

GEORGIA AQUARIUM ANIMAL FACT SHEET

Forbes' Sea Star

Asterias forbesi

Range/Habitat

- The Forbes' sea star is found in the western Atlantic from the Gulf of Maine to Texas.
- It lives on rock, gravel or sand bottoms, from the low tide line to depths to 160 feet (49 meters), although it is most commonly found at low tide on rocky surfaces.

Physical Characteristics

- This sea star can reach about five inches (13 cm) in diameter.
- Its coloration is tan, brown or olive with tones of orange, red or pink.
- It has five long, blunt, thick arms with scattered spines on the upper surface that are not usually in rows.

Diet/Feeding

- The Forbes' sea star is a carnivore that feeds chiefly on bivalve mollusks in the wild. In aquariums, this animal will eat nearly anything.
- When feeding, a sea star will wrap its five arms around its prey gripping it with its suckered tube feet. The stomach, which looks like a thin white membrane, then extends through the mouth to surround the prey. The stomach tissue secretes digestive juices that dissolve the prey, which is absorbed by the stomach membrane.
- This sea star is the major predator of the eastern oyster and sometimes consumes quantities equal to half the commercial catch.
- When preying on an oyster or clam, the sea star grips the bivalve's shell and applies strong pressure to force it open. By creating even a tiny gap, the sea star can squeeze its stomach inside the shell and digest the soft body tissue.

Conservation Status

- The Forbes' sea star is not on the IUCN Red List.

Additional Information

- The Forbes' sea star is also called the "common sea star."
- It is probably the most common sea star along the coast of the southeastern U.S.
- This species does not feed on oyster beds located in the upper reaches of estuaries as it can not tolerate salinities lower than 16 or 18 parts per thousand.
- It uses the tide to move from one oyster bed to another. By curling up the tips of its arms and releasing its hold on the substrate, it can drift with the current just above the bottom of the sea floor. In this way, it travels faster than it could on its own.
- When a sea star loses or damages an arm, it sheds the appendage at a point close to the center of its body and the cut skin begins to heal over. It then will regenerate a new limb. Sometimes a sea star will overcompensate and grow more than one replacement limb.

Sources

National Audubon Society Field Guide to North American Seashore Creatures.

Meinkoth, N. A., pg. 679

Seashore Animals of the Southeast, Ruppert, E. E and Fox, R. S., pg. 69

http://www.chesapeakebay.net/Info/atlantic_seastar.cfm