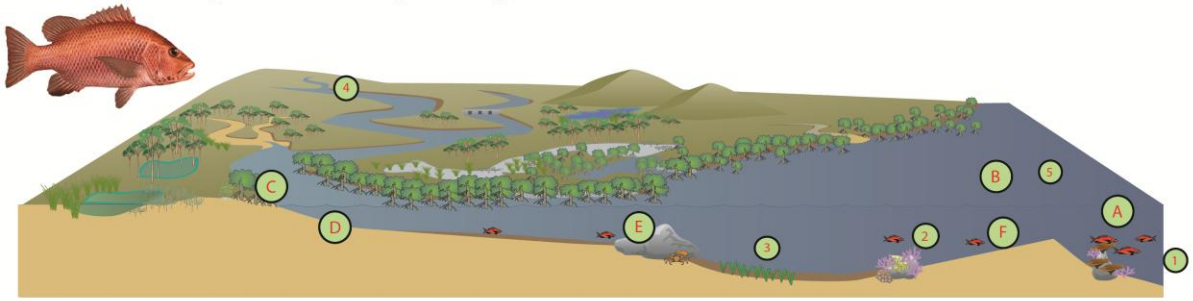
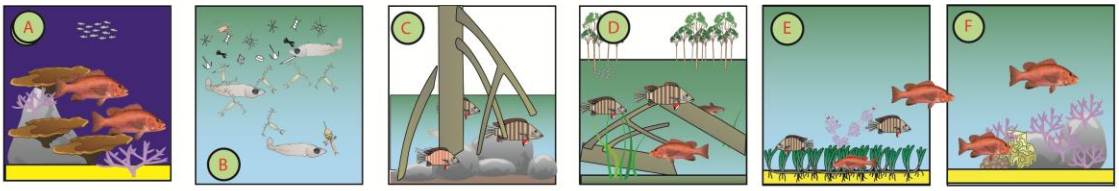
Case study: Mangrove Jack *(Lutjanus argentimaculatus)* and the Great Barrier Reef Catchment





Mature mangrove jack spawn in waters near the outer reef and continental shelf. Up to 4 million eggs are released at each spawn and these are dispersed widely up and down the Great Barrier Reef and adjacent coast. (1)

Mangrove jack eggs hatch in open marine waters, where larvae commence early development, and feed on small zooplankton. (5)

Larval mangrove jack move into inshore areas at around 32 days old. As they grow, they move into riverine areas looking for rocky habitats to hide and grow. Some have been found up to 130km upstream! (3) → (4)

As the juveniles grow they look for complex structures in the water such as snags to hide amongst. These snags, originating from mangrove and riparian forests, are extremely important habitats for growing fish. (4)

The juveniles and sub-adults begin to utilise inshore coastal marine ecosystems after 2 to 11 years. (4) → (2)

Sub-adult mangrove jack move from inshore coastal marine habitats to offshore habitats to mature and spawn. Here they can live to be over 40 years of age. (2) → (1)

Coastal Ecosystems used by mangrove jack (1) Outer GBR (2) Inshore reefs (3) Estuaries (4) Riverine wetlands (5) Open water

Australian Government
Great Barrier Reef Marine Park Authority