Seagrass beds can be destroyed by boat propellers and mooring, smothered by sediment and suffocated by poor water quality

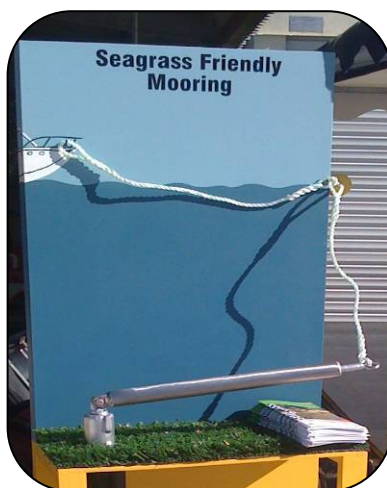
The location and area of seagrasses and mangroves has declined throughout NSW. There are a number of human activities that have contributed to this loss and continue to affect mangroves, mudflats and seagrass beds. These are summarised in the table below.

Threats to habitat	Impact on flathead
Sedimentation - Build up of sediment - Increased turbidity	✘ An increase of sediment fills dips and hollows used by flathead to ambush prey and shelter from predators ✘ Sedimentation reduces the depth of water in an estuary restricting access to parts of an estuary that could provide habitat and food ✘ Sedimentation can smother seagrasses, reducing the amount of shelter and food available for both juvenile and adult flathead
Construction and agriculture along coastlines and estuaries - Run off & pollution - Nutrients - Increased sediment	✘ Water quality may become poor if run-off from construction sites is not managed ✘ Poor water quality can reduce the abundance of prey as well as shelter for juvenile and adult flathead
Boating - Pollution - Damage by anchors	✘ Irresponsible boating practices such as anchoring on mangrove roots or seagrass beds, damages the habitats that larval, juvenile and adult flathead use to find food and shelter

Seagrasses and mangroves stabilise sediment, moderate water flows and cycle nutrients making them fundamental for healthy estuaries. Restoring and preserving estuaries by changing the way we do things will promote healthy habitat and that means healthier populations of flathead.

What you can do

- ✓ Don't anchor your boat in seagrass or use seagrass friendly moorings
- ✓ Get your hands dirty with replanting mangroves or other vegetation bordering creeks and estuaries
- ✓ Be mindful of what you wash down the stormwater drain
- ✓ Visit www.fishhabitatnetwork.com.au and find out what other fishers are doing to improve their local fish habitats
- ✓ Join the Fish Habitat Network (fish.habitat@industry.nsw.gov.au)



References

- 1 Department of the Environment, Water, Heritage and the Arts. Australian Biological Resources Study, Australian Faunal Directory. www.environment.gov.au/biodiversity/abrs/onlineresources/fauna/afd/taxa/Acanthopagrus_australis. Accessed on 29.07.10
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- 3 Froese, R. and Pauly, D. Editors. 2010. Fishbase. World Wide Web electronic publication. www.fishbase.org, version (05/2010)
- 4 State Pollution Control Commission. The Ecology of fish in Botany Bay. Environmental control study of Botany Bay. 1981.

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This Factsheet was prepared by Amy Kalatzis and Liz Baker, as part of the Recreational Fishers' Education Project, a partnership between Industry and Investment NSW and Southern Cross University, 2010. This factsheet can be used and distributed for education purposes.