

Queensland Fish Fact Sheet

Barramundi (Lates calcarifer)

Barramundi are an iconic fish, loved by recreational fishers and a favourite for dinner. As with all fish, Barra rely on healthy habitat to survive and thrive, and need different habitats at different stages of their life cycle. Maintaining and improving these habitats will support abundant populations of this fish, providing great fishing now and for future generations.

DID YOU KNOW?

- Barramundi can live for around 20 years.
- Barramundi have been recorded up to 150 cm long and weighing more than 40 kg.
- Large females can produce 32 million eggs a season, but more than 90 per cent of eggs and larvae die within the first few months. The death rate is even higher in years of low rainfall, colder water temperatures, or when food is scarce.
- Barramundi change sex: they generally mature as males in their third to fifth year, then change to females between four to eight years of age, but only in salt water.
- Barramundi like water temperature of between 23°C to 35°C.
- Barramundi can travel great distances. One fish travelled 622 km between tagging and recapture. However, there is generally not much movement between river systems.

Barramundi use a wide variety of coastal habitats, in clear to turbid water up to 40 metres deep. Most commonly, they are found in rivers and creeks with large catchments and slow, continuous water flow.

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They use undercut banks, submerged logs and overhanging vegetation for cover.

Barramundi are opportunistic predators and eat just about anything that lives in the water. This includes insects, spiders, prawns, fish, other barramundi and even crocodiles! The size of prey is largely determined by the size of the barramundi – and a barramundi can consume prey that is up to 60 per cent of its own length.

Distribution

Barramundi are distributed throughout coastal areas of the Indo-West Pacific region – from the eastern edge of the Persian Gulf to China, Taiwan, southern Japan southward to Papua New Guinea, and northern Australia.





Habitat is the key to healthy Barramundi

Sexually active adults migrate from freshwater rivers to estuaries to spawn. Ideal locations for spawning are the shallow, estuarine mudflats where the temperature and salinity are favourable.



Barriers, such as weirs, dams, and poorly designed road crossings, can stop adults accessing spawning habitat. Barriers can also restrict the natural flows which are critical cues for spawning.

High tides and wet-season floods wash eggs and larvae into tidal habitats, such as mangroves or coastal swamps. Barramundi eggs and larvae will only survive in salt water.



These salty habitats need to be **connected** to the estuary for larvae to access them.

Unseasonal flushes of freshwater, such as a release from an impoundment or a flood, will kill off the larvae.

As the wet season comes to an end and the floodplains begin to dry, the juvenile barramundi either migrate up the rivers into the freshwater billabongs, or if they do not have access to fresh water, they move into shallow coastal seas. In Queensland waters, fish can be four years old before heading into freshwater.





When immature and adult fish are stuck in the lower reaches of a river because of barriers there is greater competition for food and cannibalism of juveniles increases.

Healthy and diverse freshwater habitats, with overhanging riparian vegetation and seasonal water flows are highly productive – which means better growth of fish.

To be self-sustaining,
Barramundi need access to
saltwater. Saltwater triggers
sexual maturity in males and
they need to spawn at least
once before changing into
females.



Ideal Barramundi habitat:

- Connected
- Free-flowing
- Seasonal flows
- Good riparian vegetation
- Free of barriers to movement.

For more information about improving your local fish habitat, contact your local Chapter of OzFish Unlimited.



