

GEORGIA AQUARIUM ANIMAL FACT SHEET

Bat star

Asterina miniata

Range /Habitat

- The bat star occurs primarily along the Pacific coast from Alaska to San Diego, with small numbers encountered in Mexico.
- This sea star is found among rocks, on sandy sea bottoms and among surf grass in low intertidal and subtidal zones to a depth of 957 feet (290 m).

Physical Characteristics

- The bat star is most commonly reddish-orange or mottled white, but can be found in a variety of patterns and colors including brown, green, purple or pink.
- It usually has five, short, triangular arms, but can have from four to nine. The arms appear to have webbing between them and resemble a bat's wing, hence the species common name. It is also called the "webbed star."
- This sea star typically has a radius of about four inches but can reach 6 to 8 inches (15-20 cm).

Diet/Feeding

- The bat star is an omnivore and a scavenger. Its favorite prey includes other sea stars, tunicate worms and algae.
- The mouth of the bat star is located on its underside, and it extends its stomach out of its mouth and digests its food externally.
- A large group of bat stars will sometimes engulf the carcass of a decaying fish and consume it in a slow-motion feeding frenzy that can be mistaken for a wrestling match.

Conservation Status

- It is not listed on the IUCN Red List.

Additional Information

- The bat star was formerly known as *Patiria miniata*, meaning "vermillion dish."
- The main predators of the bat star are other sea stars, mollusks and crustaceans.
- The bat star avoids being eaten by secreting chemicals used to stimulate violent escape responses in other animals.
- The bat star has a commensal relationship with a polychaete worm, *Ophiodromus pugettensis*. The worms live on the surface of the bat star and usually move toward the ambulacral groove. There can be as many as 20 worms on one bat star.
- The bat star has an unusually long breeding season. Both males and females will discharge fertile sperm and eggs all year long, but more abundantly during the late winter and spring. A fertilized egg will develop into a motile embryo and then later into a minute larvae. The larva swims by moving its cilia. Eventually the larva settles and develops into the sea star.
- Since the bat star has a long breeding period, scientists use it for embryological studies because its fertilized eggs are available almost year round.
- Growth rates and life spans are variable among the sea stars. Individuals may live 5 to 35 years depending on the species.

- Like all sea stars, when turned upside down the bat star will right itself by using its tube feet and arms to perform a slow, graceful somersault that restores it to its normal orientation.

Sources

http://animaldiversity.ummz.umich.edu/site/accounts/information/Patiria_miniata.html

<http://www.ocean-institute.org>

http://www.vims.edu/bridge/body_batstar.html

<http://www.fao.org/figis/servlet/species?fid=2028>

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

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