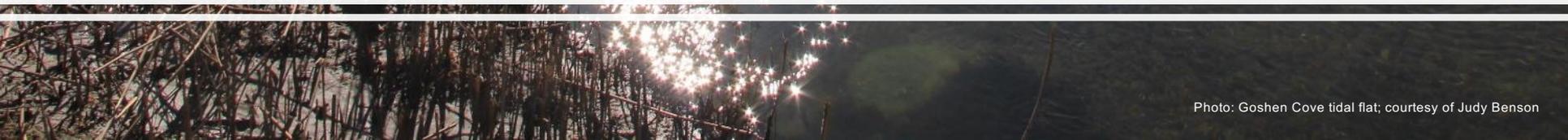




# Tidal Flats: Low Energy Calm





Water currents near tidal flats are quieter, allowing mud or sand to settle out; the fine sands, silts, and clay particles trap a lot of organic debris, which is then broken down by bacteria and fungi



Photo: White synapta (sea cucumber) *Leptosynapta tenuis*, courtesy of Robert Bachand

This translucent white sea cucumber, reaching up to 6 inches (15 cm) in length, is very common; it burrows into mudflats, sandflats and gravel in the intertidal zone and in deep water

Segmented bristled worms work the sand and mud, helping to bring oxygen down into the sediment

Food for other animals, bloodworms (top) and clam worms (bottom) are good fish bait, especially for winter flounder



Photo: (top) Bloodworm, *Glycera dibranchiata*; and (bottom) Clam worm, *Nereis virens*; courtesy of Robert Bachand

Photos: Northern moon snail, *Euspira heros*, and sand grain egg case; courtesy of Robert Bachand



A moon snail is a gastropod mollusc that uses its file-like mouth part to drill holes in bivalve molluscs for food; it constructs gelatinous sand grain egg cases, which sometimes can be found on the beach resembling fragile sand “collars”

Mud snails feed on detritus (decaying material) and algae on the surface of tidal flats



Photos: Individual mud snails (left & right),  
*Tritia obsoleta*; courtesy of Nancy Balcom

Photo: Hard clam, *Mercenaria mercenaria*;  
courtesy of Peter Auster/Robert DeGoursey



A hard clam feeds by drawing water in through one of its two siphons, straining plankton from the water, and discharging the water and its wastes through the other siphon



Photo: clam siphons; courtesy of Tessa Getchis

Often, the only signs that bivalve molluscs are present in tidal flats are their siphons extending from holes in the sand or mud as they filter microscopic plankton from the water

Softshell clams, also known as steamers or long-necks, live in deep burrows in the flats and shallows; when disturbed, they shoot up a spurt of water



Photos: Softshell clam, *Mya arenaria*; courtesy of Tessa Getchis

Photo: Razor Clams (juveniles),  
*Ensis directus*; Tessa Getchis



Razor clams burrow in the mud or sand straight up and down; they are fast and deep “diggers”



Photo: Sand shrimp or sevenspine bay shrimp, *Crangon septemspinosa*; courtesy of Peter Auster/Robert DeGoursey

Small, translucent sand shrimp burrow in the soft bottom sediments and are important food for other animals