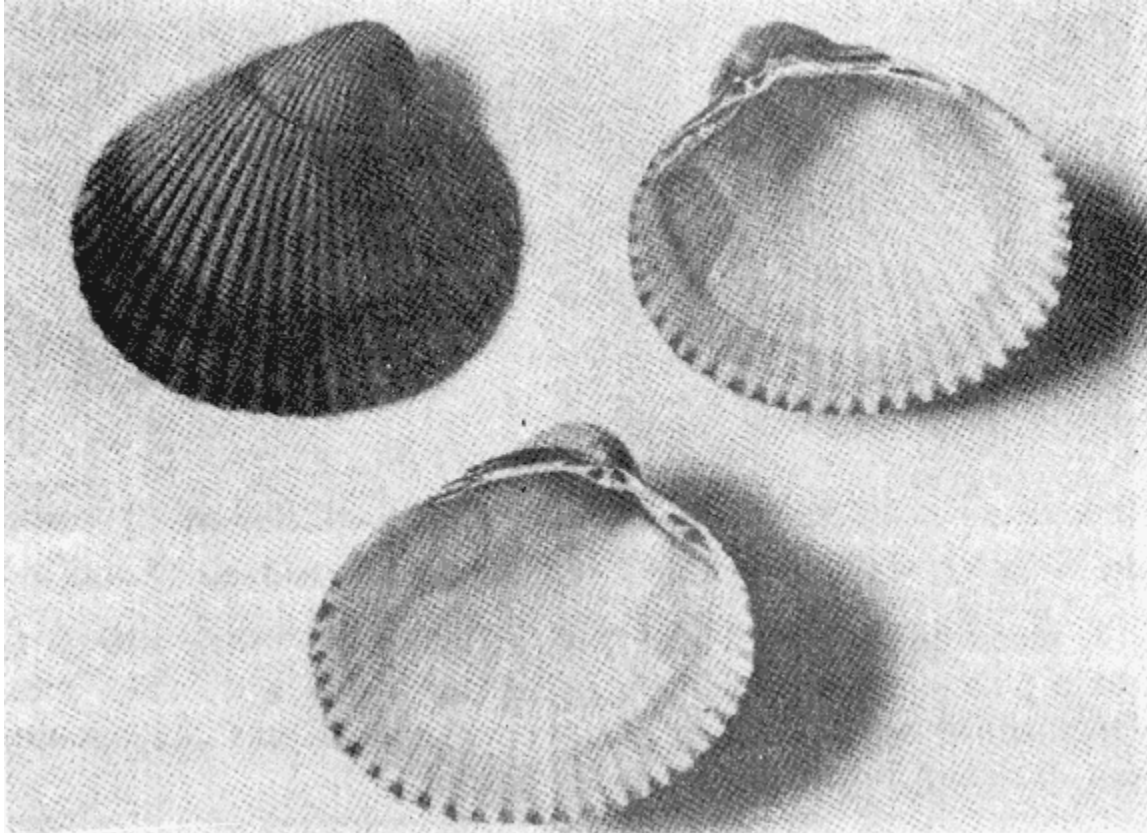


COCKLE

Clinocardium nuttallii



TAXONOMY

Phylum: Mollusca

Class: Bivalvia

Order: Veneroida

Family: Cardiidae

ECOLOGICAL DATA

Distribution: scattered on tide flats along coast, but not abundant in any one location.

Habitat: soft, sand-mud substrates of tide flats; abundant in eelgrass beds; associated with butter and littleneck clams; shallow burrow or may occur on surface; moves horizontally across beach, does not remain in same burrow;

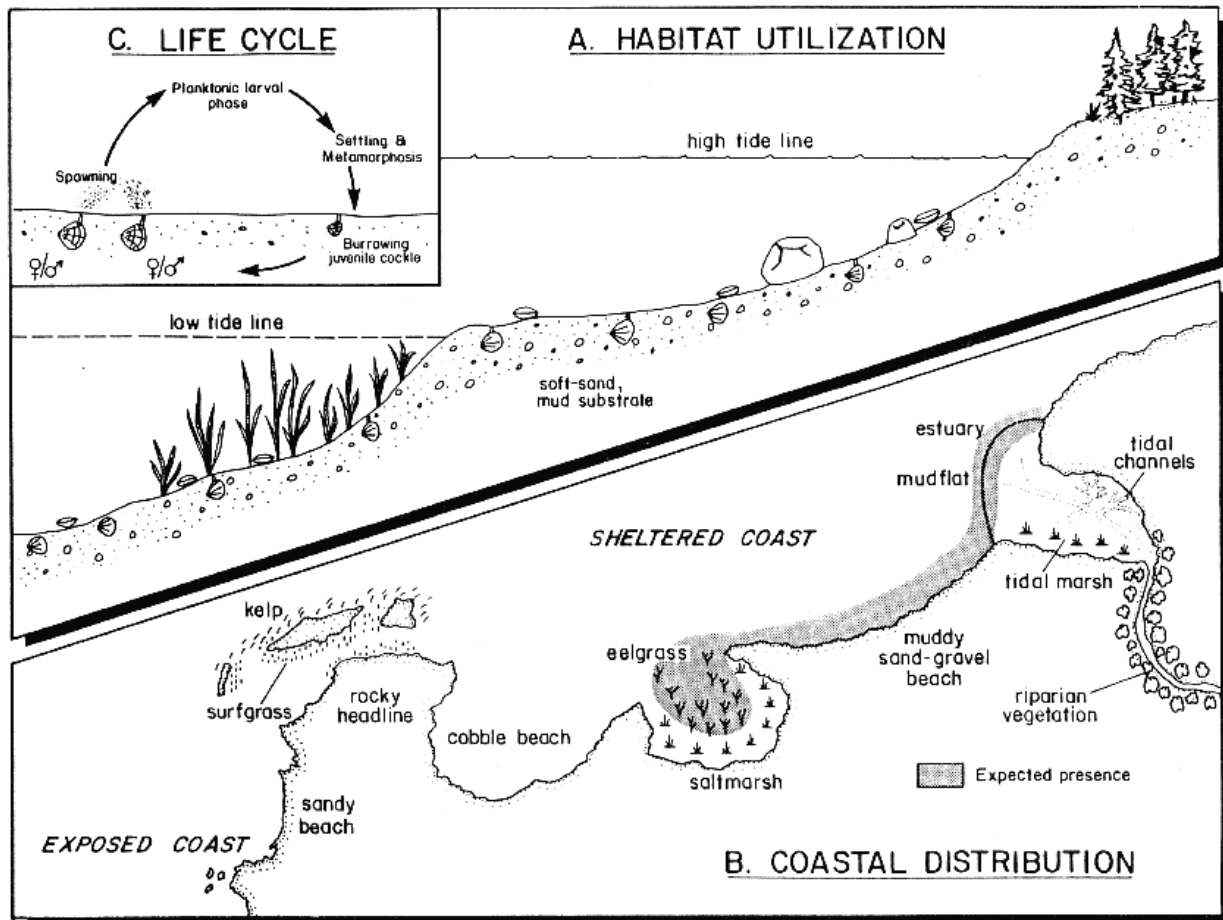
Tidal elevation: high intertidal to 30 m subtidal depth; most common in intertidal or shallow subtidal.

Food: suspension feeder; phytoplankton and detritus.

Predators: sea stars, crabs, flatfish and birds; easy prey since they occur on surface of tide flats.

GROWTH RATE

Moderately rapid growth; 60 mm in 3 yr; sexually mature at 2 yr.



Generalized life cycle of the cockle: Cockles are hermaphroditic. Spawning may extend over several months, but peak spawning occurs in May-September. Mass fertilization occurs in water column. Fertilized eggs develop rapidly into ciliated, motile larvae. Larvae phase includes several stages (i.e. trochophore, veliger and umbrane), during which time the larvae drift in the plankton and are dispersed by water currents. The larvae phase ends when larvae settle from the plankton and attach themselves to gravel or broken shell in sublittoral zone. Juvenile clam then burrows into substrate. As juvenile cockle grows it moves inshore and into intertidal. Adults usually live to a maximum age of 7 years and shell length may reach 12 cm.