

### Tube worms

*Hydroides dianthus* and *Spirorbis* spp.

**Range:** Maritime Provinces to Gulf of Mexico

**Habitat:** Attached to some form of substrate, including hard surfaces and plants

**Time of Year:** Most abundant in warmer months



### Boring sponges

*Cliona* spp.

**Range:** Maritime Provinces to Gulf of Mexico

**Habitat:** Live within mollusk shells, typically subtidal

**Time of Year:** Common year around; particularly active during warmer months

**Notes:** Affected shells are peppered with small (~1/8") holes



NOAA/WHOI

### Acorn barnacles

*Balanus* and *Semibalanus* spp.

**Range:** North American east coast

**Habitat:** Attached to hard substrate along both protected and exposed coast. Some tolerate low salinities. Intertidal and subtidal.

**Time of Year:** Barnacle sets are often observed in the late winter/early spring.



### Blue mussel

*Mytilus edulis*

**Range:** Maritime Provinces to South Carolina

**Habitat:** Attached to firm substrate, but can form extensive beds in soft substrate areas by clumping together. Intertidal and subtidal.

**Time of Year:** Mussel sets are often observed as early as late winter, but occur throughout the year

**Notes:** Blue mussels are very active and do quite a bit of 'walking' during high tide



### Eastern oysters

*Crassostrea virginica*

**Range:** Maritime Provinces to Gulf of Mexico

**Habitat:** Coastal embayments, intertidal to subtidal, including low salinity areas. Oysters attach to some type of hard substrate

**Time of Year:** Set typically occurs in June or July and are soon visible to the naked eye



# PESTS of Concern to New England Shellfish Growers



Woods Hole Sea Grant  
Woods Hole Oceanographic Institution  
MS #2, 193 Oyster Pond Rd.  
Woods Hole, MA 02543-1525  
Ph. (508) 289-2398  
[www.who.edu/seagrant](http://www.who.edu/seagrant)



Cape Cod Cooperative Extension  
P.O. Box 367  
Barnstable, MA 02630-0367  
Ph. (508) 375-6849  
[www.capecodextension.org](http://www.capecodextension.org)

# Shellfish Pests

If you are a shellfish grower, harvester, or resource manager, you are very familiar with the plants and animals that foul or infest shellfish. The Woods Hole Sea Grant Program and the Cape Cod Cooperative Extension Service have teamed up to provide you with information about common shellfish pests. This guide provides information about common shellfish pests, including their geographic range, habitat, and when they are most likely to pose a problem in New England waters.

This information is designed to help you determine which pest(s) you might be dealing with so you can begin to find a solution, such as treatments, alternative growing techniques, siting and planting techniques, and control measures. If you have any questions about the information provided in *Pests of Concern to New England Shellfish Growers*, or if you would like more information about solutions, contact your local extension agent.

## Algae

### Fleece alga, a.k.a., Deadman's Fingers

*Codium fragile* ssp. *tomentosoides*

**Range:** Maine to New Jersey

**Habitat:** Subtidal, but often washes ashore. Often attached to some rock or hard-shelled animal



### Sea lettuce

*Ulva lactuca*

**Range:** North American east coast

**Habitat:** Lower intertidal to subtidal, but often washes ashore. Often attached to some rock or hard-shelled animal.



### Hollow green weeds

*Enteromorpha* spp.

**Range:** North American east coast

**Habitat:** Tolerant of tidal exposure, occur in wide variety of habitats.

**Time of Year:** Can be year round, but some species are more common in spring and summer



### Rockweed

*Fucus* spp.

**Range:** Maritime Provinces to South Carolina

**Habitat:** Intertidal to subtidal, attached to rocks or pilings.



## Invertebrates

### White crust

*Didemnum* spp.

**Range:** North American east coast

**Habitat:** Lower intertidal to subtidal, on hard surfaces

**Time of Year:** Present year around, though it's growing season is typically from June-October (depending upon location)

**Notes:** Unlike many of the other sea squirts, this species can cover extensive areas of the seafloor if the substrate consists of pebbles and cobbles



### Star tunicate

*Botryllus schlosseri*

**Range:** Maritime Provinces to Chesapeake Bay

**Habitat:** Lower intertidal to subtidal protected waters, can tolerate brackish water. Attached to hard substrates.

**Time of Year:** Most common in summer



### Club or stalked tunicate

*Styela clava*

**Range:** Maritime Provinces to Chesapeake Bay

**Habitat:** Subtidal, attached to hard substrates

**Time of Year:** Common year around, recruits in warmer months



### Sea grape

*Molgula* spp.

**Range:** Maritime Provinces to New York

**Habitat:** Usually attached to substrate. Subtidal.

**Time of Year:** Most common during warmer months

**Notes:** Often encrusted with debris; unlike many other sea squirts it can tolerate brackish water conditions for short periods of time



### Mud or blister worm

*Polydora* spp.

**Range:** Maritime Provinces to Gulf of Mexico

**Habitat:** Lives within oyster shell

**Time of Year:** Most common during warmer months



### Hydroid

*Campanularia* spp. and related genera

**Range:** North American east coast

**Habitat:** Lower intertidal to subtidal, attached to hard substrate

**Time of Year:** Most common from spring to fall

