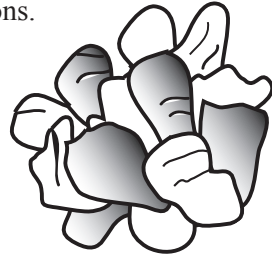


## Oyster Populations

Oysters are considered to be a keystone species and good indicators of the health of estuaries. Students take a closer look at why oyster populations have declined during the last century using hands-on and inquiry-based activities that compare the role of sedimentation, overharvesting, water quality and disease on oyster populations. Students perform water quality tests, collect data, create graphs and draw conclusions as to why oyster populations have been impacted.

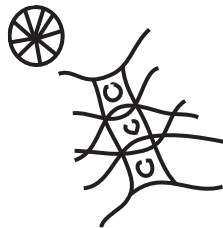
1.5 hours; GPS aligned; minimum 15 students, maximum 25; 5<sup>th</sup> grade and up



## Dermo Detectives

Students determine the prevalence of Dermo, the common name for an oyster disease caused by the protozoan parasite, *Perkinsus marinus* in oysters collected locally. Students learn what Dermo is, how it affects oysters, and test for Dermo using an assay procedure that involves oyster dissections and microscope observations.

2 hours; GPS aligned; minimum 15 students, maximum 25; 5<sup>th</sup> grade and up



## Oysters – the Fanatic Filterers

Oysters are able to filter 2.5 gallons of water per hour removing plankton, sediment and pollutants! This hands-on program provides students an opportunity to collect and identify various species of phytoplankton consumed by oysters using plankton nets and microscopes, and to conduct a filtering demonstration to determine the filtering rates of living oysters.

2 hours; GPS aligned; minimum 15 students, maximum 25; 5<sup>th</sup> grade and up

## Oyster Reef Habitat Exploration

Oyster reefs provide essential habitat for a variety of creatures including fish and crabs. Students explore the function of the oyster reef as critical habitat, providing shelter for fish and invertebrates and providing food for the community. This hands-on, in the field approach provides students with a better understanding of what types of organisms use an oyster reef as they collect organisms from an existing reef to construct food webs and determine species diversity.

3 hours; GPS aligned; minimum 15 students, maximum 25; 5<sup>th</sup> grade and up

## The Amazing Oysters and Water Quality

Did you know that an adult oyster can filter up to 60 gallons of water per day? Through filtration, oyster reefs can improve water quality by removing pollutants and controlling algal blooms. Using sampling equipment, students collect and analyze various water quality parameters (salinity, temperature, sedimentation, dissolved oxygen) at a nearby-restored reef.

3 hours; GPS aligned; minimum 15 students, maximum 25; 5<sup>th</sup> grade and up

## All About Whelks and Oysters

By using two of coastal Georgia's most famous shellfish (oysters and whelks) comparisons are made between the classes Bivalvia and Gastropoda. Differences in general anatomy and life history are explored through dissections of each species' reproductive and digestive systems.

3 hours; GPS aligned; minimum 15 students, maximum 25; 9<sup>th</sup> grade and up

## Guided Oyster Disease Study

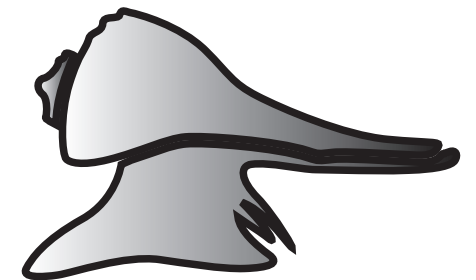
Disease has caused major oyster population decline in the United States over the last 20 years. Students are introduced to a disease that affects oyster populations in Georgia, called MSX (*Haplosporidium nelsoni*). This class begins with a guided tour of a working histology laboratory to learn how slides are prepared. Students will use these prepared slides in a hands on microscopic exercise to determine the prevalence and intensity of MSX in local oysters populations.

3 hours; GPS aligned; minimum 15 students, maximum 25; 5<sup>th</sup> grade and up

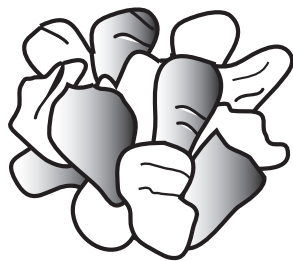
## Oyster Restoration in Georgia

This class introduces the history of the Georgia oyster industry followed by a discussion on why our populations are declining. Students will visit a restored oyster reef and get an overview of oyster restoration processes currently being conducted in the area. Each stage of the process involved will be discussed from the collection and bagging of shell, to the planting and monitoring of reefs. Students will have the opportunity to participate in the restoration program and earn community service hours by assisting with the bagging of shell.

3 hours; GPS aligned; minimum 15 students, maximum 25; 7<sup>th</sup> grade and up



**Reservations are required in advance. Contact (912) 598-2335 or [mared@uga.edu](mailto:mared@uga.edu) to make a reservation or for more information.**



## G.E.O.R.G.I.A.

### Generating Enhanced Oyster Reefs in Georgia's Inshore Areas

“Generating Enhanced Oyster Reefs in Georgia’s Inshore Areas” (G.E.O.R.G.I.A.) is a community-based oyster restoration program coordinated by the University of Georgia Marine Extension Service. Oyster populations along the Georgia coastline have been depleted by rapid and sustained economic and population growth, overharvesting, and disease. Oyster reefs serve many vital functions in the estuarine ecosystem including erosion control, water filtration, food production, and spawning and breeding habitat for many species. G.E.O.R.G.I.A.’s goals are to restore, preserve, and enhance our local oyster reefs by educating the public about their importance and encouraging community participation in shell recycling and reef restoration activities. Funding for this project is provided by grants from the NOAA Restoration Center Community-based Restoration Program, the National Fisheries Institute, and Ocean Trust. For more information call 912-598-2348/2340.

Marine Extension Service  
Shellfish Research Laboratory  
20 Ocean Science Circle  
Savannah, GA 31411  
www.shellfish.uga.edu



# The University of Georgia

## Marine Extension Service Oyster Restoration Education Programs



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[www.shellfish.uga.edu](http://www.shellfish.uga.edu)

