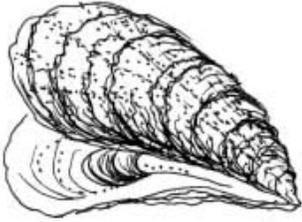


N.C. Plant and Animal Species Fact Sheets



Oyster

(*Crassostera virginica*)

Introduction

Oysters are bivalves which means that they contain two connected shells with a hinge between them. They are also mollusks, a group that includes clams, and whelks.

What do they look like?

They are very variable in shape, long and narrow, thick and sturdy with irregular sharp edges that can cut. The inside is smooth, tinged with purple.

How big are they?

Can reach up to 10 inches in length. (25cm)

Where do they live?

Found in brackish water of estuaries, they permanently cement themselves to hard surfaces, including other oysters. A cluster of oysters is called an oyster bed. They have adapted to the tides by closing tightly during low tide if no water is available for them to eat and breathe.

Who eats them?

They are eaten by man, rays, moon snails, sea stars, oyster drills, oyster catchers.

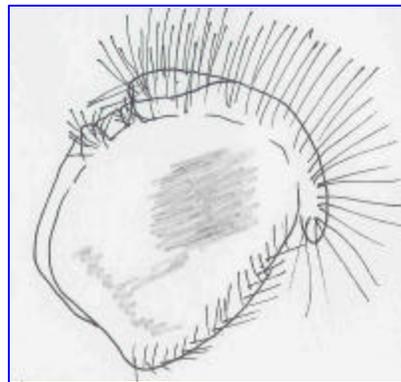
What do they eat?

Opening their shell they fan water over internal gills and filter their food inside then expell the water. In this way oysters eat everything available in the water but they also remove alge and organic matter from the water column making it clearer for plants that

live in it. An oyster can filter up to 60 gallons (227 liters) of water a day!

How do they mate?

Oysters begin life as males, changing to females the following season. They generally remain female after this; but revert back into males from time to time. In fact they can change sex a lot during their lifetime.



This bivalve veliger larvae is a planktonic larval form that changes into oyster spat that settles onto a surface.

Reproduction can be quite haphazard for this genus, because the egg and sperm are released directly into the water. Fertilization only takes place when the cells happen to cross paths. Successfully fertilized eggs,

should they survive, rapidly grow into planktonic larvae then small oyster spat which, swim off in search of a place to settle.

What are the young like?

The young oysters or "spat" are vulnerable to many predators. For some protection they attach themselves to other oyster beds.

How long do they live?

About 4 years is an average life span. They are sexually mature in one and of harvestable size in 3 years.

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People Interactions

Oysters were very popular as food for native Americans and still are today. They can be eaten steamed, roasted, fried, or stewed. It is important to cook them though as when they filter water for food they also accumulate bacteria and viruses in their bodies.

It is important to keep water clean for oysters as they filter it to clean it up. Both point and non-point source pollution damage oysters through immediate poisoning or through the accumulation process. As oysters filter, they serve to actually clean the water. Large scale efforts to restore oysters in the Chesapeake Bay as well as areas in North Carolina are important to keeping our water bodies clean.

They are very important to the commercial fishing industry. For many years oysters were over harvested for food. Although harvests are limited now, oyster diseases have limited their comeback to the commercial industry. Oysters require clean and not turbid water to grow. This is sometimes at odds with our current coastal development practices though many people are working to control stormwater runoff and other pollution as they plan communities. Be careful when walking near oysters, people can be cut by the sharp shells and also oysters do in their bodies.

Recently scientists found that Oyster Toad Fish, protects oyster beds by controlling a population of crab that lives and feeds on oysters. The crab controls the oysters by eating them! Although the oyster toad fish is not a

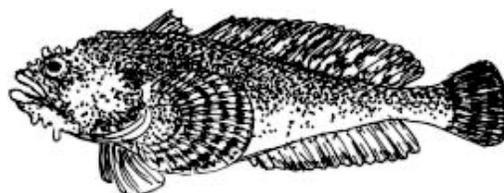
fish we harvest for food it might be important to the oysters we eat as food.



Students monitoring the water quality of Taylor's Creek

Reference for Teachers

<http://www.marine-ed.org/bridge/> and search for oysters



Oyster Toad Fish

EstuaryLive

www.EstuaryLive.org

North Carolina National Estuarine Research Reserve

www.ncnerr.org or tel. 252.728.2170

Albemarle-Pamlico National Estuary Program

<http://www.apnep.org/> or tel. 252.946.6481

Carolina Estuarine Reserve Foundation

www.cerf.us



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