

BIVALVES OF LOUISIANA'S COAST

Eastern Oyster and the Atlantic Ribbed Mussel
(*Crassostrea virginica*, *Geukensia demissa*)

Habitat: Low tidal marshes and mudflats in brackish or salt water. The ribbed mussel's distribution extends from Maine to Florida and the Gulf of Mexico. The eastern oyster's habitat range is very large extending from Canada all the way to Mexico.

Food Sources: Algae, plankton, and other particles of food in the water.

Behavior: They are found in dense clumps called reefs. Reefs are formed because they attach themselves to hard substrates and one another after they settle. Once they settle they will stay in that location for the rest of their lives. They are filter feeders meaning they filter food out of the water through their gills.

Bivalves and Water Quality: Since oysters and mussels are filter feeders they have the amazing capability to improve water quality. An adult oyster can filter between 20 to 50 gallons of water per day! While feeding they will also filter out debris, toxins, and pollutants in the water column improving water quality and making a more productive ecosystem.



Building Habitats: Oyster reefs provide habitat for many crustaceans, fish, and invertebrates while also providing a substrate for larval oysters (spat) to attach on.

Mussels help provide stability to marsh grasses by attaching themselves to the base of the plant. They provide nutrients for the plant and a more stable base for them to withstand storms and strong tides.

Bivalves, nom, nom, nom: Louisiana produces the highest oyster landings in the nation. The eastern oyster is very popular and sold in most seafood restaurants and markets around the country. While these bivalves are very tasty they can cause harm to humans if not harvested properly and at high tide. They can hold toxins and bacteria in their shell when closed for longer amounts of time during low tide that can make humans sick if ingested.

While the Atlantic ribbed mussel's are edible they are not as popular as the blue or California mussel.

Student Research at LUMCON: Students who participated in our Field Marine Science Camp conduct experiments to find out how filtration rates of the eastern oyster could be affected after being exposed to oil. To date, the results of this particular research were found to be inconclusive but more research will be conducted over the upcoming years with future campers.

References:

Chesapeake Bay Program, Atlantic Ribbed Mussel-
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www.sms.si.edu/irlspec/Geukensia_demissa.htm
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