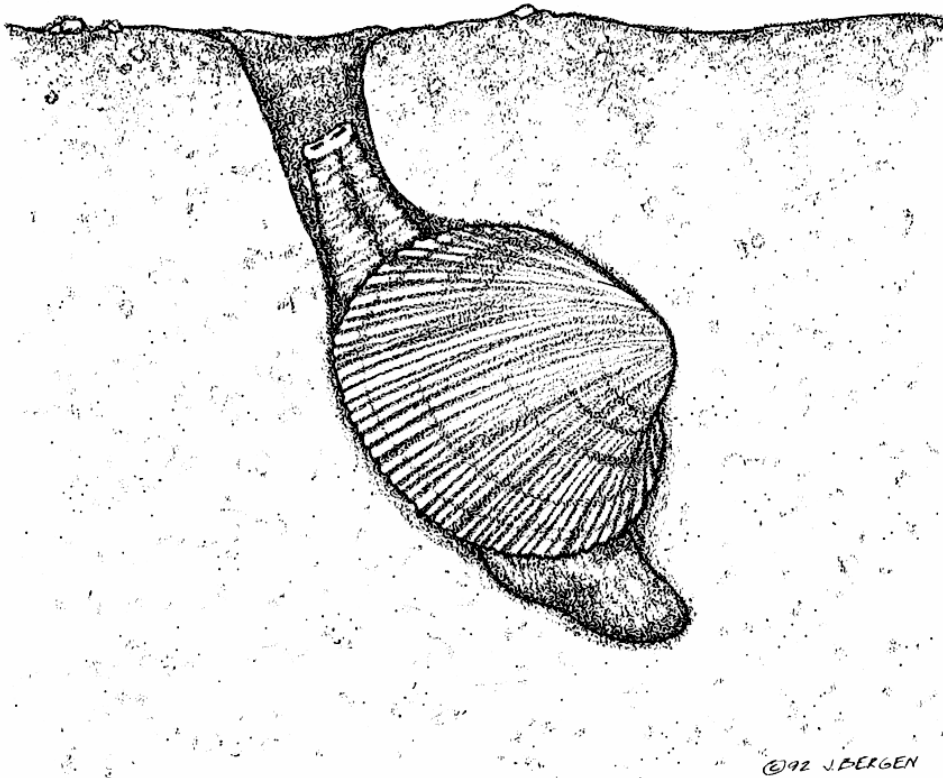


Oregon's Bay Clams

by Kenn Oberrecht



Mollusks are invertebrates that typically have shells, called valves, of one or more pieces completely or partly enclosing their soft, unsegmented bodies. Members of the class Bivalvia, the bivalves are simply mollusks with two shells. They include scallops, oysters, mussels, cockles, and clams.

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Clams reproduce sexually, and in most species fertilization occurs as eggs and sperm drift through the water. Clam larvae are planktonic ("drifters"), usually for two weeks or more, after which they metamorphose into juvenile form and settle to the bottom.

A juvenile might use its foot to move about the estuary bottom, or might briefly tumble with the currents before burrowing into the bottom sediments. Others temporarily attach themselves, via byssal threads, to rocks or other solid bottom structure, where they remain until they've grown to an inch or more and can then take up residence in sand or mud.

Clams are well built for the two jobs they do best: burrow and eat. Each is equipped with a muscular anterior foot, with which it digs into the substrate. Its symmetrical valves or shell halves give it a wedge shape that facilitates burrowing.

Ensnconced in its habitat, and with the efficiency of a submersible pump, the clam puts its two siphons to work. It takes in water and nutrients with its incurrent or inhalant siphon and discharges water and wastes with its excurrent or exhalant siphon.

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The clam's gills secrete a mucus that collects tiny plants and animals and other fine particles of organic matter on which the bivalve dines. For silverware it has two flaplike structures called palps, with which it moves food from gills to mouth.

Lining the entire shell and forming a tough, rubbery strip along the ventral or opening edge of the shell is a membrane called the mantle. Siphons might be little more than a pair of slits in the mantle edge, as in the cockle. Or they can be two separate, extensible tubes, as in the bent-nosed and sand clams. In gaper and soft-shell clams, among others, the siphons are united into a single neck with two passages.

Bay clams are not only important to people, but also to other predators. Raccoons and otters prey on them, as do various species of fish, crabs, shorebirds, wading birds, and waterfowl. So it seems clams are vulnerable to a variety of predators, no matter the tide stage. Considering that and the fact that clams live out their existence in a wet, cold, gritty, and unforgiving environment, it's difficult to ponder the origin of the expression, "happy as a clam."

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