

# **OYSTERING ON THE MISSISSIPPI GULF COAST**

By

ZAN SKELTON

**Book IV: Marine Discovery Series**

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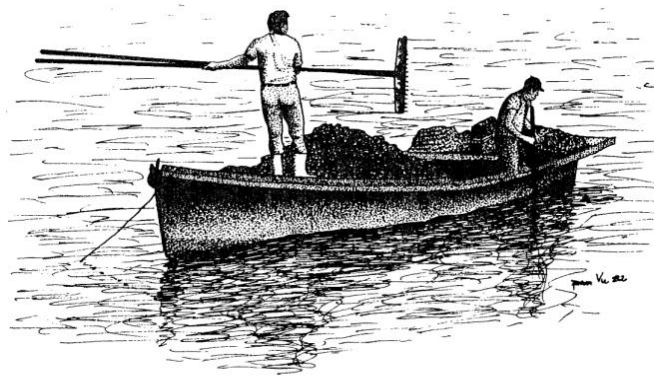
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# Oystering

ON THE  
MISSISSIPPI  
COAST



BOOK IV  
MARINE DISCOVERY SERIES

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## OYSTERING ON THE MISSISSIPPI COAST

"I remember times when you couldn't look around here without seeing oyster shells," the old fisherman said, staring off into the distance across Biloxi's Back Bay and thinking aloud to his visitor.

"There must have been a lot more oysters then," the young reporter said, hoping to keep the old man talking. His editor had given him the assignment of interviewing several old-time fishermen on the Mississippi Gulf Coast, and this was his first interview--with Michael Wienetski. Mr. Wienetski was the son of one of the many fishermen who had been imported into the coastal area in the early 1900s. He was only four years old when his family moved to Biloxi from Baltimore, with many other first-generation Americans of Polish and French and Yugoslavian descent.

"You know anything about oystering, young man?" Michael Wienetski questioned, turning to look at the reporter. "Is that why they sent you to talk with me? I know your editor, and--"

"No-sir," the reporter admitted. "I don't know anything about oystering. But that's one reason they sent me to you. My editor said that if anybody could tell me about oystering, you could."

The old man laughed.



OYSTER TONGS OR RAKES

"He wasn't far wrong," he admitted. "That's how I started here--why we came here in the first place. It was in 1905, I think. Sometimes it's hard for me to remember. But back then, Biloxi was second only to Baltimore in the oyster business. They used to tong for oysters until the dredge was invented. That was a little before my time--"

"What do you mean--'tong' for oysters?" the reporter was scribbling rapidly on his note pad.

"Well, let me start at the beginning. You can put it in your own words later. But I'll start way back and then you can talk with some people at the Bureau--and they'll tell you more about how it is now."

"The Bureau?"

"Of Marine Resources," Mr. Wienetski said patiently. "They're the ones you'll have to see now, because they manage our oyster resources."

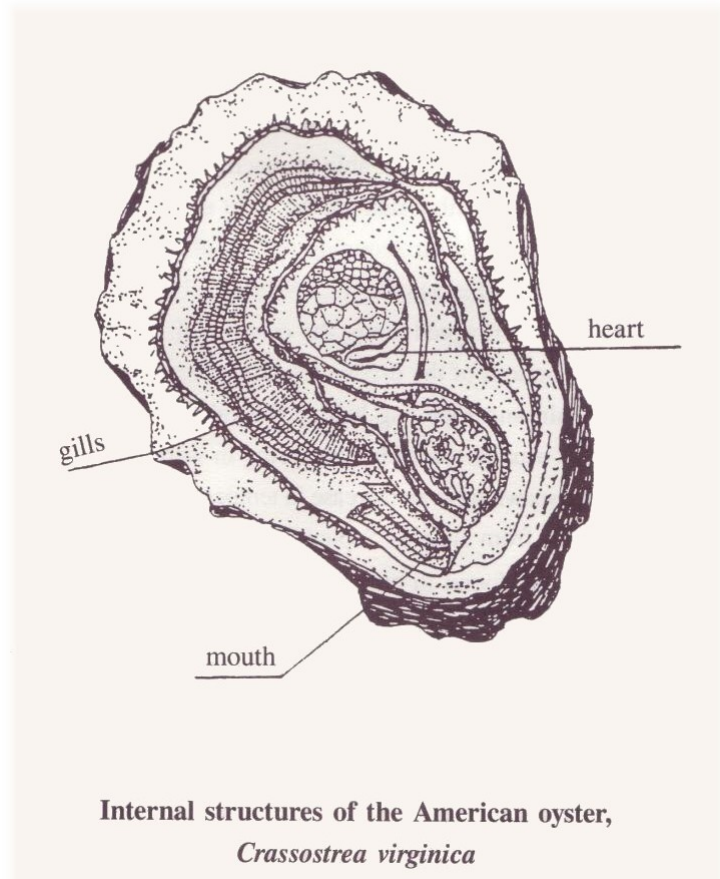
The reporter listened carefully and made pages of notes. He knew that he was involved in a living chapter of the Mississippi Gulf coast history, a chapter he would have called 'Oystering on the Mississippi Coast.' During the next few days, he became fascinated by the stories he heard as he visited oystermen in Pass Christian, Waveland, and other areas. He also went to seafood plants and talked with marine biologists and advisory service people. There was so much more to the story than he had imagined. Oystering on the Mississippi coast began long before the days of Michael Wienetski, although the old man had lived through the most productive years.

When the reporter finished his interviews, he began to try to put his notes into some order. If he was going to make other people understand, he thought, he would have to include a great many facts about the oyster itself, its history and life cycle, its harvesting. Only then would people be able to see clearly into the lives of these people who had long depended on the oyster for their livelihoods.

The oyster is a bivalve mollusk. That is, it has two hinged shell sides that open to let water pass through. The oyster filters its food from the water by using hair-like cilia, tiny bristle-like attachments that help it to trap microscopic sea life. The oyster is considered one of nature's finest foods, because it has in it essential nutrients and minerals.

Large coastal reefs have been in existence for thousands of years, but gradual over-harvesting and environmental changes during the first half of this century resulted in dramatic decreases in production.

Oyster harvesting and processing in the late nineteenth century was one of the prime seafood industries of the United States. In the early days on the Mississippi Gulf Coast, the shipment



of raw oysters was a thriving business. Brought in by sailing schooners, they were shucked and packed in wooden pails. Ice was placed in each bucket of oysters and they were then shipped in their own juices for as long and as far as the ice lasted.

The early European settlers on Mississippi's coast were taught by the Indians to harvest oysters from the abundant oyster reefs--or oyster beds.

Later, oyster gathering was done entirely by tonging. Tongs are two poles arranged like a pair of scissors, similar to a huge salad-server. At the end of the ten to twelve-foot poles are strong rakes, which can be used to scrape across the bottom of the shallow water and scoop oysters together. When the tong is pulled shut, the oysters are held between the teeth of the rakes.



In the late 1800s, the dredge was invented. Although there was a great deal of resistance to it at first, the dredge gradually became the accepted tool for harvesting oysters.

The dredge was able to reach the countless oysters in deeper waters where tongs were not able to reach. The dredge is a V-shaped iron frame with a rake on the front edge and bag trailing behind. It is used for scooping oysters off the bottom and catching them in the large mesh bag. While the boat circles slowly, the dredge is dragged along the oyster reef. The rake-like teeth at the bottom of the dredge are able to scoop the oysters into the chain and rope bag behind the rake.

Oysters usually spawn in late spring in warm waters. The stimulus for spawning is an increase in temperature. Peak spawning season is from June to September in Mississippi.

Oysters are found in bays near shore where major rivers have influenced the salinity. They grow best in warmer temperatures, although they also grow in colder waters. They are unable to exist in soft, silty bottoms where they get covered and die of suffocation. In considering the development of the oyster, one must take into



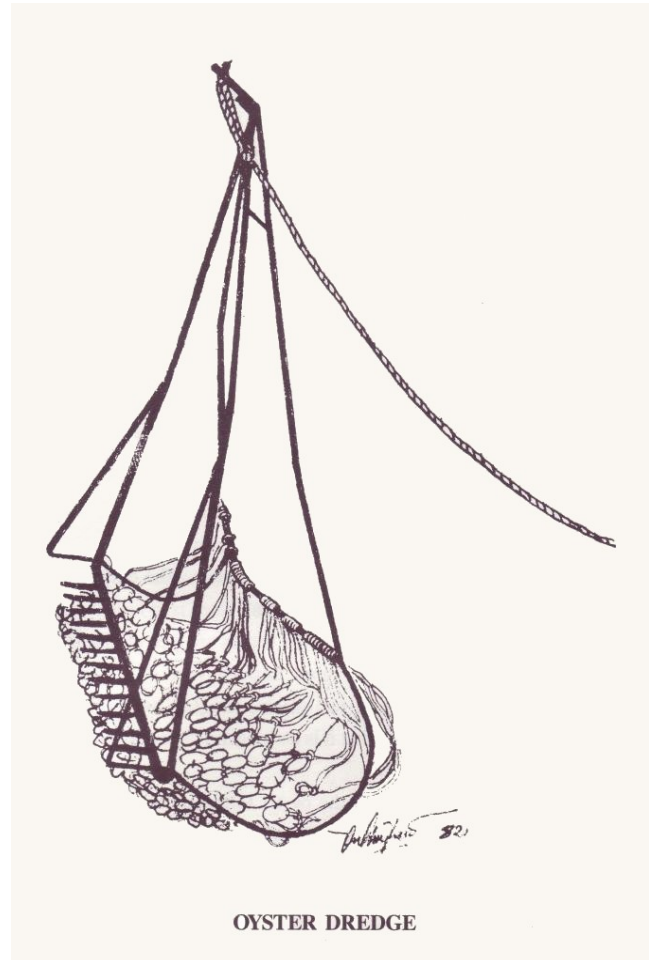
consideration the saltiness of sea water, temperature, pollution, and availability of food on which oysters thrive.

Larval oysters settle on or adhere to what is called cultch, materials such as oyster shells or clam shells. This is called "setting" of the oyster. It adheres to the cultch by secreting an adhesive. Once it is set, it does not move on its own again.

The adult female oyster produces from sixteen-million to sixty-million eggs in a year, incredibly small eggs that are fertilized and which develop into swimming embryos in a few hours.

A tiny, thin shell begins to form over the entire body from twenty-four to forty-eight hours after fertilization. During this period, lasting about two weeks, it moves about through means of its cilia and then set, entering what is called the "spat" stage. From this point on, it resembles the adult oyster, only smaller. Then spat develops into "seed" and in about two years grows to marketable size.

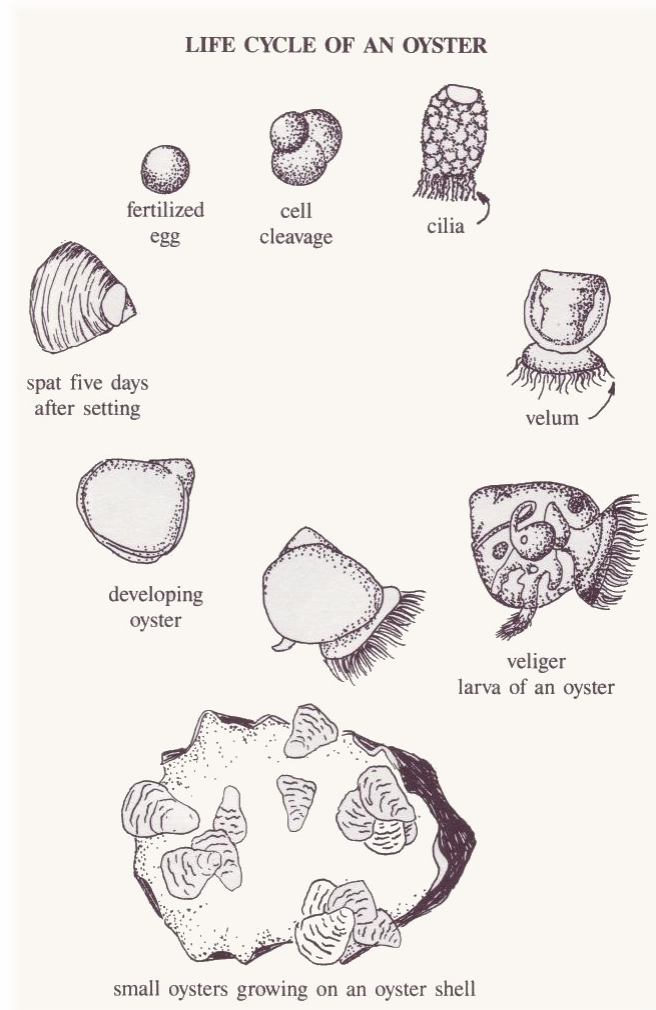
Growth of the oyster may be stunted by heavy spring flooding, since the oysters do not grow well where extremely low salinity exists. Ordinarily it takes about two years for an oyster to attain the size of three inches, which is the legal size for harvesting oysters in Mississippi. Under ideal conditions, the oyster will reach this size earlier.



The best bottoms for development of oyster reefs are composed of both sand and mud, with a firm enough bottom to support the cultch material so that the oysters are not covered by silt.

Mature oyster reefs are low mounds with high centers. This center is usually occupied by dead shells, with the live oysters found most on the slopes of the mound.

The largest oyster reef on the Mississippi Gulf Coast, located south of Pass Christian, covers about 3,500 acres. This reef area has long been the most productive of Mississippi's oyster beds.



The oyster is subject to a large number of predators, which feed on the oyster and destroy it. Among the worst enemies of the oyster are crabs, oyster leeches, flatworms, skate, blackdrum, starfish, and oyster drills.

The oyster drill is particularly responsible for much destruction of oysters. It is a snail which reproduces during the summer months at the same time the oyster reproduces. Its voracious feeding habits result in great damage to oyster beds, as it bores through the shells of the oyster and sucks out the juices, killing the oyster. It does not take long for oyster drill to devastate an entire oyster bed if they are not controlled.

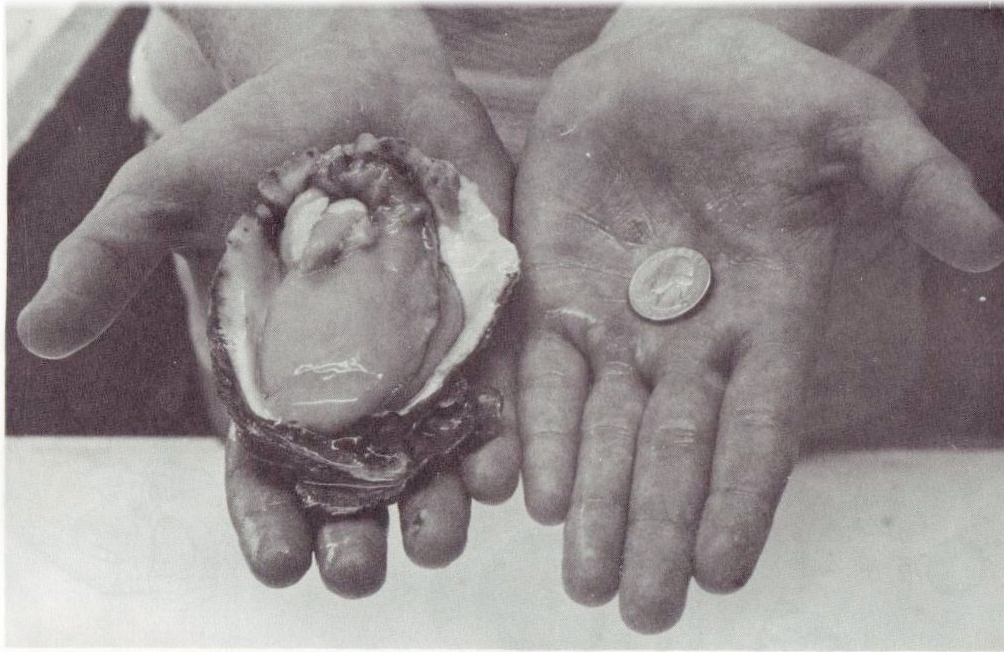
Oysters also grow in polluted waters and at the same time take in disease organisms as they feed. However, it is illegal to harvest oysters from these "closed"

waters. The only way that oysters from closed waters can be harvested is to have them transferred to other places where the waters are free of disease organisms. There the oyster goes through what is called a depuration period of about two weeks, purging itself of the disease germs to the point that it is no longer a threat to humans and is ready for harvest.

Because of the value of the oyster to the economy of the Mississippi Gulf Coast and to the entire state, much work has been done to help increase oyster production on the coast. A large part of that work has been done by marine scientists working with the Bureau of Marine Resources and the Gulf Coast Research Laboratory.

An important part of Mississippi's oyster revitalization project is that of helping to provide suitable bottoms for oyster cultivation. By adding clam or oyster shells to old oyster reefs, or making new reef areas, these scientists can help increase oyster production in waters open to oystering. This cultch material provides a firm bottom on which young oysters will set and grow.

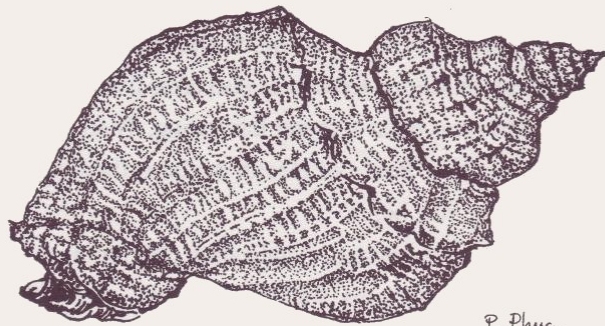
The shells are barged to the reef areas and blown into the water with high pressure hoses, much like fire hoses.



**LARGE MATURE OYSTER**

The Bureau of Marine Resources also take live oysters from closed waters to areas open to oyster harvesting. There they must remain until the State Board of Health declares them safe, and public harvesting can begin.

Another part of the oyster revitalization program is the leasing of state water bottoms for the growing of oysters by individuals.



P. Phuc.

**OYSTER DRILL (*Thais haemastoma*)**

**A predator of the oyster.**

All of these things are done as part of the management and conservation process to assist in the greater production of oysters on the Mississippi coast--and finally, of course, to assist the oyster fishermen who depend on these natural resources.



When the oyster fisherman comes into port with his catch for that day, he will sell his oysters to seafood dealers or keep them for his own use.

Strict state and federal regulations govern the processing and marketing of oysters. The oysters may be sold in a number of ways. Frequently they are used by restaurants which serve oysters on the half-shell. The oysters are opened in the restaurant as the diner watches. In addition, the oysters may be frozen or



Oyster shells which can be used to create new oyster reefs.

canned or they may be sold in jars in their own juices.

It was only after he had finished trying to put his notes together that the young reporter decided that the best way to learn about harvesting oysters was to go with someone in one of the small boats used for tonging.

He made arrangements to go out with a young man from Pass Christian that Michael Wienetski told him about, the grandson of a long-time friend.

Since oystering is legal only during the daylight hours, the two men started out to the tonging reefs near Pass Christian at daybreak. The sun was not hot enough to warm them on that foggy October morning.

The small boat motored through the low ripples of the water as it neared the reefs.

"Here," George Janowicz said. "Here is where we'll stop." There were several other skiffs and small boats nearby, all of the men



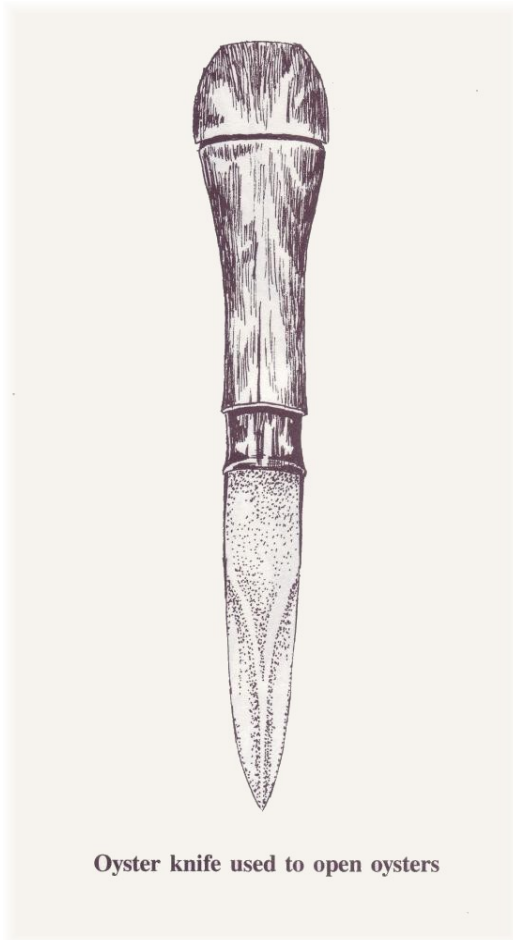
Glove with two thumbs used to "shuck" oysters

busy making their preparations to tong for oysters.

George stood up and began to work the long handles of the tongs, opening and shutting them, trying to scrape the oysters into a pile on the bottom of the shallow water, which the reporter judged to be no more than eight feet deep.

It was hard work and, despite the cool weather, the young fisherman began to sweat as he worked. He was used to it, however, and it seemed not quite so hard to him. When the reporter tried it, however, he found that tonging was much more difficult than it looked, as he clumsily tried to scrape across the bottom and pile the oysters together. Eventually, all he succeeded in doing was almost turning the boat over.

"Here," George said, laughing. "You'd better let me do it. I don't want to have to use the tongs to pick you up out of the water, too."



The morning fog had burned off and the work continued until shortly before noon. The sun was getting quite warm when George was satisfied with his catch. One last time he opened and closed the oyster tongs, pulling them back up and opening them so that the oysters spilled into the bottom of the boat, together with the shell pieces and mud and occasionally other trash. Once the oysters were in the boat, the undersized ones were separated from the other oysters, usually found in clumps, and the small oysters were returned to the water, along with other shell fragments and debris.

The young reporter thought that he had never spent so hard a day, but he knew from George's expression that the young fisherman was enjoying himself, particularly as the catch seemed to be going well. The oysters they opened were fat and salty and slightly green. George explained that the greenish color was due to the oyster's eating plant life from the sea.

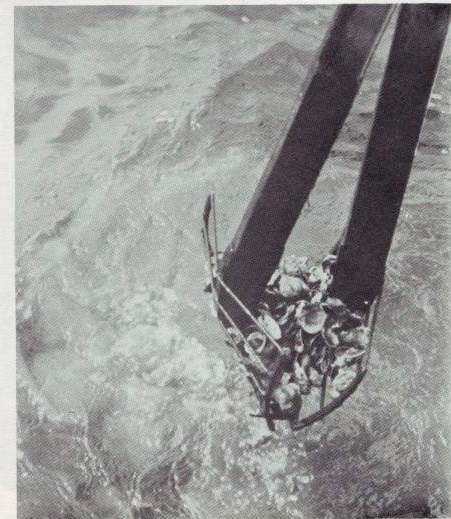
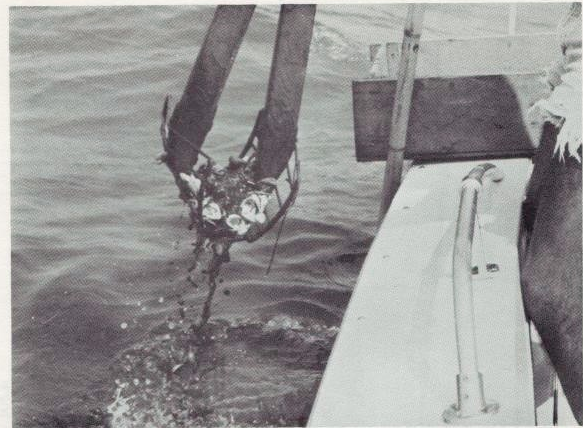
They were careful not to exceed the limits of the catch as set by the State. Finally it was time to return to the harbor to report their catch and then go home.

All in all, it had been a busy and productive day, but it was not over until the reporter went with George to the seafood factory, where he sold his oysters in the shells.

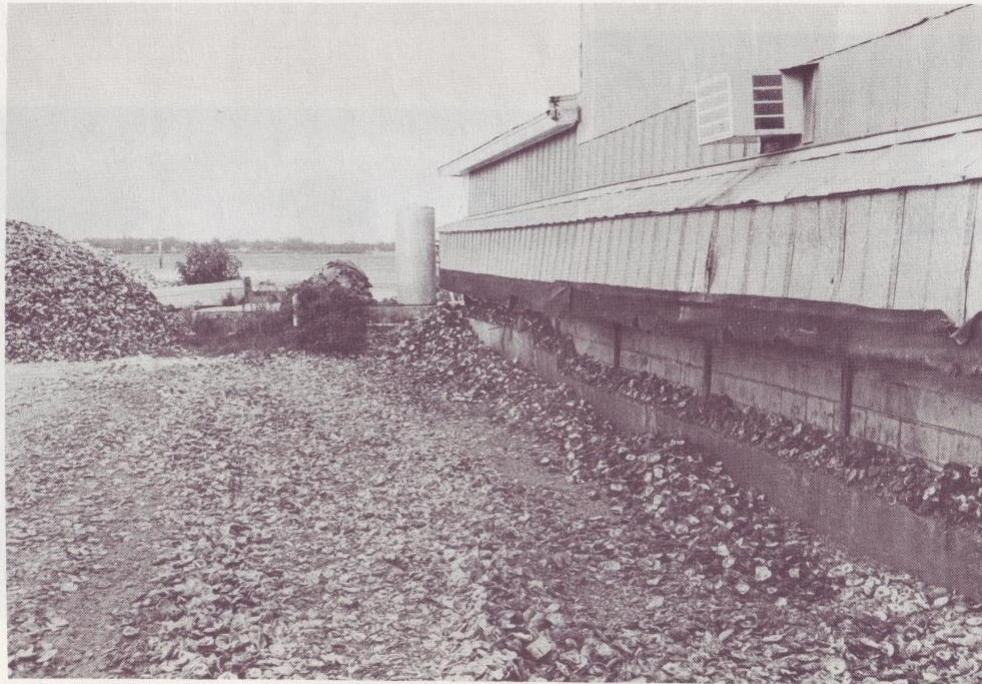




SHUCKING OYSTERS



OYSTER TONGS



Outside of an oyster factory

It was a far more complicated process, the reporter concluded, than he had ever thought it would be. It was more complex--but it was also more rewarding. He knew that he had never met any people who were as generous with their time and as satisfied with their place in life as the fishermen he had met. That seemed to him quite remarkable in today's world, where people often appear so dissatisfied with what they do, unhappy that they are not somewhere else doing something else.

These men, he concluded his story, are happy, because in so many ways they are answerable first to themselves. Of course, they have regulations they must follow, laws to be obeyed--but what it comes down to is this: they are their own men. They work hard and they see the results of that labor almost immediately. They produce something that helps other people at the same time it helps themselves. They are the oyster men of the Mississippi Gulf Coast.

It is almost as if, in some very real ways, he wrote, one is taking a look into a better time when one talks with these people and attempts so unsuccessfully to walk in their shoes for just a short while. They are very big shoes to be filled, indeed.

They are unique--these oyster men of the coast. And they find their lives to be uniquely satisfying. We should all be so fortunate. We should all be so necessary and so special!





Courteney Lowery, a sixth grade student from Hattiesburg, Mississippi, visits a local seafood factory on the coast to purchase seafood for her relatives who live in Indianola, Mississippi.

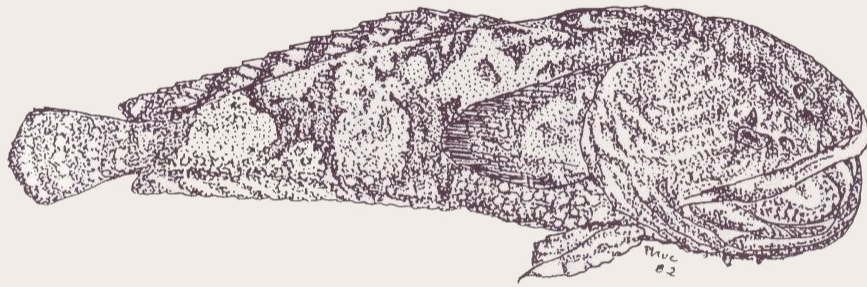


Local citizen tonging for oysters



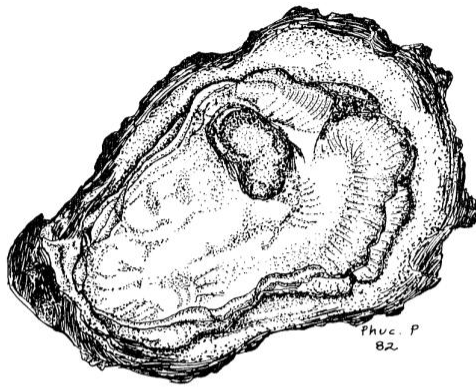
## A GLOSSARY FOR ELEMENTARY STUDENTS

<b>bivalve</b>	having two shells hinged together
<b>cilia</b>	short, hair-like processes on the surface of small organisms, which move to produce locomotion
<b>conservation</b>	preventing loss, injury, decay, or waste
<b>cultch</b>	materials such as oyster or clam shells to which larval oysters can attach themselves
<b>cultivation</b>	to prepare for growing and harvesting
<b>depuration</b>	to make pure, to purify, the process of purification
<b>devastate</b>	destroy
<b>dredge</b>	V-shaped iron frame used for scooping oysters off water bottoms
<b>embryo</b>	organism in earliest stages of development
<b>imported</b>	brought in
<b>larval</b>	of immature life forms
<b>mollusk</b>	invertebrate having a calcareous shell of one of more pieces enclosing soft body
<b>nutrient</b>	nourishment, food
<b>pollution</b>	the introduction of elements, compounds, or any matter into places where living organisms are harmed, causing slow growth, prevention or alteration of growth, or death
<b>predator</b>	one that feeds on something else, destroyer
<b>prime</b>	foremost, among the most important
<b>reef</b>	ridge of oysters, oyster bed
<b>rehabilitation</b>	to make useful again
<b>salinity</b>	degree of saltiness
<b>shucked</b>	removed outer covering
<b>silt</b>	fine mud particles
<b>spat</b>	"set" stage of oyster development
<b>spawn</b>	reproduce
<b>specialist</b>	expert, knowledgeable about
<b>stunted</b>	reduced in growth
<b>tongs</b>	long poles with scissors-like action, having a rake-like attachment on the end of the poles for scraping oysters off beds and pulling them up
<b>unique</b>	one of a kind
<b>voracious</b>	consuming quantities of food



### OYSTER FISH

*Opsanus beta*, a fish that has a strong bite and can crack an oyster.



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