



FACTSHEET

Sea Star



Sea Star



Common Name: Sea Star

Scientific Name: *Asteroidea*

Conservation Status: The waters around Rottneest Island are a designated Marine Reserve. Some parts of Rottneest' coral reefs, sandy floors and seagrass meadows are also included the Marine Sanctuary Zones shown in the Rottneest Island Marine Management Strategy (2007).

Habitat: rocky shores, reefs

Description:

Sea stars have flattened bodies made of a central disk and usually five arms. The sea stars most commonly found around Rottneest are very bright in colour and tend to be red or orange.

Bright colours in the marine environment are often an indication of poison or danger. Sea stars use their bright colour as a decoy by pretending to be poisonous as they are not harmful at all. In this way sea stars protect themselves from potential predators.

Diet:

Mussels, clams, oysters, molluscs, invertebrates, sponges, plant material.

In the wild:

Sea stars move by crawling along the seabed and over rocks and reefs. On the underside of their bodies, a groove extends from the mouth to the tip of each arm. Rows of slender tubes, called tube feet, line these grooves. They use the suction disk at the end of each tube foot to grip surfaces and crawl along.

Many sea stars are omnivores, feeding on both plants and animals. A sea star's mouth is in the middle of the underside of the central disk and leads directly into a large, bag-like stomach. The sea star can push its stomach out through its mouth. When it feeds on a bivalve (such as an oyster), it attaches its tube feet to the two halves of the animal's shell and pulls the shells halves apart, opening a tiny crack between them. Then the sea star pushes its stomach, turned inside out, through the crack in between the shells. A sea star can slide its stomach through a crack no larger than the





thickness of a piece of cardboard!

The stomach surrounds the animal's soft body, slowly digests it, and the food is absorbed through the lining of the stomach.

Most sea stars have separate sexes.

They reproduce by releasing eggs and sperm into the sea through reproductive organs (small holes) between their arms.

The eggs and sperm meet by chance in the water column and fertilisation occurs.

The fertilised eggs hatch into microscopic swimming larvae, forming part of the plankton. After a while, each larva settles down on the sea bottom and develops into a sea star. Most sea stars live for 3-5 years, but some may live to 7.

Threats:

- Pollution
- Human disturbance

DID YOU KNOW?

Sea stars can regenerate (or grow again) new arms when the old ones are broken off.

Even if a starfish is cut in two, each of the pieces will regenerate into a new animal (as long as part of their central disc exists).

The sea star "sees" with a small coloured eyespot located at the tip of each arm.

The eyespot senses light, but cannot form images.