



### Fauna The Pond: Vertebrates

#### Sharks, Stingrays and Eels



PORT JACKSON SHARK  
(*Heterodontus portusjacksoni*)

Maximum Length: 100 cm

Easily identified by a bony crest above the eyes and harness-like arrangement of dark brown stripes on the body. Jervis Bay is an important breeding ground for these harmless sharks, whose spiral egg cases are often washed up on south coast beaches. Their teeth are flat grinding plates, suited to their diet of shellfish, crustaceans and various scraps.



EASTERN FIDDLER RAY or  
BANJO SHARK  
(*Trygonorrhina* sp.)

Maximum Length: 125 cm

Flat banjo-shaped body with sharklike tail and unique dark line pattern on the dorsal surface. Found from QLD to Eden. Like other skates and rays, this harmless species is a bottom feeder with an excellent sense of smell. They favour shallow sandy bays, rocky reefs, and seagrass beds. The eastern fiddler is found to a depth of 120 meters and the southern fiddler to a depth of 180 metres.

#### Bony Fish



SMOOTH TOADFISH  
(*Tetractenos glaber*)

Maximum Length: 15 cm

This well-known species has beautifully patterned skin with no scales. Its flesh is extremely poisonous. The diet of the smooth toadfish includes molluscs and small crabs. It often follows the tide into estuaries in search of food. As with other fish of this family, eating the fish can have fatal consequences. Along with related toadfish species, the smooth toadfish is known in Australia as a "toadie"



TAILOR  
(*Pomatomus saltatrix*)

Maximum Length: 110 cm

Generally silver with a bluish-grey tinge. Streamlined and fast with razor-sharp teeth, these rapidly maturing predators are found in schools. Tailor are extremely aggressive, and will often chase bait through the surf zone, and literally onto dry beach. Those in this reserve are voracious feeders in the summer months, but they are seldom seen in midwinter.



AUSTRALIAN BONITO  
(*Sarda australis*)

Maximum Length: 100 cm

Fast-moving schooling carnivore common to coastal waters of south-eastern Australia. It is also a part of the mackerel family. Bonito school by size and mature from January through April. It is often used as a replacement for tuna in some countries.



**DUSKY FLATHEAD**  
(*Platycephalus fuscus*)

Maximum Length: 150 cm

The colour of this easily recognisable species is variable, ranging from sandy with small brown spots and dusky blotches to blackish brown with whiter spots. It has poisonous spines on its gill covers. Habitat is the sandy to silty bottoms of NSW estuaries and bays. The larger individuals in this reserve were caught in Jervis Bay and are over twenty years old.



**DIAMOND FISH**  
(*Monodactylus argenteus*)

Maximum Length: 19 cm

A common estuarine species in NSW particularly near jetties. These fish breed in the reserve, and perform the invaluable service of removing parasites from larger fish. The big eyes are crossed by a dark ray. Its fins are silver with yellow reflection and have a silver body in a triangular shape. It is also called a fingerfish because its genus *Monodactylus* means "one finger".



**LARGE-TOOTHED FLOUNDER**  
(*Pseudorhombus arsius*)

Maximum Length: 53 cm

This master of camouflage is often found in the estuaries and bays of Australia's east and west coasts. In its life cycle, an adult flounder has two eyes situated on one side of its head, where at hatching one eye is located on each side of its head. Flounder ambush their prey, feeding at soft muddy areas of the sea bottom, near bridge piles, docks and coral reefs.



**EASTERN FORTESQUE**  
(*Centropogon australis*)

Maximum Length: 10 cm

Common in coastal bays and estuaries, feeding mainly at night. The Fortesque has a brown to white body with dark brown to black bars. It has two large spines on either side of the head that can be projected sideways when the fish is disturbed. Their camouflage makes them hard to see amongst weeds and rocks. If trodden on the venomous dorsal spines produce a very painful sting. These fish breed in the marine reserve.



**SILVERBIDDY**  
(*Gerres subfasciatus*)

Maximum Length 23 cm

This species inhabits estuaries and bays and breeds in this Reserve. It has a silver coloured body and highly protrusible jaws. The dorsal fin is long based. Its anterior spines are black-tipped and are longer than those in the rest of the fin. Both jaws can protrude out and down forming a tube. This adaptation to the mouth is used when the fish feeds on bottom-dwelling invertebrates.



**SAND WHITING**  
(*Sillago ciliata*)

Maximum Length 47 cm

Abundant in the coastal and estuarine waters of eastern Australia. Also known as Bluenose Whiting, it is an important commercial and recreational species. The Sand Whiting is commonly found in bays, estuaries and beyond the breakers off surf beaches. The Sand Whiting has a short-based spiny dorsal fin and a long-based soft dorsal fin. The lateral line is gently curved above the pectoral fin. The species is silver-grey above and white below. The ventral and anal fins are yellow. There is a dusky spot on the pectoral fin base.



**SEA MULLET**  
(*Mugil cephalus*)

Maximum Length 80 cm

Variable in colour from steel blue to olive green to brown, often with brownish lines along the lower sides. They travel in large schools through Jervis Bay in Autumn. The Sea Mullet in the reserve grow rapidly in the first few years and keep a low profile in the winter months. They feed on algae and a variety of detritus and scraps including bread. They can be seen feasting on swarming termites on hot summer afternoons.



**BLACK BREAM**  
(*Acanthopagrus butcheri*)

Maximum Length 55 cm

Silvery olive brown to bronze, one of the most recognisable fish in the reserve. They have a broad diet which includes crustaceans and molluscs as well as bait fish. The yellow fin type is more common, in Jervis Bay, than the black fin type. These fish breed in the reserve, and can be sometimes seen queueing for the cleaning services of the Diamond Fish.



**EASTERN SEA GARFISH**  
(*Hyporhamphus australis*)

Maximum Length: 52 cm

Seasonally common in bays and estuaries from Queensland to as far south as Eden. These fish breed in the Marine Reserve. At least 18 species of garfishes are known from Australian waters. Most have very elongate silvery bodies with a long lower jaw and short triangular upper jaw. It is a schooling species that grows to 52 cm in length.



**YELLOWTAIL KINGFISH**  
(*Seriola lalandi*)

Maximum length: 2m

Blue to bluish green back, separated from white lower half of body by a dark line. Yellow caudal and ventral fins. Normally occurs in schools in southern Australian coastal waters. Observations in this Reserve show it to be an inquisitive, cheeky species, usually on the move. Likes sheltering under floating objects.



**STRIPEY**  
(*Microcanthus strigatus*)

Maximum Length: 16cm

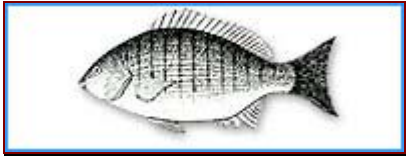
This distinctive little fish with yellow and black stripes is reasonably common on shallow protected reefs on Australia's east and west coasts. It often forms small schools around jetties. All of the species are generally too small to be useful as a food fish.



**MULLOWAY**  
(*Argyrosomus hololepidotus*)

Maximum length 2m

Also known as the Jewfish. Habitat is coastal and estuarine waters of southern Australia except Tasmania. Usually moves in schools, and occurs infrequently in deep offshore waters. This magnificent fish may live for over a century, and its slow maturing rate makes it vulnerable to overfishing. Its numbers in Jervis Bay have declined in recent years.



LUDERICK or BLACKFISH  
(*Girella tricuspidata*)

Maximum Length: 60cm

Dark brown to silvery light brown with thin dark vertical stripes. A common inhabitant of coastal and estuarine areas, they breed well in the reserve. Primarily algae feeders, they tend to eat almost anything all year round.



SURF SARDINE  
(*Iso frothophilus*)

Maximum Length: 7cm

Commonly found schooling in coastal bays and estuaries. This species breeds in the reserve.



EASTERN AUSTRALIAN SALMON  
(*Aripis trutta*)

Maximum Length: 90cm

Greyish-green across the back and silvery on the underside. Seasonally common in schools along the south-eastern Australian coastline. The species occurs over sandy seabeds. Juveniles are usually seen in bays and estuaries. Adults are found in coastal waters. The Eastern Australian Salmon occurs in temperate Australian and New Zealand waters. In Australia it is known from southern Queensland to Tasmania.



SNAPPER  
(*Pagrus auratus*)

Maximum Length: 130cm

Base colour varies from pale pinkish silver to almost brick red, with characteristic vivid blue spots along the upper half of the body. Large hump on the head more prominent on males. Travels in schools along the deep offshore coastline of southern Australia. The snapper in this reserve have grown from 20 cm to 75 cm in 11 years. They tend to school up in winter. A mighty fish and a spectacular feeder.