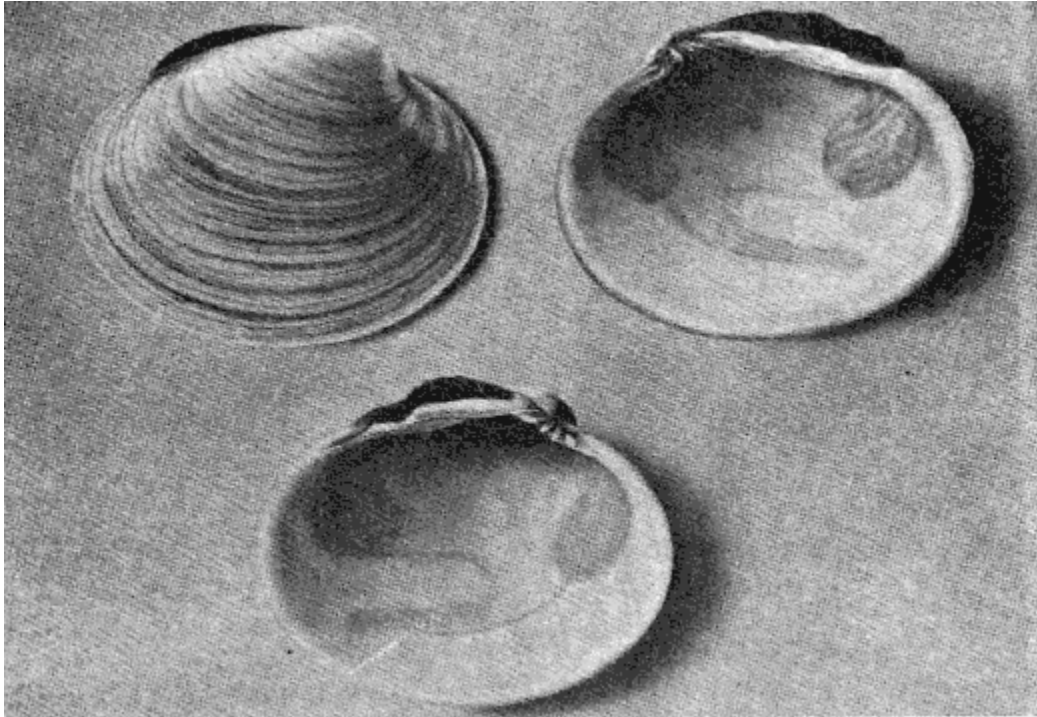


BUTTER CLAM

Saxidomus giganteus



TAXONOMY

Phylum: Mollusca
Class: Bivalvia
Order: Veneroida
Family: Veneridae

ECOLOGICAL DATA

Distribution: common in protected beaches in bays and estuaries along the Northwest coast.

Habitat: variety of substrates but typically occur in beaches of porous sand, broken shell, gravel and mud; may occur in association with littleneck clam; burrow to a maximum depth of 25 cm; planktonic larvae are dispersed by currents; adults remain in same burrow for life.

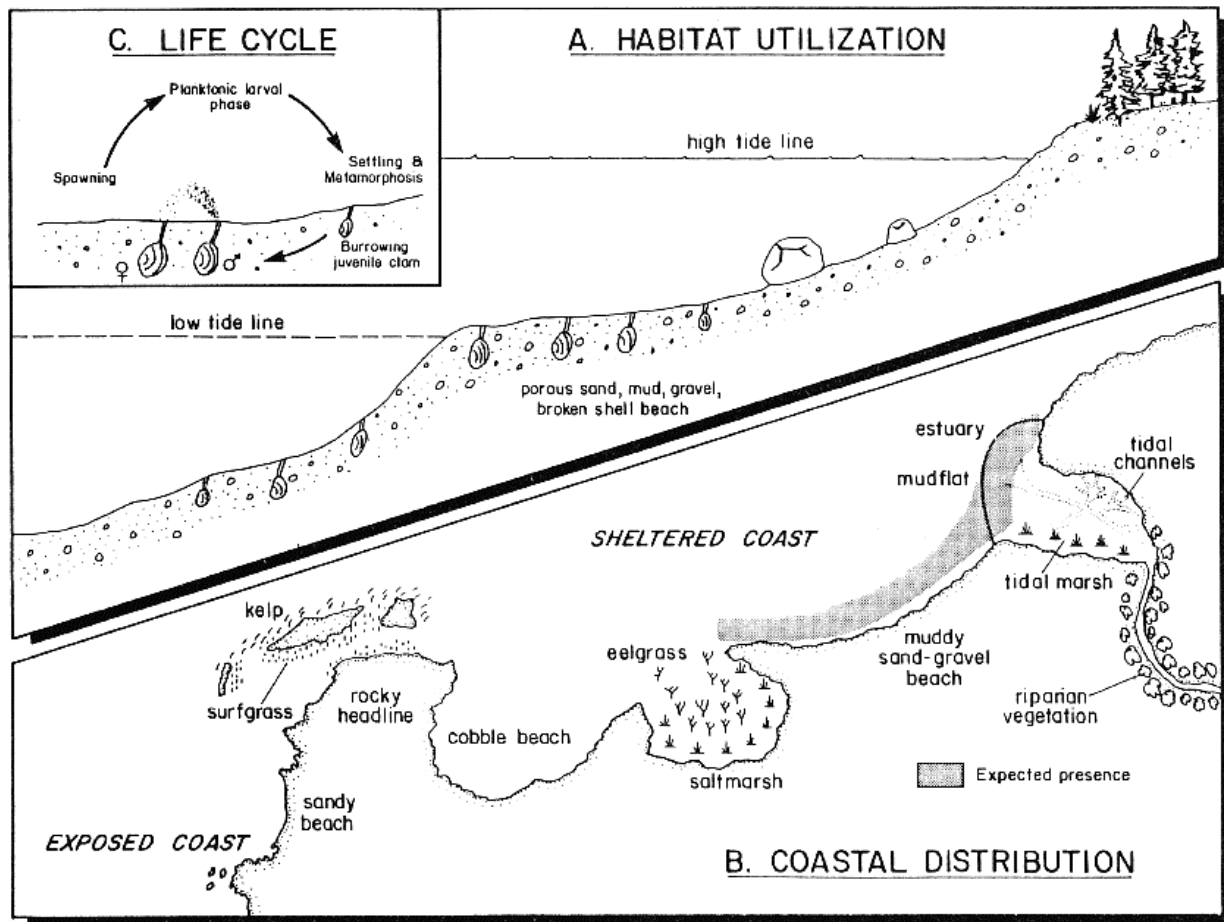
Tidal elevation: lower third of intertidal zone; may occur to 15 m subtidal depth.

Food: suspension feeder; mainly phytoplankton, but also zooplankton and detritus.

Predators: crabs and fishes prey on juveniles; moon snail, birds and sea stars prey on adults.

GROWTH RATE

Slow; sexually mature at 38 mm (about 3 yr.); legal size of 63 mm is reached in 5-6 yr



Generalized life cycle of the butter clam: Male and female clams spawn in May. Mass fertilization occurs in water column. Fertilized eggs develop into ciliated, motile larvae within 12 h of fertilization. Larval phase includes several stages (i.e. trochophore, veliger and umbone) and lasts for 3-4 weeks, during which time the larvae drift in the plankton and are dispersed by water currents. The larval phase ends when larvae settle from the plankton and attach themselves to gravel or broken shell by byssal threads, referred to as spatting. At approximately 5 mm the spat or juvenile clam creates a permanent burrow where it remains for life. Although butter clams may spawn every year, poor juvenile recruitment due to adverse environmental conditions, predation or competition can affect adult abundance. Adult clams may live to over 20 years and reach a maximum shell length of 130 mm.