
Aphrodita negligens

Sea Mouse

Phylum: Annelida
Class: Polychaeta
Order: Phyllodocida
Family: Aphroditidae

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Taxonomy: *Aphrodita negligens* was first described in 1905 by John Percy Moore. Synonymous names include *Aphrodita californica* Essenberg, 1917; *Aphrodita castanea* Moore, 1910; *Aphrodite negligens* Moore, 1905; and *Aphroditella negligens* Moore, 1905) (Read and Fauchald 2021).

Description

Size: *Aphrodita negligens* specimens have been recorded between 18 and 60 mm in length. They generally have an oblong shape, but their width can vary (Essenberg 1917).

Color: Specimens have been golden brown or dark grey in color with small, dull green bristles (Essenberg 1917), which can be iridescent (Moore 1905).

General Morphology: *Aphrodita negligens* is covered in setae, which gives it a felt-like covering on its dorsal side, often coated with debris (Fig. 1). The segmented body is most clearly seen from a ventral view (Essenberg 1917).

Body: The body has an oblong shape that tapers into a small point towards the posterior end (Essenberg 1917). The setae on the dorsal side arch high over the body, creating the illusion of having a boxy shape (Moore 1905).

Mouthparts: Unknown

Eyes: *Aphrodita negligens* has two pairs of small eyes located on each side of the anterior part of the prostomium (Moore 1905).

Prostomium: The prostomium is slightly wider than it is long and rounded on all sides. The frontal caruncle is as long as the prostomium, positioned vertically. It is somewhat globular towards the top but narrows ventrally until it ends in a finger-like process extending over the mouth. The exact nature of this process is unknown. A tentacle is believed to be attached but has not been observed (Moore 1905).

Sexual Dimorphism: This species is not sexually dimorphic.

Possible Misidentifications

At first glance, *Aphrodita negligens* may seem only to be a piece of inorganic matter due to debris coating the dorsal surface. Many *Aphrodita* species are often confused with one another, as they look very similar.

Aphrodita negligens has small iridescent bristles, while some other species, such as *A. brevitentaculata*, do not. The two *Aphrodita* species with the most marked iridescence, *A. aculeata* and *A. refulgida*, have much more iridescent bristles than *A. negligens*. The posterior end of *A. parva* is more rounded than *A. negligens*. (Essenberg 1917).

Ecological Information

Range: *Aphrodita negligens* are found all along the Pacific coast of North America. Moore's (1905) original specimen was found in Alaskan waters, and other specimens have been found as far south as San Diego, California and the Coronado Islands (Treadwell 1914).

Local Distribution: Unknown, but OIMB has collected individuals from about 120 m depth near Stonewall Bank off the Oregon coast.

Habitat: Rocky and soft bottoms.

Temperature: Unknown

Depth: *Aphrodita negligens* is considered to be a deep-sea dwelling annelid. Most specimens have been found at depths surpassing 150m deep, but one has also been collected from waters as shallow as 31m (Treadwell 1914).

Associates: Unknown

Abundance: Unknown

Life-History Information

Reproduction: Unknown

Larva: Unknown

Juvenile: Unknown

Longevity: Unknown

Growth Rate: Unknown

Food: Little is known about *A. negligens* feeding behaviors. All other Aphroditidae

species have been described as carnivorous, slow-moving hunters specializing in eating other slow-moving polychaetes (Fauchald 1979). There is also evidence that *A. negligens* may be a detrital feeder (Feder 1982).

Predators: There is little research on the predators of *A. negligens*, though they have been found in the gut content of the rock sole, *Lepidopsetta bilineata* (Kravitz 1976).

Behavior: Unknown

Bibliography

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Fig. 1. Dorsal view of *Aphrodita negligens* collected from ~120 m near Stonewall Bank off the Oregon coast in September 2019. Photo courtesy of MacKenna Hainey.