

GEORGIA AQUARIUM ANIMAL FACT SHEET

Purple Sea Urchin

Strongylocentrotus purpuratus

Range/Habitat

- The purple sea urchin occurs along the coast of the eastern Pacific from British Columbia to Baja California.
- It is found on rocky shores from the low-tide line to depths of 525 feet (160 m).

Physical Characteristics

- The purple sea urchin is spiny and ovoid shaped. Its upper surface is domed and the underside is flattened.
- Its mouth has a complex structure made up of five calcium carbonate plates. It is referred to as "Aristotle's lantern" because he was the first to describe it.
- This sea urchin grows from a greenish colored juvenile to a vivid purple adult.
- It can grow 4 inches (10.2 cm) wide and almost 2 inches (5 cm) high.

Diet/Feeding

- The purple sea urchin eats brown and red algae, kelp, and decaying plant and animal matter. It is able to grasp food using its spines and tube feet.

Conservation Status

- The purple sea urchin is not on the IUCN Red List.

Additional Information

- The purple sea urchin moves on small tube feet, which are found all over the animal. Each tube foot can be extended or contracted and each terminates in a tiny suction cup which allows it to cling to hard surfaces.
- This urchin can tolerate temperatures of 41° to 74°F (5°-23.5°C). Water temperatures above about 79°F (26°C) cause massive die-offs.
- The test (or "shell") of the purple sea urchin is actually a hard, thin calcareous skeleton, rather than a shell.
- The purple sea urchin can regenerate broken spines and can grow new teeth at rates that result in their complete exchange in about 75 days in the lab.
- Sea urchins are an important part of the diet of sea otters. They also are preyed upon by numerous fish species, such as wolf eels and sheepshead, as well as sea stars.
- The pigment from the urchins' spines will lodge in the bones of the sea otters and stain them purple.
- Purple sea urchin ovaries are shipped to Japan for sushi ("uni").

Sources

<http://www.aquariumofthebay.com>

<http://www.enature.com>

<http://www.sheddaquarium.org/>