

Bream



Bream is one of our most popular fish targeted by recreational fishers. It is a tough and resilient species however the condition of its habitat will determine how many fish we catch in the future.

If you'd like to know more about bream, its habitat and the things we need to do if we want to keep fishing for this lovely fish, read on ...

The species of bream caught in northern NSW is the yellowfin bream (*Acanthopagrus australis*). Black bream is found further south. This factsheet talks about yellowfin bream.



Figure 1: Distribution of yellowfin bream (www.environment.gov.au)¹

Bream Habitat Fact File

Bream can be found from Queensland to Victoria on the east coast of Australia.

Bream use both estuarine and near-shore marine habitats.

Bream eat small fish, crabs, prawns and worms and other small animals that depend on healthy estuaries to flourish.

Estuaries are the most vital habitat for bream.

Estuarine habitat has been lost due to direct and indirect impacts of coastal development.

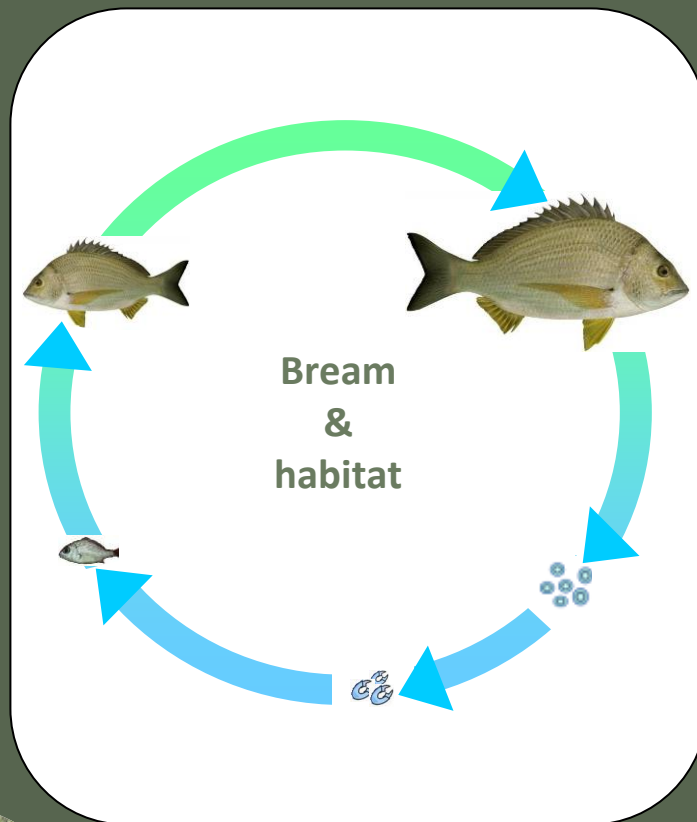
Improving areas of seagrass and mangroves will help ensure healthy populations of bream into the future.



Bream eat small fish, crabs, prawns and worms. Adult bream find food in and around **seagrass beds** and **mangroves**. They also forage in **deep water** overlying **sand** and **rocky reefs** (in winter) and **shallow water** overlying **sand** (in summer) ⁴

It takes about 5 years to reach maturity at about 220 mm long

Bream tolerate varying levels of saltiness and are found **inshore** and around **rocky reefs, estuaries** and the **lower freshwater reaches** of coastal rivers



Large juveniles feed in **shallow sand** habitats in summer and in **deep water** overlying **mud** in winter ²

Bream spawn in **surf zones** near **estuary entrances** and return to **estuaries** after spawning ³. Their short spawning season peaks during July and August. All male fish greater than 220 mm in size spawn. ²

After about 1 year the fish are usually more than 100 mm long ³



Larvae & juveniles shelter and find food in estuarine **seagrass beds** (*Zostera* sp.), **shallow water** overlying **mud** and inundated **mangroves** ⁴

Larvae are 13-14 mm long by August to November ³



Threats to bream habitat

Estuaries are the most vital habitat for bream.

Bream are disadvantaged by loss of seagrass, removal of mangroves and poor water quality. These can happen as a result of irresponsible boating, poor agricultural practices, poor stormwater management, urban and industrial development and pollution.



Mangroves are susceptible to damage by cattle or removal for development



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

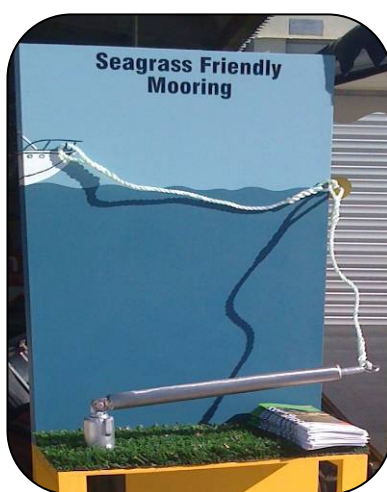
A lot of bream habitat has been lost. Hundreds of hectares of seagrass, for example, have been lost from the Richmond, Macleay and Clarence estuaries. Ongoing threats to bream habitat include the following.

Threats to habitat	Impact on bream
<p>Sedimentation</p> <ul style="list-style-type: none"> - Build up of sediment - Increased turbidity 	<ul style="list-style-type: none"> ✗ Sediment can smother seagrass beds and other vegetation that provides food and shelter for larval, juvenile and adult bream. ✗ Increased turbidity caused by sediment decreases the amount of light able to reach aquatic vegetation. This reduces the ability of vegetation to survive and grow. ✗ Build up of sediment will gradually reduce the depth of water in an estuary restricting larval, juvenile and adult bream from accessing areas that could provide potential food and shelter. ✗ Seagrass beds provide food and shelter for the animals bream eat. A reduction in seagrass may also reduce the abundance of prey.
<p>Construction and agriculture along coastlines and estuaries</p> <ul style="list-style-type: none"> - Run off & pollution - Nutrients - Increased sediment 	<ul style="list-style-type: none"> ✗ Pollution can kill bream and the food they eat, eg, crabs, prawns, small fish, worms ✗ Poor water quality can increase bream susceptibility to disease ✗ Sedimentation can cause estuary entrances to close, affecting bream access to the surf zone for spawning.
<p>Irresponsible boating</p> <ul style="list-style-type: none"> - Pollution - Damage by anchors 	<ul style="list-style-type: none"> ✗ Poor boating and mooring practices damage seagrass

Changing the ways we do things so that the health of seagrass and mangroves is safeguarded and more can grow will help support greater numbers of bream.

What you can do

- ✓ Don't anchor your boat in seagrass
- ✓ 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/online-resources/fauna/afd/taxa/Acanthopagrus_australis. Accessed on 29/07/10.
- 2 Pollock, B.R. 1984. Relations between migration, reproduction and nutrition in yellowfin bream *Acanthopagrus australis*. Marine Ecology and Progress Series. Vol. 19 pp 17-23.
- 3 Pollock, B.R., Weng, H and Morton, R.M. 1982. The seasonal occurrence of postlarval stages of yellowfin bream, *Acanthopagrus australis* (Gunther) and some factors affecting their movement into an estuary. Journal of Fish Biology. Vol 22, Issue 4 pp 409-415.
- 4 State Pollution Control Commission. The Ecology of fish in Botany Bay. Environmental control study of Botany Bay. 1981.

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