

## Fish Habitat Fact Sheet

Mangrove Jack (Lutjanus argentimaculatus)

Mangrove Jack are a favourite with fishers, capable of lightning-fast strikes and strong runs for cover. As with all fish, Mangrove Jack 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.



- Mangrove Jack can live for over 40 years. It takes between 4 and 8 years to reach sexual maturity, by which time the fish are usually about 55cm long.
- They can reach a maximum length of about 1.2 metres and 16 kg in weight.
- These fish prefer a water temperature of at least 22 degrees.
- Mangrove Jack are highly prone to barotrauma when caught from depths greater than 10m.
- Mangrove Jack sometimes go deeper than 100m on the offshore reef areas where they live.
- Some Mangrove Jack travel considerable distances, with one tagged fish migrating 335km along the north Queensland coast.

Mangrove Jack are active predators, preying mostly on smaller fishes and crustaceans. They use ambush tactics and their distinctive canine teeth to seize and hold their prey. As they are predominantly sight feeders, rather than relying on vibrations to assist them in locating prey, Mangrove Jack prefer clear water. They take advantage of the available cover and food supply offered by mangrove systems. Indeed, cover is an essential part of Mangrove Jack territory: snags, submerged vegetation, roots, rocks, logs, rock walls, bridge pylons and jetties. They prefer shaded, complex structure that allows them to pack in tight, often in small schools.



## **Distribution**

Mangrove Jack occurs in tropical and some warm temperate marine waters of the Indo-West and Central Pacific. In Australia, they inhabit coastal waters and rivers from Shark Bay in Western Australia through Torres Straight and Queensland, south to Lake Illawarra in NSW.





## Habitat is the key to healthy Mangrove Jack!

During the early stages of recruitment to coastal estuaries, Mangrove jack often utilise seagrass habitats and tidal or ephemeral coastal wetlands.



Marine habitats, such as seasgrass beds, need to be connected to the estuary for larvae to recruit into the juvenile population.

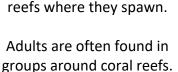
Juveniles live in estuaries, ranging far up brackish mangrove creeks and into freshwater areas, where they frequent snags, rocky structures, and grasses overhanging undercut banks as cover.

Juveniles are highly territorial, with most staying very close to the one location.



**Destruction** or degradation of mangroves is a key threat for Mangrove jack, as is loss of structure, such as snags, overhanging grasses, and instream rocks.

Once they reach maturity, at between 40 and 50cm in length, Mangrove jack move out of the rivers, wetlands and estuaries to offshore





When juveniles cannot migrate upstream into habitat or downstream as adults because of barriers there is greater competition for food and reduced recruitment into the breeding population.

Healthy and diverse estuarine and brackish habitats, with overhanging riparian vegetation and seasonal water flows, mean more food for fish.

Mangrove jack of all ages love prawns. Habitat that supports prawns, supports Mangrove jack!



Ideal Mangrove Jack habitat:

- Connected & free-flowing
- Good water quality
- Lots of structure
- Good riparian vegetation
- Free of barriers
- Healthy, diverse reefs

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



