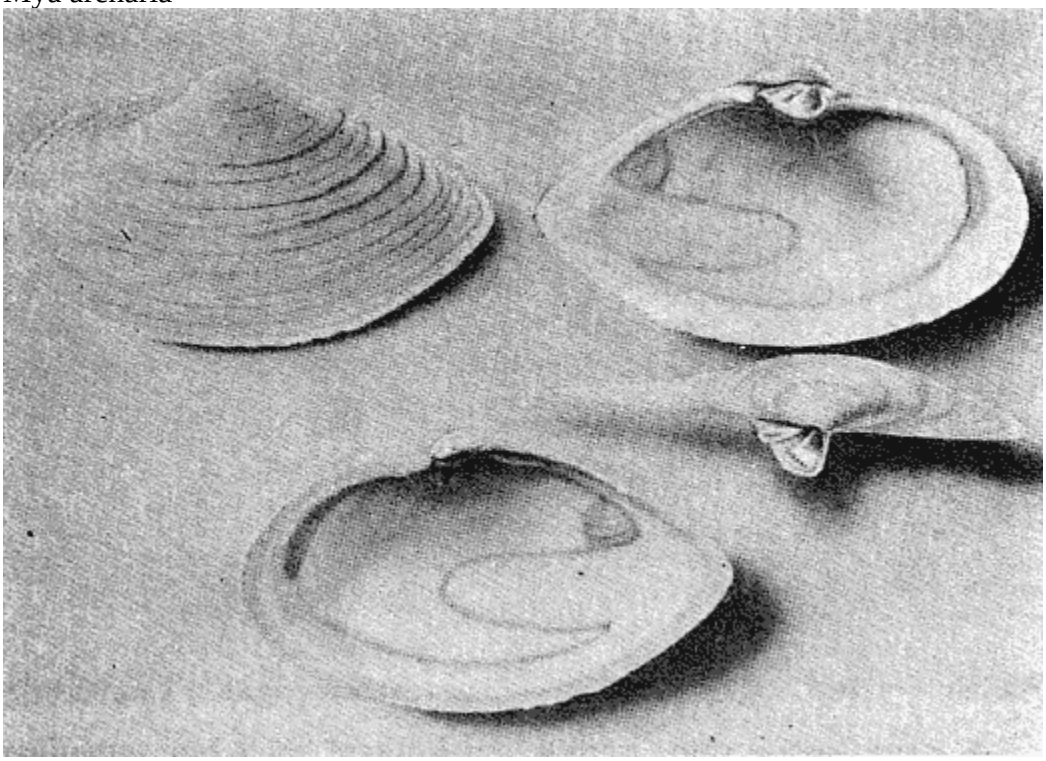
SOFT-SHELL CLAM

Mya arenaria



TAXONOMY

Phylum: Mollusca
Class: Bivalvia
Order: Myoida
Family: Myidae

ECOLOGICAL DATA

Distribution: introduced from Atlantic around 1879; common along the Northwest coast in protected estuaries and bays, often in brackish waters.

Habitat: soft muddy substrates in estuaries; common in eelgrass beds; survives in high organic-low oxygen conditions; poor digger, burrows to maximum of 20 cm; may occur with butter clams; planktonic larvae dispersed by currents; adults remain in same burrow for life.

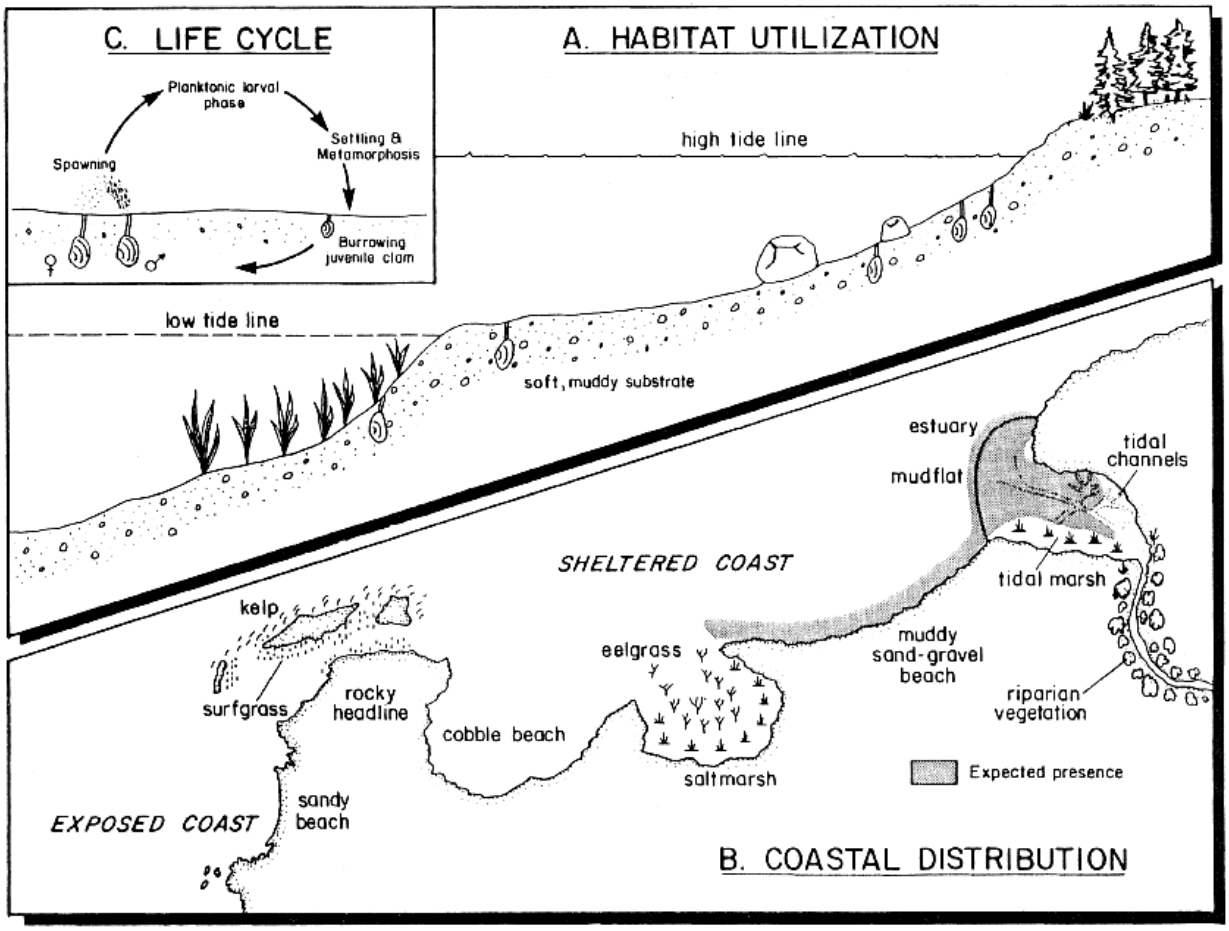
Tidal elevation: upper tidal to mid-tide range; on Atlantic coast extends to 9 m subtidal depth.

Food: suspension feeder; mainly phytoplankton and detritus.

Predators: diving ducks, gulls, crows, cormorants, and fishes.

GROWTH RATE

Sexual maturity at 2-3 years (25 mm); grow to 7.5 cm in 3 yr; reach up to 10 cm in B.C.



Generalized life cycle of the soft-shell clam: Male and female clams spawn in spring and summer. Mass fertilization occurs in water column. Fertilized eggs develop rapidly into ciliated, motile larvae. Larval phase includes several stages (i.e. trochophore, veliger and umbone), during which time larvae drift in the plankton for 2 weeks and are dispersed by water currents. The larval phase ends when the larvae settle from the plankton and attach themselves to gravel or broken shell by byssal threads, referred to as spatting. Juvenile clams may release byssal attachment and crawl about the bottom. At 6 mm they establish a permanent burrow and grow to full size.