## **Point Reyes**

National Park Service U.S. Department of the Interior

**Point Reyes National Seashore** 



## Velella Velella (or By-the-Wind-Sailors)

As you walk along the beach during the spring or early summer months, you may see scores of blue or clear. objects washed up on the sand. These jellyfish-like creatures are called *Velella velella*, or "by-the-wind-sailors."

| Physical Description | Velella are not true jellyfish, but are related<br>to jellyfish, as well as to sea anemones, corals,<br>and hydroids. The Velella is a flat, oval-shaped<br>creature, bluish to purple in color and three<br>to four inches long. The body is relatively firm<br>and has a flexible two-inch-high triangular<br>"sail" attached to it. The Velella's sail is<br>S-shaped at its base and is attached to the body<br>diagonally.<br>Dangling from its body are numerous<br>blue tentacles which contain stinging cells<br>(cnidocysts, also called nematocysts) to help<br>capture the Velella's food. Velella's stinging<br>cells are rarely harmful to humans, as opposed<br>to those of the Portuguese man o' war. | endodermal<br>air vent<br>buds<br>buds<br>buds<br>buds<br>buds<br>buds<br>buds<br>buds   |
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| Diet and Predators   | Velella is an off-shore animal which lives on<br>the surface of the water. It feeds on planktonic<br>crustaceans, primarily copepods.  | Known predators are limited, but include<br>nudibranchs (sea slugs) in the genus<br><i>Glaucus</i> and purple snails in the genus<br><i>Janthina</i> .   |
| The "Sail"           | The name "by-the-wind-sailor" is really a<br>misnomer for this little animal. Velella don't<br>actively navigate using their sail, although<br>they are at the mercy of the winds as to where<br>they go. When the sail catches the wind, the<br>Velella will be blown downwind at an angle<br>to the wind. This sets Velella apart from<br>many other jellyfish, which drift with the<br>ocean currents.  | Some sails on Velella angle to the left and<br>propel the animal left of downwind; others<br>angle to the right and propel the animal<br>right of downwind. Due to the prevailing<br>winds in different parts of the world, left-<br>handed Velella are usually found in the<br>Northern Hemisphere, while right-handed<br>ones are usually found in the Southern<br>Hemisphere. |
| Strandings           | When the prevailing winds shift, such as<br>during a storm, the Velella are driven towards<br>the coast, where they often are stranded on<br>beaches in great numbers. As the Velella<br>dries out on the beach, it becomes brittle and<br>transparent, looking like a cellophane candy<br>wrapper.  | Velella are one of the few examples of the<br>high seas life which beachcombers may<br>find in Point Reyes National Seashore.  |