



FACTSHEET

Coral (Hard Corals)



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Common Name: Coral (Hard Coral)

Scientific Name: *Scleractinian*

Conservation Status: The waters around Rottneest Island are a designated Marine Reserve. Also, some parts of Rottneest' coral reefs are included in the Marine Sanctuary Zones shown in the Rottneest Island Marine Management Strategy (2007).

Description:

Hard corals have a simple design. A thin outer layer of soft tissue covers a calcium carbonate skeleton. The live coral polyp (individual coral organism) is made up of tentacles surrounding a mouth which leads to the digestive system inside the animal. Each individual coral polyp occupies a skeletal cup. This cup is called a corallite. A coral colony (the big structures which together form the reef) is made up of lots of the same basic polyps.

Hard corals have a symbiotic relationship with tiny algae that live inside them. This means that the two organisms live together as one. In this case, the relationship is

useful for both the coral and the algae.

The algae use the waste products (nutrients and carbon dioxide) from the coral.

The algae are photosynthetic which means they use light to produce sugar and protein. This process also produces oxygen.

The coral uses these products to grow and build its skeleton.

There are three types of hard coral: branching, massive/encrusting, plate;

- Branching coral looks similar to branches in plants. It can sometimes have a small base attachment to rock or the sea floor, but sometimes it does not. Cauliflower Coral (*Pocillopora damicornis*) is an example of a branching coral.
- Massive/encrusting coral lives in dome shaped or rounded colonies. The widest part of the colony is firmly attached to rock or the sea floor. Encrusting coral colonies are more flattened than the usual massive dome shape. Flowerpot coral (*Alveopora fenestrata*) is an example of a massive/encrusting coral.



- Foliose/plate coral are colonies with plate-like horizontal or vertical folds. Yellow Scroll Coral (*Turbinaria reniformis*) is an example of a foliose/plate coral.

Threats:

- Human activity (inappropriate boating, fishing and diving practices)
- Pollution
- Climate change causing increased water temperature, low salinity.

DID YOU KNOW?

You can tell the difference between coral species by looking at the different size, shape and arrangement of these polyps. It is easier to do this during the daytime because the coral tentacles are tucked away and the structure is exposed.

Corals feed at night. The individual polyps open their tentacles out to capture the small plankton which they eat.