

Antedon (sea lily)

Classification

Kingdom : Animalia
Phylum : Echinodermata
Class : Crinoidea
Order : Comatulida
Family : Antedonidea
Genus : Antedon



For further details, [Link](#)

Characteristics

- Antedon is a free-swimming crinoid echinoderm known as a feather star, characterized by its stalkless, feathery arms, central disk, and clawed cirri used for temporary attachment to the seafloor.
- It is a marine animal found in shallow to moderate depths worldwide, often in areas with currents, where it feeds on microscopic organisms.
- A unique fact is its ability to break off from its larval stalk and achieve a mobile adult form, allowing it to move actively by swimming with its arms.
- **Appearance:** Antedon has a stalkless, central, concave disk from which five pairs of feathery arms emerge. These arms are bifurcated and bear rows of lateral extensions called pinnules, giving them a feather-like appearance.
- **Appendages:** The underside of the central disk has clawed cirri, which are used to temporarily cling to rocks or the substrate.
- **Pinnules:** These feathery structures along the arms contain tube feet and function as a filter-feeding mechanism.
- **Mouth and Water Vascular System:** The mouth is located on the upper surface of the central disk, surrounded by the ambulacral grooves, and the body contains a water vascular system typical of echinoderms.

Habit and Habitat

- **Habitat:** Marine, found in shallow to moderate depths in all seas.

- **Behaviour:** Antedon is a gregarious, free-swimming animal in its adult form. It can attach itself to rocks using its cirri or swim using its arms.
- **Feeding:** They are passive suspension feeders, using their feathery arms to capture and transport microscopic living organisms to their mouths.
- **Reproduction:** It is dioecious, meaning individuals are either male or female. Fertilization occurs on the pinnules, and the developing embryos are protected by the parent.
- **Feathery Arms:** Antedon have feathery arms arising from a central disc, which is characteristic of feather stars.
- **Crinoid Class:** They are members of the Crinoidea class, which also includes stalked sea lilies and other related echinoderms like starfish and sea urchins.
- **Unstalked Life:** Unlike many crinoids, adult Antedon lack a long stalk, detaching from their larval stage to become free-living animals.
- **Temporary Attachment:** They possess specialized, clawed appendages called cirri on their underside, which allow them to briefly attach themselves to objects in their environment.
- **Filter Feeding:** They are suspension feeders, using their many arms and pinnules (small, branched extensions) to filter plankton and other small particles from the water column.