

# Student

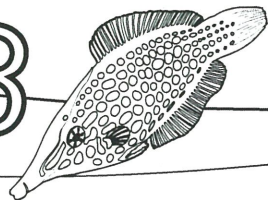
## Fact Files



Australian Government

Great Barrier Reef  
Marine Park Authority

#8

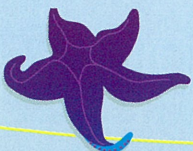
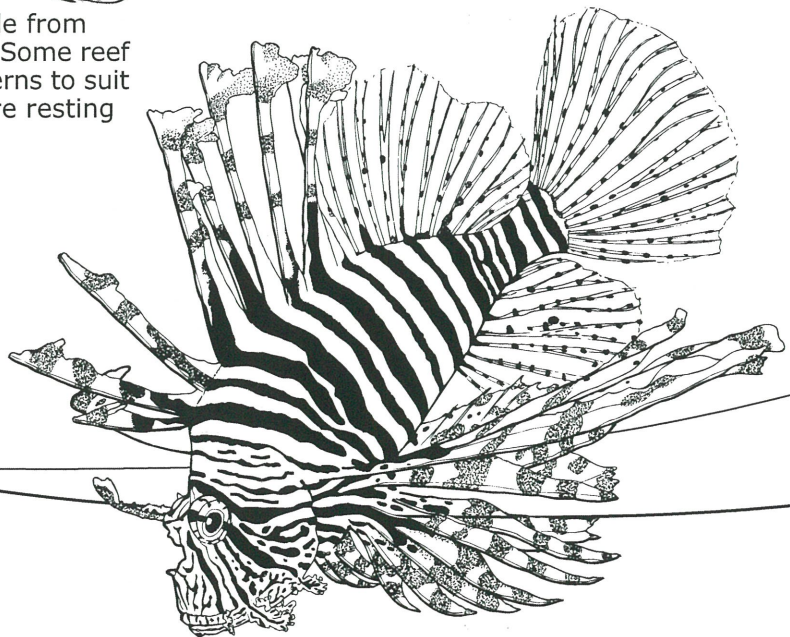
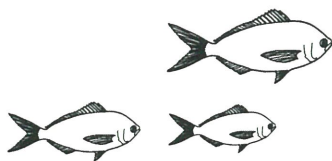


March 2005

### Fishes



- More than 1500 species of fish live in the Great Barrier Reef.
- The smallest reef fish is the Goby and is just one centimetre long.
- The largest fish on the Reef are giant cods and groupers. They can weigh up to 400 kilos!!
- Reef fish are able to see colour.
- Reef fish use their colours to hide from predators and sneak up on prey. Some reef fish can change their colour patterns to suit the colour of the surface they are resting on.
- The shape of a fish helps determine where it lives, what it eats and how it catches its prey.
- Baby fish are on their own from the moment they hatch.
- Fish use body parts like spines to protect themselves.
- Some reef fish are very poisonous.



our great barrier reef  
let's keep it great

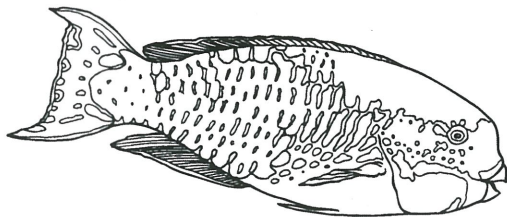






Reef fish can be divided into six broad categories:

- **Colourful coral associates**, like clown anemone fish and butterflyfish;
- **Cryptic fish** like blennies, gobies and seahorses that are hard to see because of their camouflage or where they live;
- **Grazing fish**, like blue tangs, parrotfish and wrasse;
- **Pelagic reef associates** like batfish and fusiliers;
- **Reef predators** like snapper, emperors, cod and grouper; and
- **Nocturnal & cave dwellers** such as eels, scorpionfish, squirrelfish and soldierfish.

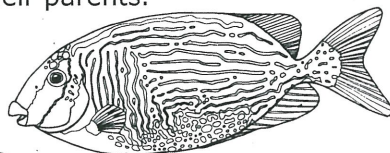


Most fish have a skeleton made of bone, one gill opening on each side of the head and a swim bladder. They reproduce through external fertilisation. The overall structure of a fish is streamlined, however you can definitely tell where its' head, trunk and tail are. Fish skin comprises two layers: an outer skin or *epidermis* and an inner skin or *dermis*. Most fish are covered in scales.

Fish live in a variety of habitats. Most live in oceans, rivers, lakes, ponds or aquaria. Some species, such as mud skippers, are able to survive out of water for long periods and can breathe both above and below the water.

### Reproduction

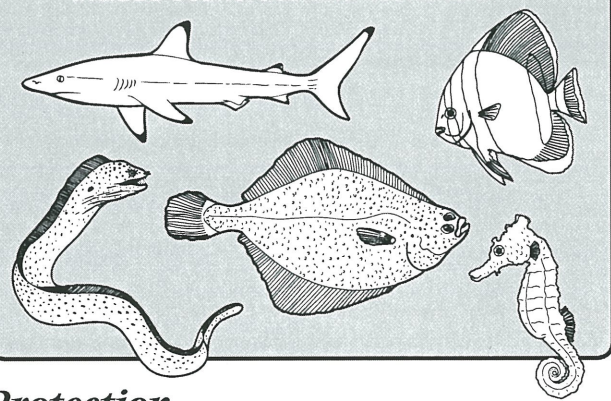
Most Reef fish release large quantities of eggs annually. When the eggs hatch, baby fish are on their own and they know instinctively how to swim and find food. The majority of fish species on the Great Barrier Reef produce a mass of tiny eggs which float away and never have any further contact with their parents.



### Fish shapes

The shape of a fish varies between each species, however there are five main types of fish body shapes:

- **Streamlined** – these are fast swimmers and include sharks and mackerals.
- **Laterally compressed** – swim in bursts to escape from predators or capture food and include angelfish, butterflyfish and batfish.
- **Ventrally compressed** – these are flattened from top to bottom and live and swim on the bottom of the sea. They include flathead and rays.
- **Elongated (stretched)** – includes eels, trumpetfish and pipefish. Their shape is ideal for moving in and out of narrow spaces such as rocky coral reefs.
- **Unusual** – these are slow moving and include seahorses and stonefish.



### Protection

Reef animals use their shapes, body parts and behaviour in many different ways to help them survive. Many fish have protective spines. The surgeon fish (*Acanthurus*) have very sharp 'blades' at the base of their tails. Members of the scorpionfish family have poisonous spines on their dorsal fins that give powerful stings. The well-camouflaged stonefish have strong dorsal spines and a potent venom.

