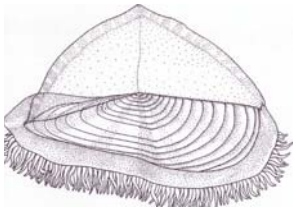
Velella-Velella



An amazing event happens on many coasts in the Northern hemisphere and especially in the spring in Bandon. On an early morning walk along our beautiful Bandon beaches - it seems that over night, after a good southernly wind, the color of the sandy beach has been transformed from tan to a bluish tinge! It may seem that the mussels attached to rocks may be "dying" from some strange disease. The pebbles, drift wood and other objects washed ashore are are also covered with a jelly-like substance. In a few days there is little left but a semi-circular pieces which were the sail.

What is this strange phenomenon that has been washed ashore? The Velella-Velella are considered members of the "jelly family" but are actually a pelagic[1] colonial hydroid also called cnidarians. They are a gelatinous sea creature that looks like a tiny sail boat with a fixed sail tacking in the wind. The sail gives the animal both its scientific (i.e. from velum, a sail) and its common name, 'by-the-wind-sailor'. The semi-circular sail sets diagonally along the float. The course sailed depends on the prevailing wind thus their common name of "by-the-wind-sailor" "In the modern schemes of classification, Velella is placed close to hydroids of the genus Tubularia"[2].

Some Velella-Velella may remain alive for a few days, if able to remain in a tide pool, but eventually, all that is left of this species is the nearly transparent, colorless sail which feels like parchment or soft plastic, when dried and laying on the beach. By-the-wind-sailors are either "left-sailed" or "right-sailed". On the North American side of the Pacific these hydroids are "right-sailed".

The prevailing northwest winds usually keep them off-shore, but if a southerly or westerly wind blows, the Velella is washed ashore.

It is commonly thought that while afloat in the Pacific, the prevailing winds determine which coast they are blown to; the western or eastern Pacific! The Velella-Velella has been seen on the open ocean in the tens of thousands.

The body consists of two parts: the float and the sail below which polyps (individual members of the colony) dangle. The float is oval, and jelly-like, and contains a series of sealed chambers that gives it buoyancy. The clear semi-circular sail projects above the surface of the gas-filled float. There are stinging cells on some of their polyps which collect plankton for food. These hydroids are also food for other sea life. They are considered to be cousins of the Portuguese Man-of-War (also bluish in color) [3]

[1] Sea dwelling life form

[2]. Seashore Life of the Northern Pacific Coast by Eugene N. Kozloff

[3] Sea Life edited by Geofrrey Waller

DIET - consists of fish eggs, shrimp eggs, copepods and other plankton.
RANGE - found in temperate to tropical waters world-wide.
SIZE - Up to 3 in (8 cm).
REPRODUCTION: In this species the adult does not reproduce directly. Some polyps are specialized reproductive organs which transform polyps into medusae which look more like traditional jelly-fish in miniature. The medusae produce egg and sperm which produce larvae that develop into the next generation of adults. During the early stages oil droplets are formed that bring the young Velella to the surface[4]
CONSERVATION NOTES: the population of "by-the-wind-sailors" is not considered to be in danger at this time. However, they are affected by contaminants. [5]

Reference: Marine Life Information Network: Biology and Sensitivity Key Information Sub-programme [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 15/03/2004]. Available from: http://www.marlin.ac.uk/species/Velvel.htm

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[4] Aquascope Web Site of the Tjärnö Marine Biological Laboratory, Strömstad Sweden

[5] Monterey Bay Aquarium