

Featherduster Worm



Kingdom: Animalia
Phylum: Annelida
Class: Polychaeta
Order: Canalipalpata
Family: Sabellidae
Genus: *Sabella*
Species: undefined

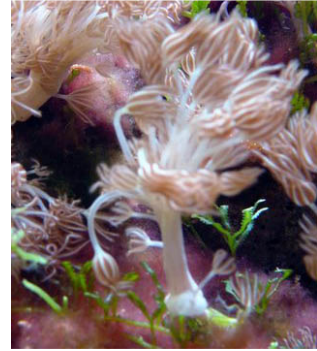


Photo courtesy of Jane Patrick

Habitat

- **In the Wild:** Featherduster worms are found in tropical and temperate waters worldwide, in depths of 7-165 feet, among stones or built on rock crevices.
- **Exhibit Location:** USS Antiquities

Characteristics

- The featherduster worm lives in a tube that it makes from a combination of fine sand particles and mucus. It may have a calcareous (composed of or containing calcium carbonate) tube which it secretes.
- The worm's body is made up of muscle, separated from the internal organs by a layer of fluid.
- The common name “featherduster” comes from the crown of tentacles attached in two groups, one on each side of its head. Internal skeletal rods support the tentacles.
- The featherduster worm uses its tentacles to breathe and to capture its food. The tentacles have fine cilia (tiny hairs) on them, and are grooved so that the particles are guided to the base of the tentacle.
- Featherduster worms found in deeper water tend to be larger than those found in shallower water.
- **Lifespan: In the Wild** unknown; **In Captivity** unknown

Behaviors

- The featherduster worm usually has its tentacles extended in the water to trap food particles. The particles are then channeled to the base of the tentacles where they are sorted by size.
- The smallest particles are sent to the mouth. The medium-sized particles are used to build the tube. They are kept in ventral sacs where they are mixed with mucus. The sacs secrete strands of mucus and sand and are sent to the collar at the top of the tube. There the tube is lengthened as the worm rotates inside the tube.
- Once the tube is formed and firmly attached to a hard surface, the worms stay inside it for the rest of their lives.
- The tentacles also contain light sensing spots. When a shadow passes over the worm, its muscular structure reacts instantly, and retracts the worm into the tube.
- **Enrichments at the Zoo:** not applicable

Reproduction

- Unlike its relative the earthworm, the featherduster worm has distinct male and female individuals. The females shed eggs into the surrounding water, and the males secrete sperm.
- Females greater than 12 inches in length can shed as many as 50,000 eggs at a time.

Diet

- **In the Wild:** plankton
- **At the Zoo:** brine shrimp larvae

Conservation Status

- **IUCN status:** not listed; **CITES Appendix:** not listed

- Predators: turbellarians (aquatic flatworms), ribbon worms, cnidarians (jellyfishes, hydras, etc), crustaceans, brittle-stars, sea stars, fish

Did You Know?/Fun Facts

- There are numerous species of featherduster worms under the *Sabella* genus, but the species at the RGZ cannot be determined without expert dissection.
- The outside of their tubes is often home to smaller organisms.
- Featherduster worms are often mistaken for plants.
- *Sabella spallanzanii* has become a pest in Australia. It has no known predators there and is colonizing hard man-made surfaces in Australia's harbors.
- In Italy, the featherduster worm is used as bait to catch large fish.

Sources:

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