

## **Australian Government**

Great Barrier Reef Marine Park Authority

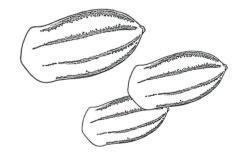


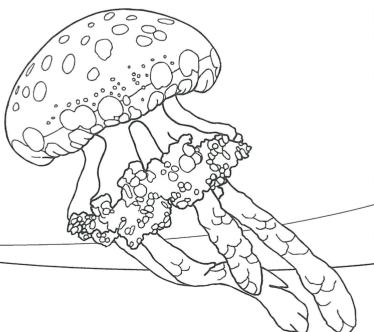
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## Jellyfish

- Jellyfish have a bell-like shape and tentacles.
- The jellyfish is made up of 95% water.
- A group of jellyfish is called a smack.
- Large adult jellyfish are often accompanied by small fish which hide amongst their tentacles for protection.
- Box jellyfish can swim as fast as most people can walk.

- O Some jellyfish have clear bodies and you can see right through them.
- Most jellyfish can only move up and down in the water using a pumping action.
- Some jellyfish have tiny algae known as zooxanthellae living inside them.
- The box jellyfish is the most dangerous marine animal to humans.











Jellyfish are not fish, but are actually Cnidarians (the same group as corals and anemones). They are invertebrate animals, which means they do not have a backbone. All jellyfish have stinging tentacles but how much the sting burns varies between different species.

Feeding

Depending on the number and length of tentacles, jellyfish feed in various ways. Most catch their food with their tentacles as it drifts by and is then carried to the mouth, which is located in the centre of the bell shaped body. Some jellyfish have a thick fluffy-looking frill between the upper bell and the lower tentacles, which actually contain countless mouths to trap small organisms from surrounding waters. Jellyfish eat small crustaceans, fish and minute planktonic organisms.

Stages of life

Like most other *Cnidarians*, jellyfish have a two-part life-cycle. The first stage is the familiar free-swimming bell-like stage. The polyp is the lessor known stage, which forms just after egg and sperm combine. The polyp stage is normally very small and not free-swimming. Prior to summer the polyp starts to shed parts of its body, each of which grow to form the swimming jellyfish stage. At the free-swimming stage, jellyfish drift at the mercy of the currents, often accumulating in sheltered bays and estuaries. They swim in an unusual way - a pumping action where muscles in their bodies contract and propel them through the water. This does little more than allow them to move up or down in the water.

Box Jellyfish (Chironex fleckeri)

Often called the marine stinger, the box jellýfish inhabits the shallow coastal waters around northern Australia and can be found in the waters of the Great Barrier Reef during the summer months between October and May.

Their body, which is box-like in shape, can vary in size from 5–25 centimetres across and has groups of tentacles (up to 15) at each of the four corners. Box jellyfish move in the water by filling their bell with water and then forcing it out again. Their tentacles, which are covered in millions of stinging cells, drag along behind them as they move.

During 'stinger season' (October to May), humans are more likely to be stung by box jellyfish when swimming or wading in Australia's northern oceans. The jellyfish are difficult to see as they are almost invisible in the water. When an animal or human comes into contact with the tentacles the stinging cells are triggered and fine, hollow threads pierce the victim allowing the venom (poison) to enter. The tentacles attach to the victim with the help of a sticky material produced at the same time.

Irukandji (Carukia barnesi)

The irukandji jellyfish is also one of the most dangerous marine animals found in the Great Barrier Reef. The irukandji is a tiny jellyfish with a two centimetre wide bell and tentacles from five to fifty centimetres long. They are clear and extremely hard to see in the water. An irukandji sting can cause extreme sickness and can even be fatal. Swimming in the Reef's waters between the warmer months of October and May is not recommended without protective clothing such as a stinger suit. Care should be taken when swimming in stinger enclosures, as the irukandji is so small it can sometimes fit through the enclosure's nets.

What to do if stung by a box or irukandji jellyfish

If possible flood the sting area with vinegar, which will stop the firing of the stinging cells. Do not rub the sting area with hands, a towel or sand. If breathing stops begin resuscitation. Keep the affected area still and seek medical assistance.

FACTFIDES #18

