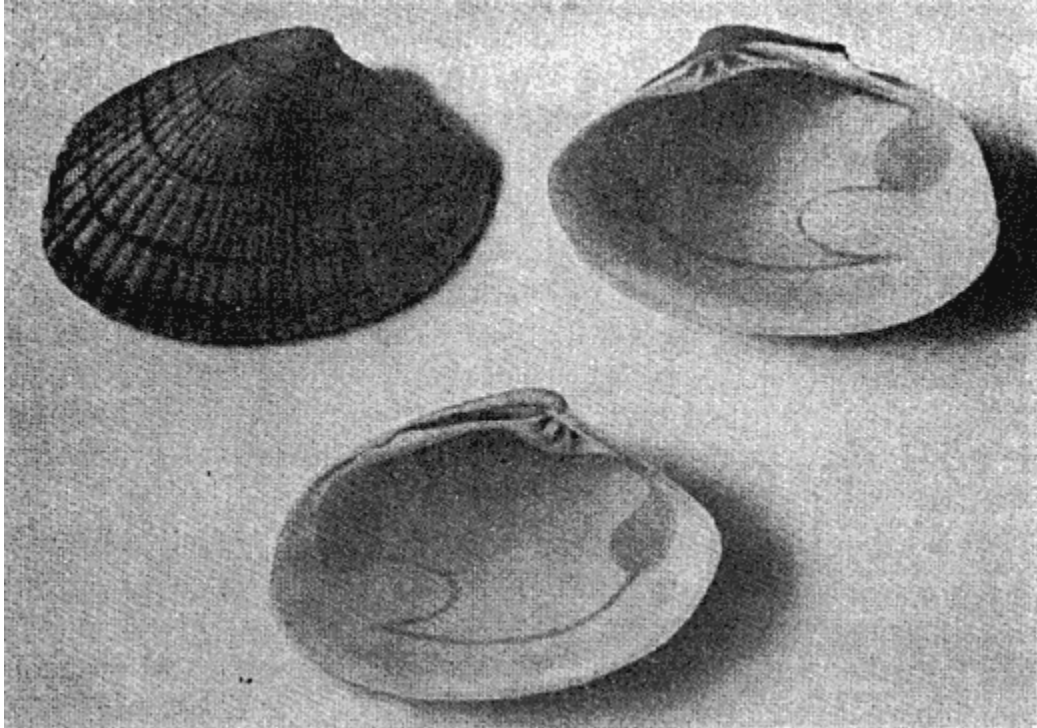


MANILA CLAM

Tapes philippinarum



TAXONOMY

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

ECOLOGICAL DATA

Distribution: exotic species; common in protected beaches in bays and estuaries in the Northwest

Habitat: sand-gravel beaches; burrow just below surface, to maximum depth of approximately 10 cm; planktonic larvae dispersed by currents; adults remain in same location for life.

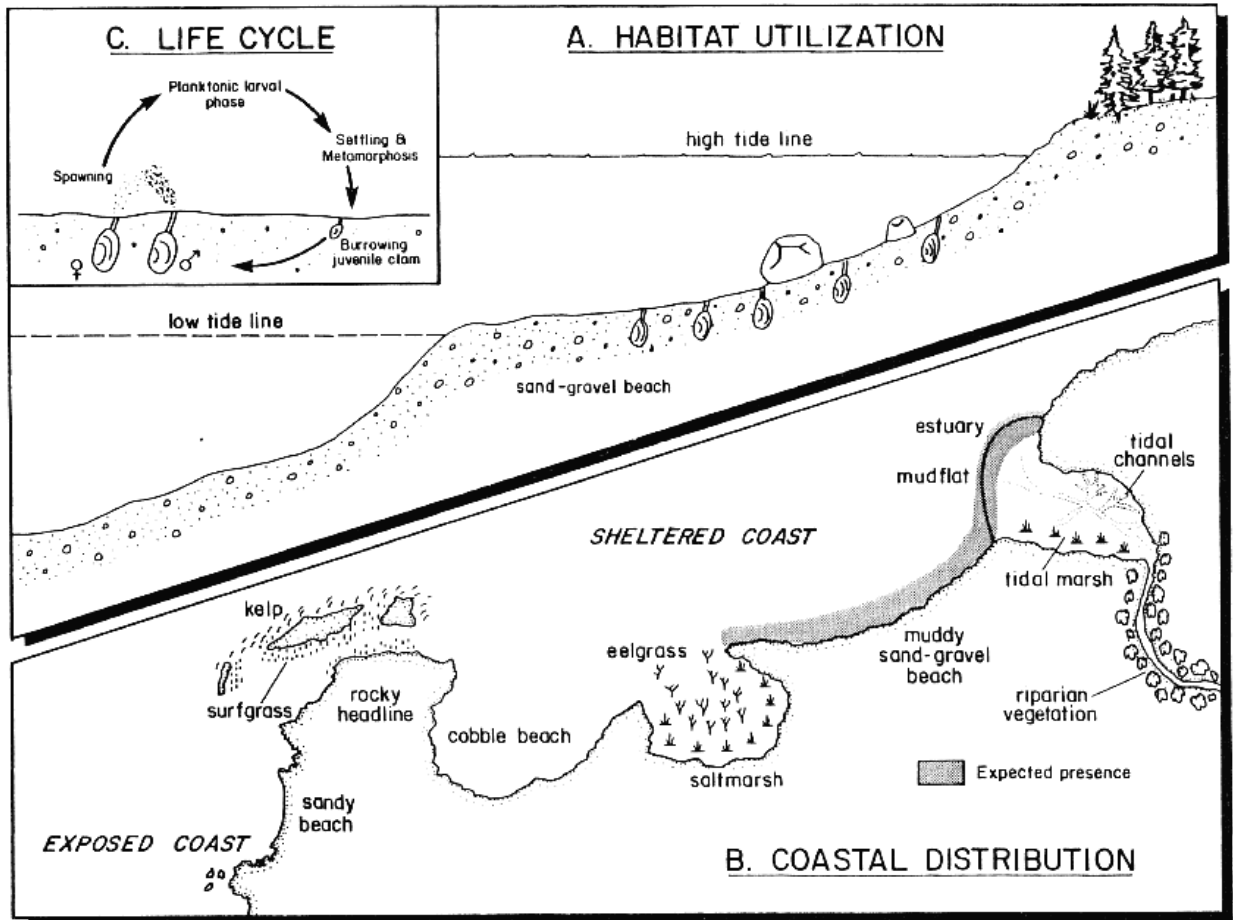
Tidal elevation: from 1 m intertidal zone to well above mid-intertidal level; does not inhabit subtidal; limited spatial competition with native clams.

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

Predators: mainly water birds due to higher intertidal colonization.

GROWTH RATE

Slow; sexually mature at 20 mm (about 2 yr.); legal size of 38 mm is reached in 3.5 yr in Strait of Georgia and 5-6 yr in north coast.



Generalized life cycle of the Manila clam: Male and female clams spawn between mid-June and September. 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. Manila clams require surface water temperatures in excess of 14 degrees C to permit gametogenesis, spawning and larval development, so establishment is largely along south coast. Adult clams may live to 10 years and reach a maximum shell length of 75 mm.