

# DELTA JOURNAL

## Oyster reefs

America's wetland — coastal Louisiana wetlands — is a complex ecosystem made up of estuaries, bayous, swamps and marshes. Among its more important and interesting components is the oyster community. Oysters, of course, are one of the basic elements of Louisiana haute cuisine.

Mature oysters seasonally spew forth with eggs and sperm that somehow find one another in the water column and unite to form a new oyster. For a period of time, the tiny developing oysters float about in the water at the whim of currents. Most are eaten, but those that survive gradually get larger, until they have enough weight to settle to the bottom.

We know oysters as sessile — meaning that they attach to a hard substrate and never move. But when they first reach the bottom,



STAFF PHOTO BY BOB MARSHALL

they have the ability to move about, which they do until they find something hard, such as an oyster shell. They cement themselves to this structure and begin to grow.

As more oysters attach to more oyster shells, first a cluster forms and these may progress to an oyster reef. Reefs consist of oyster shells and living oysters, but they are special places indeed. A myriad of other

Oyster reefs, made up of oyster shells and living oysters, are vital to the local economy. Oysters are a culinary delicacy and help protect the coast by breaking waves that move toward it.

species find these neighborhoods ideal, and soon the reef becomes a thriving community of symbiotic and dependent relationships.

Reefs consist of oysters that spend their time filtering food items out of the passing water. Shells may be covered with layers of bryozoans, calcareous worm tubes, and spat — newly developing oysters. Worms of various types move about the nooks and crannies, and snails called

oyster drills (*Stramonita haemastoma*) cruise about feeding on oysters. Holes are made in the shells by boring sponges (*Cliona*) and oyster piddocks (*Diplothyra smythii*), the latter a type of clam. Crabs of all kinds scamper about feeding and avoiding predation. Some large fishes, like black drum, visit to grab a quick bite, while others zip by looking for prey.

Because the reefs are clusters of irregular shells, there are many little rooms available, and this makes them an extremely valuable and necessary element of the overall biodiversity of our coastal zone.

It is equally obvious how important oysters and their reefs are to our economy. They are also an important component as a submerged barrier in what we call our multiple lines of defense. They break waves moving toward our coast.

What other state is blessed with a coastal protection system that is also a culinary delicacy?

— **Bob Thomas**