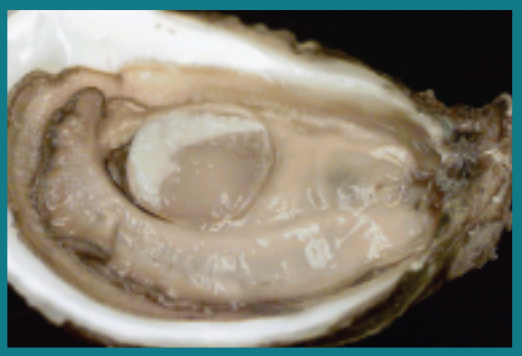
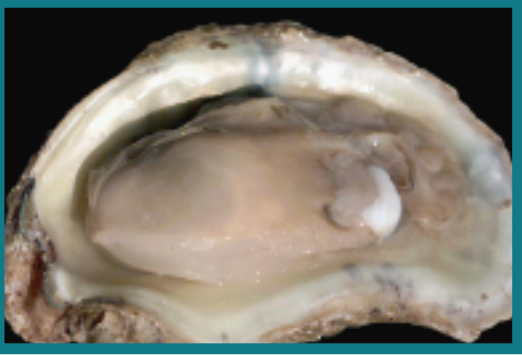


# Conditions of oysters

Diseases of oysters often affect their condition, which also varies seasonally. Sustained poor, watery oysters may indicate a disease is present and warrant professional testing.

Good  
(plump)





Poor  
(watery)

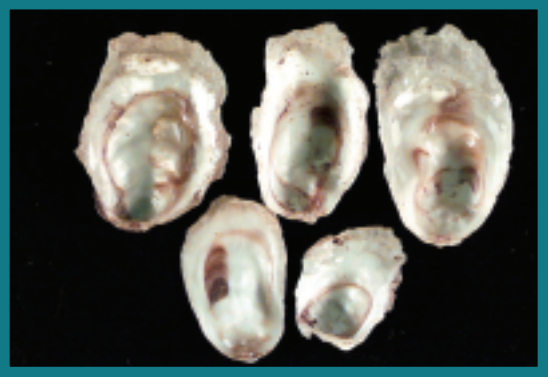


# Diseases of oysters

These images are for illustration only; diseases should be diagnosed by a certified professional.

## Juvenile oyster disease

**Current Range:** Maine to New York  
**Appearance:** Cupping of left valve with brownish deposits on the inner shell  
**Promoting Conditions:** High salinities  
**Time of Year:** Typically July to September  
**Notes:** Typically affects smaller oysters (< 25 mm)



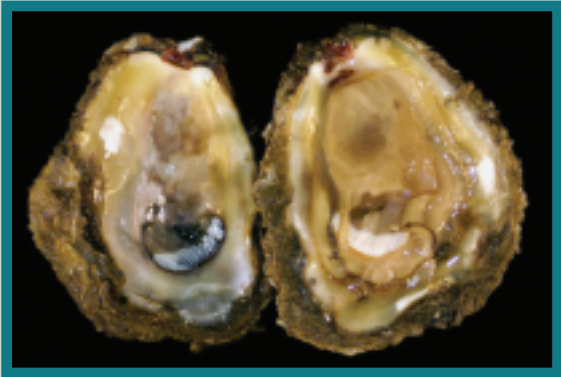
## Dermo, Perkinsus marinus

**Current Range:** North American east coast  
**Appearance:** Poor, watery condition of adult oysters  
**Promoting Conditions:** Warm temperatures and brackish to saltier waters  
**Time of Year:** September or October  
**Notes:** Typically affects second year oysters



## MSX or Multinucleated Sphere Unknown, Haplosporidian nelsoni

**Current Range:** North American east coast  
**Appearance:** Poor, watery condition of adult oysters  
**Promoting Conditions:** Warm temperatures and brackish to saltier waters  
**Time of Year:** July to September  
**Notes:** Often affects first or second year oysters



## SSO or Seaside Organism, Haplosporidian costale

**Current Range:** Southern New England to Virginia  
**Appearance:** Poor, watery condition of adult oysters  
**Promoting Conditions:** High salinity areas  
**Time of Year:** Spring to early summer



Like many other diseases, SSO is not typically detected by eye until a significant mortality event occurs. Even healthy appearing seed (shown above) should be tested if SSO is common in the growing area.

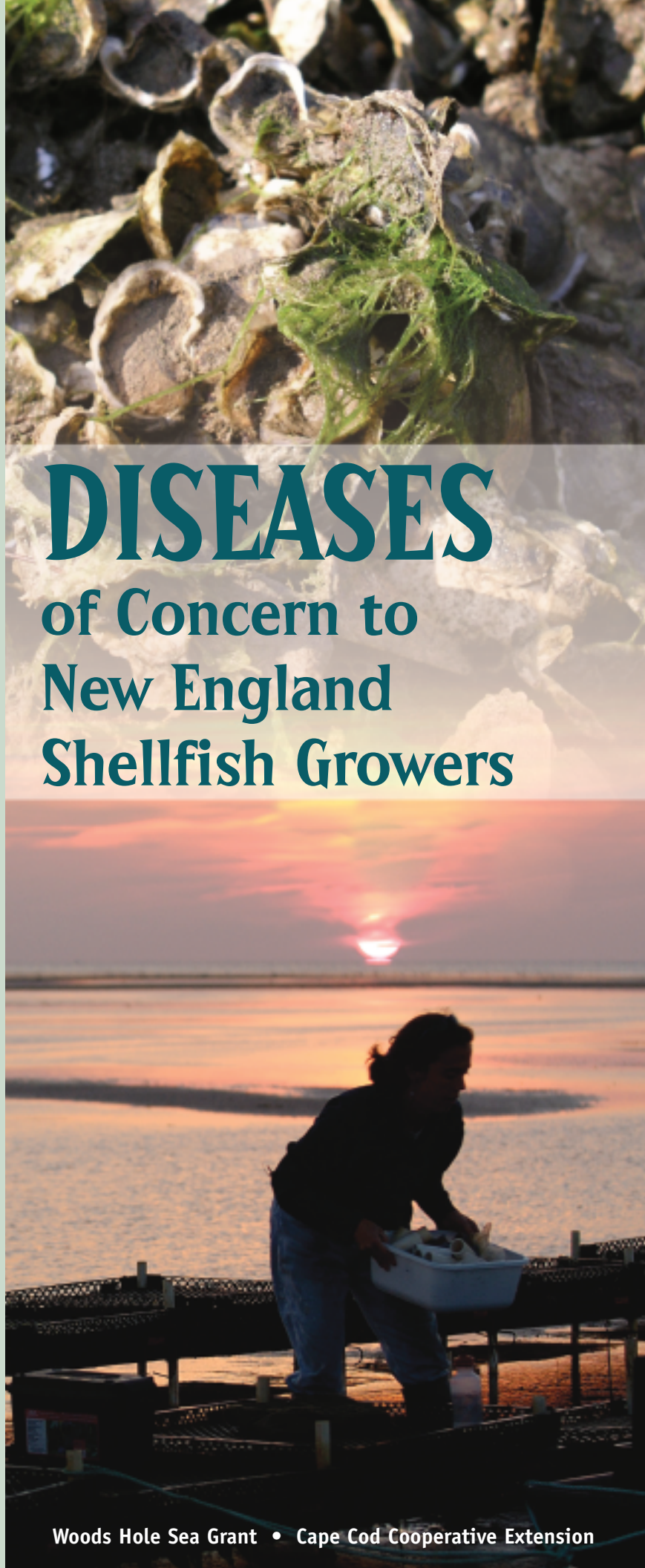




Woods Hole Sea Grant  
Woods Hole Oceanographic Institution  
MS #2, 193 Oyster Pond Rd.  
Woods Hole, MA 02543-1525  
Ph. (508) 289-2398  
[www.whoi.edu/seagrant](http://www.whoi.edu/seagrant)



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

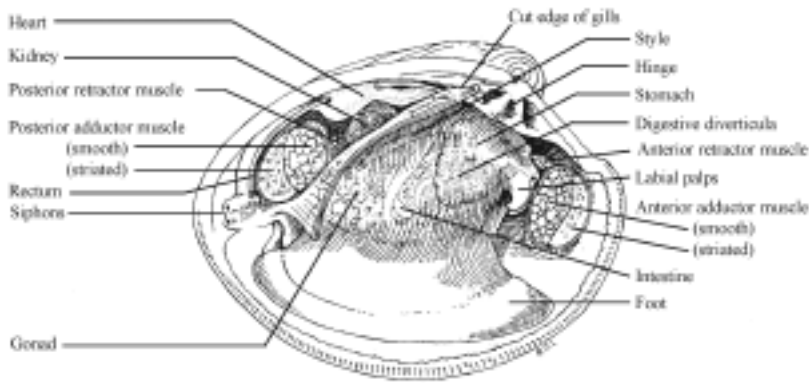


# Shellfish Diseases

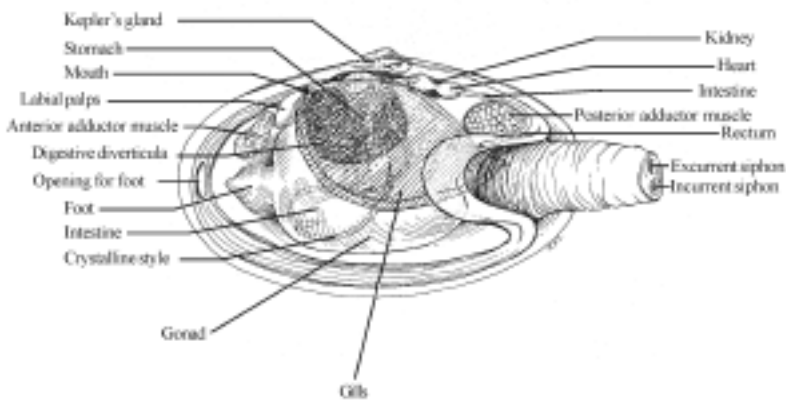
If you are a shellfish grower, harvester, or resource manager, you know that there are a number of diseases that may affect your shellfish. The Woods Hole Sea Grant Program and the Cape Cod Cooperative Extension Service have teamed up to provide you with information about common shellfish diseases. This illustrated guide provides a description of the diseases and identification tips—including times of year each is typically found to affect shellfish in New England waters.

With information about your shellfish disease(s), 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 Shellfish Diseases of Concern to New England Shellfish Growers, or if you would like more information about solutions, contact your local extension agent.

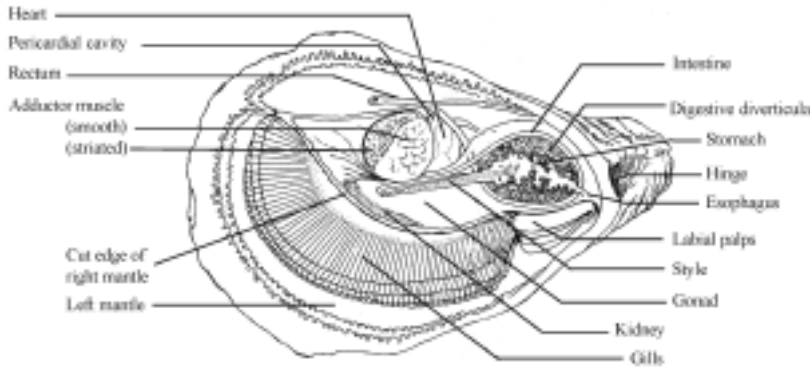
## Anatomy of a quahog



## Anatomy of a soft shell clam



## Anatomy of an oyster



## Diseases of quahogs

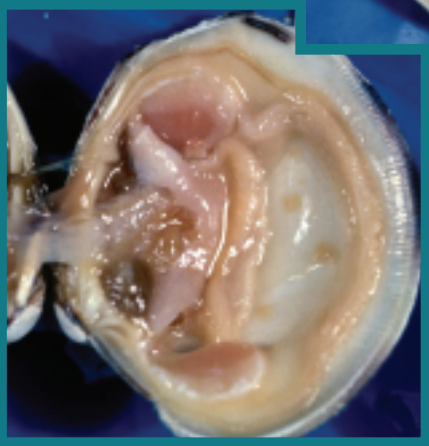
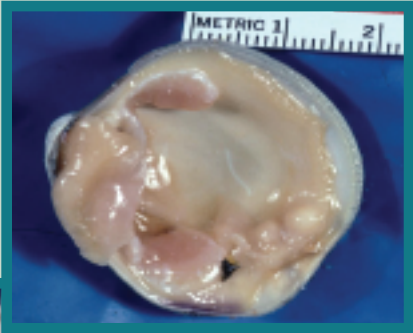
### QPX or Quahog Parasite Unknown

**Current Range:** North American east coast

**Appearance:** Slow growth, chipped shell margins occasionally, nodules in the mantle

**Promoting Conditions:** High salinity areas

**Time of Year:** Mortality often occurs in spring and late summer



Mortality from QPX can be extreme at times. In some sediments, dead and dying quahogs will come to the surface creating a carpet of shells.

## Diseases of soft shell clams

### Hemocytic neoplasia

**Current Range:** North American east coast

**Appearance:** Watery tissues

**Promoting Conditions:** May be associated with polluted areas



Clams affected by hemocytic neoplasia do not look outwardly different from healthy clams. This means that obtaining seed only from professionally certified, disease-free hatcheries is essential to disease management.