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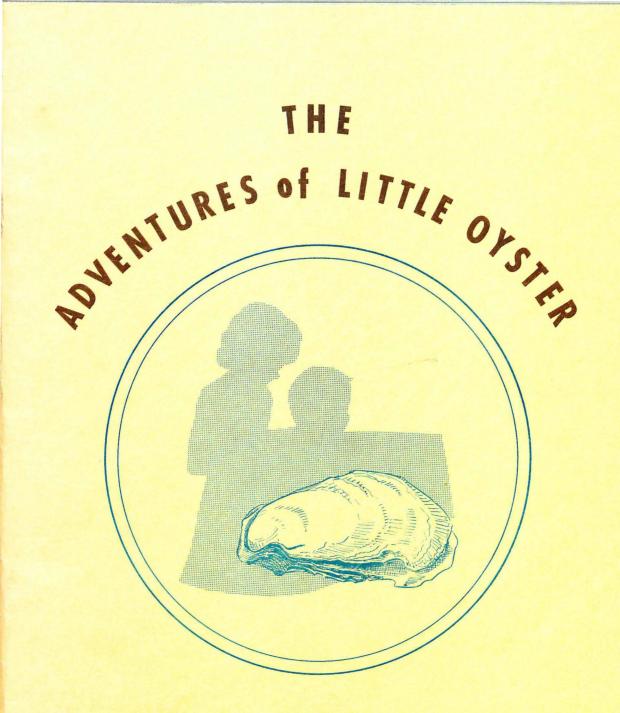
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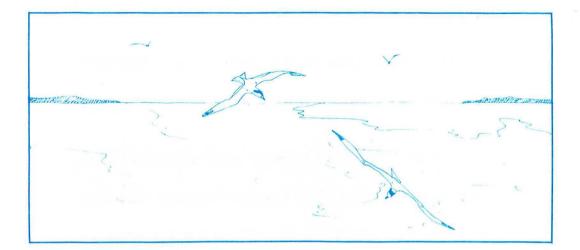
THE ADVENTURES of LITTLE OYSTER

By Staff Information Officers

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VIRGINIA INSTITUTE of MARINE SCIENCE

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THE ADVENTURES of LITTLE OYSTER

One warm summer day a gentle breeze drifted over the river near Chesapeake Bay. The bright sun glittered on the dancing water, and gulls were gliding through the air.

Down in the salty water, along the bottom, sprawled a large bed of Virginia oysters. On this particular day, the sun had warmed the water and made conditions just right for the oysters to spawn. All at once one of them released a great cloud of eggs. Other oysters nearby began to do the same. Soon most of the oysters in the bed were spawning, releasing swarms of eggs and sperm into the water. Some of the sperm entered the eggs, fertilizing them and initiating new growth.

When this happened, millions upon millions of new, baby oysters came to life. They were very tiny creatures, too small for a person to see without a microscope.

Let's follow one of these baby oysters to see what sort of life he leads in his watery home. We shall call him Little Oyster in order to separate him from the others.

At first Little Oyster was just a round ball of cells, but before a single day had passed he had already grown two shells and a circle of tiny, hair-like things that looked like a windmill with many arms. This was his swimming machine. Using











this swimming machine, Little Oyster could keep from sinking to the muddy bottom, but he couldn't swim against strong tidal currents. When he folded it and tucked it in, he drifted slowly downward through the water. Then he would spread it and swim back up again. Floating in the water, he was carried by the same tides which carried his millions of brothers and sisters and cousins far from their homes.

Little Oyster seemed to eat all the time. He fed mostly on tiny one-cell green plants called algae, which were, of course, much smaller than he was. Everywhere he went, food came drifting with him. He ate and ate.

Little Oyster grew rapidly, and when he was two weeks old it was time for him to settle to the bottom on an oyster bed like all other oysters. So, he folded his swimming machine and closed his little shells.



Gently, ever so gently, he drifted downward. Soon he touched the bottom. By this time he had grown a small foot which he used to feel the bottom as he crawled

over it. The bottom where he landed was very slippery and covered with mud. Had he stayed there, the mud might have piled over him and buried him in a short time. So he spread his swimming machine and swam back up into the water. He tested several other bottom areas until he finally landed on an old shell. This felt just right.

Little Oyster crawled over the shell to find a clean spot on it. Then he squeezed out some cement from a gland in his foot and in no time at all he cemented his little shell to the big old oyster shell.

This was a very important time in the life of Little Oyster. He could no longer swim or crawl about. His

swimming machine and the foot disappeared and new food collectors, gills, developed.

The gills are provided with cilia (like fine hair) and serve as miniature water pumps. As they pump water they strain out tiny living things called plankton. The food is caught on a sticky net covering the gills. The net, filled with food, is moved into Little Oyster's mouth by the rhythmic movement of special cilia. Thus, Little Oyster ate and ate, in fact, he seemed to eat most of the time.

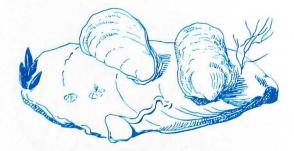
Little Oyster worked hard as he pumped water all day and all night while water currents moved silently about him, bringing him a fresh supply of food. Eventually, he would be large enough to pump 50 gallons a day. You could take several baths in that much water.



Little Oyster was comfortable in his new "oyster bed" home. This bed was different from the kind people use for sleeping. It was a place on the river bottom where many oysters lie together, silently feeding and growing. It was an oyster community.

Little Oyster and all his little companion oysters grew and grew. When his first birthday arrived, he had grown as big as a silver dollar. He was getting to be a big oyster now.

One day in October, there was a great turmoil in the usually quiet oyster bed. It seemed that the river exploded around him. The water became cloudy with mud and trash.

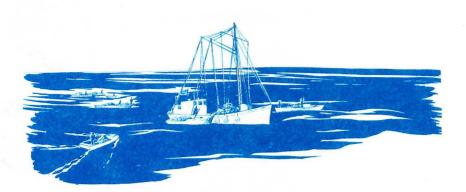




All at once two big iron jaws came at Little Oyster and his companions nearby. They snapped their shells shut. That was all they could do to defend themselves from the mud and sand and shell falling all about. The big jaws closed around them, and they were lifted up out of the water and dropped heavily onto something solid. Tim Tonger, the oysterman, opened his great, long oyster tongs and dumped his catch into the boat. Tim sank the tongs back to the river bottom for more little oysters. He worked and worked, and by mid-morning many young oysters lay with Little Oyster in the boat.

Tim Tonger worked on the seed beds of James River, but there are other seed beds of lesser size in other rivers. Oysters taken from seed beds are called seed oysters. They are tonged up and planted on growing grounds to grow to market size. When he had loaded his boat, Tim Tonger carefully laid his tongs aside and started the engine. Little Oyster and the others kept their shells tightly sealed for they were no longer in water.

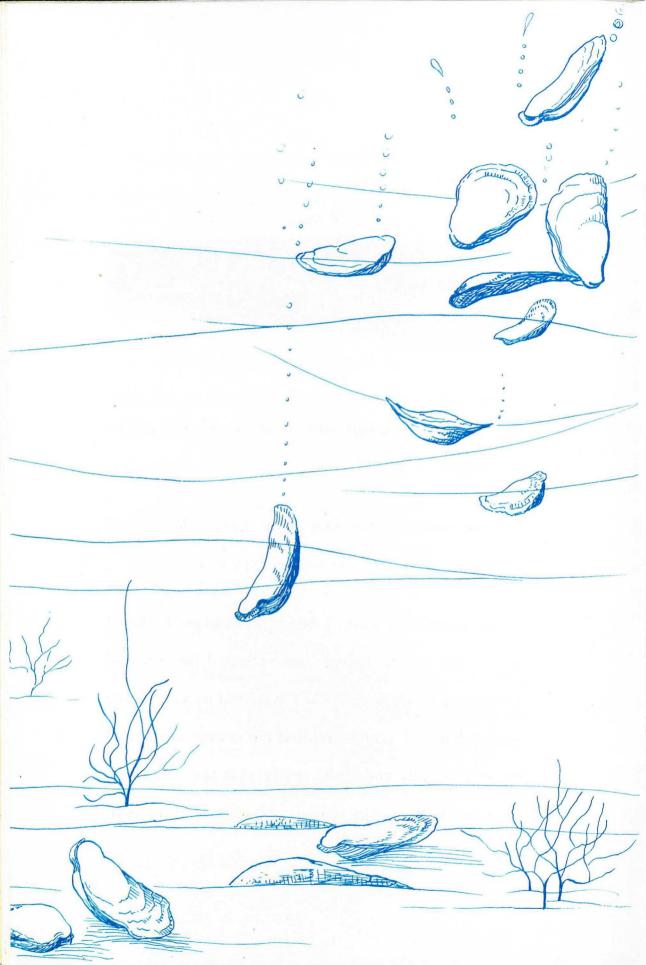
After a while the boat pulled beside a very large boat, a buy-boat which had a huge pile of oysters already on deck. Tim Tonger was about to sell his catch to the buyboat owner, Captain Ben. Hoisted up in a bushel measure, Little Oyster and many others were dumped on the buy-boat pile. Other tongers came from nearby to sell



their catches to Captain Ben. Soon the pile looked like a mountain.

Once loaded the buy-boat engine came to life and off it chugged down the river and into the Bay.

The journey was long. Little Oyster was not bothered by the ride for his strong shell protected him. It had been many hours since his last meal and he was getting hungry but each time he relaxed the muscle which held his shells tightly closed, he sensed that this was not a place where he could feed, so he clasped them tight again.



The boat passed other buy-boats which were also loaded with big piles of seed oysters. Some boats were just drifting and a strange thing was happening. Men were dumping oysters back into the water. However, the boat on which Little Oyster was lying continued its journey past several rivers and small bays.

The next morning Captain Ben steered his boat into a narrow inlet that opened into a wide cove off the bay. The boat slowed down, and the engine died to a soft purr. The crew set to work with shovels, tossing the oysters overboard.

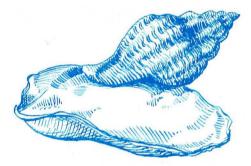
Splash! Little Oyster and some of his companions hit the water and slowly settled to the bottom. Other oysters fell all about him. But Captain Ben was carefully spreading the load over a large area of the bottom so that the oysters would not be covered by others. Here the captain was planting seed oysters on his own private oyster bed.

Captain Ben wanted all the little oysters to grow big and fat. Just as there is both good and poor farmland, there is good and poor oyster ground. The farmer selects rich soil for his corn. The oysterman chooses the finest ground he can find for planting oysters.

Little Oyster was very lucky because Captain Ben had some of the best oyster ground to be found. The bottom was firm, and the little oysters did not sink into any mud and become buried. There was just enough mud to keep waves and strong currents from shifting the sand, washing the oysters away or covering them. Some oystermen who have grounds that are too muddy dump tons of old shells on the bottom to make it stiff enough to hold seed oysters out of the mud.

When the last seed oyster had been dumped overboard, the big buy-boat chugged away. All was peaceful and quiet in the water again. Little Oyster who had not eaten for two whole days, opened his shells slowly and began to pump water through his gills. Um-m-m-! It was full of delicious oyster food. He pumped as hard as he could, and he ate and ate.

In the salty waters where Little Oyster was now living, thousands of sneaking enemies were searching for a meal. One was Rasptongue, a small snail that likes to eat oysters. Oystermen called these snails "drills" since they drill holes through the shells of oysters with their rasp-like tongue. Silently, Rasptongue glided over the bottom. He was headed right for Little Oyster! He just missed Little Oyster and stopped on one of the young oysters nearby. Without warning, he set to work with his file, making a small hole right through the oyster's thin shell. This completed, he inserted his long feeding tube with its



rasp-like teeth at the end and dined on the oyster's soft flesh.

Having finished his meal, old Rasptongue pulled in his feeding tube and crept off the now empty shell looking for his next victim.

Rasptongue began to crawl right in Little Oyster's direction. Suddenly he was crawling up on top of Little Oyster, who closed his shell together with a snap! It was his only protection. In a moment Little Oyster's shell began to vibrate. The monster was drilling a hole in it.

All of a sudden a violent storm broke in the water over the oyster bed. A large mud toad was passing by, thrashing his tail vigorously about, right over Little Oyster and Rasptongue. In a moment all was still again and Rasptongue was gone. He had been knocked aside by the fish's tail.



The water quietened around Little Oyster. How lucky he was to be rid of Rasptongue! Slowly he opened his shell and began to feed. It was peaceful on the oyster bed once again.

Little Oyster was comfortable in his new home. Day and night he pumped gallons and gallons of water through his gills. Spring and summer passed, and so did fall and winter. He grew larger and larger every month, but he grew most rapidly during spring and fall when the water was filled with food he liked best.

Little Oyster passed three whole years in Captain Ben's oyster grounds. He was healthy and strong and he ate most of the time. But he was no longer a baby oyster. He was now fully grown.

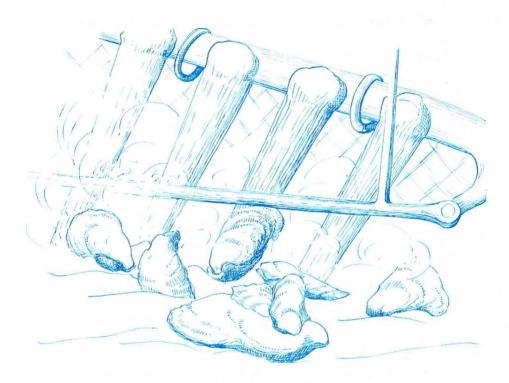
Summer began to fade and the water began to get cool and clear. All the oysters had eaten heartily and stored up much food. They were fat for the cold winter months which lay ahead.

Early one morning the stillness was broken by a rumble which grew louder and louder as it neared the oyster bed. It was a sound not heard since Captain Ben's buyboat had left the bed three years ago.

A large power boat glided overhead. Men aboard it began to lower dredges over both sides of the boat. One dredge would rake up oysters from the bottom while the others would be dumped on the deck of the boat. Iron chains clanged on the rollers as a sturdy winch hauled in first one dredge and then the other. Little Oyster did not know what was happening.

Suddenly the mud stirred and the iron dredge scraped loudly against oyster shells nearby. Little Oyster snapped his shell together just as the iron teeth of the dredge raked him up along with many of his neighbors. They were lifted quickly up through the water until the dredge dropped them on the boat's deck. Market size oysters were shoveled onto a pile on the boat's deck as the workmen harvested the oyster bed.

That evening the dredges became silent. After a short trip on the river, the loaded boat pulled up to a long pier.



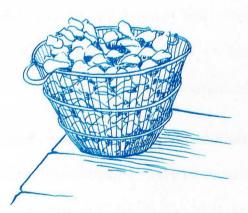
All the oysters were shoveled into a cart and wheeled into a cool storage room.

Little Oyster was headed for market. Some of these oysters would go to fine restaurants to be opened and served on the halfshell.

Others would be shucked from their shells and sold to stores and supermarkets. Housewives would take them home and fry them or make delicious soups. This had happened many times before. Oysters make good food for people. They supply energy and minerals young people need for growing strong bones and teeth and rich blood. All the vitamins and muscle-building materials the oysters had gathered from the river would be passed on to the people who ate them.

Little Oyster, along with the other oysters harvested that day, remained in the cool room all night. All of them kept their shells closed to keep from drying out.

When morning came the storage room door was opened with a bang. Men began to shovel oysters into wheelbarrows and rolled them into the next room where people worked at long shucking tables, opening oysters



and dumping them into large cans. Oysters of unusually good shape were tossed into baskets for the raw bar trade. Little Oyster was among these.

Someone picked up the basket and walked to the door of the shucking room.

"Take that one to the platform," roared a husky voice. Little Oyster and the others in his basket were loaded onto a large truck. These big and fat oysters were being sent to restaurants in the city.



The truck rumbled along the highway all day. Just as night came on it entered the city. Soon it stopped at the service entrance of an elegant hotel diningroom. Doors clanged and men busily unloaded the baskets.

"These are prime oysters," said Mr. Jones, the restaurant manager. "Let's put them in the cooler to keep them fresh." Soon it was dark and quiet in the cooler. The silence was not broken until next morning when the door opened with a bang, and some people came in. Was the shucker at the raw bar coming for them?

No! Instead a soft feminine voice sounded. "The children will be very grateful to you, Mr. Jones. The marine aquarium was their own idea, and I am glad to see them so interested in sea life. We bought artificial sea salts from an aquarium supply house and have the water mixed and waiting, but we are very lucky that you have just brought some live ones to the city. We would have had to travel many miles to get them."

Mrs. Markham and two of her young pupils, Mike and Alice, walked into the cooler with Mr. Jones.

She and the students looked at the baskets of oysters.

"We need only two oysters for our aquarium," said Mrs. Markham.

"These are big oysters," said Mike, "Let's take this one."

He plucked an oyster from one of the baskets near where Little Oyster lay.

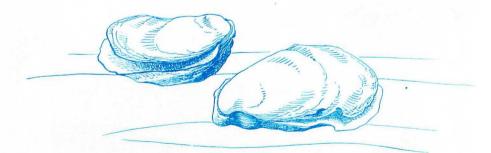
"This is a fine looking one," said the teacher. "Now you choose one, Alice."

Alice walked over to the baskets. She looked and looked, finding it hard to decide which was the best. Finally she stepped to Little Oyster's basket and pointed directly at him. "That one!"

In less than an hour Little Oyster was in Glenn Heights School, and he was the pride of the fifth grade classroom. There in the aquarium it was peaceful again. The whole class gathered around and peered at their new pet from the sea.

"Now be very quiet, children, and perhaps he will open his shell," said Mrs. Markham. She watched silently with them.

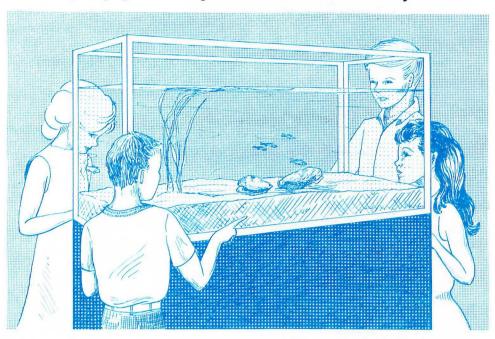
Little Oyster had not eaten for two days. Slowly he opened his shell to test the water. It was nice and salty



like the river. And there was food in it. He began to pump heartily, and all the children were delighted to see his shells slightly open. Every once in a while he would snap them shut to flush out the trash; then he would slowly open them again and resume feeding.

The children kept Little Oyster in the coolest place in their classroom. He was comfortable enough, but he never got used to the gentle tapping now and then on his glass home, the ringing bells and the shuffling feet as children came and went. So he always snapped his shells together when these disturbances occurred.

The children kept his acquarium clean and replaced the pretty green sea plants in it when necessary. The



teacher fed Little Oyster algae, (very tiny one-celled plants) that she grew in another aquarium, so he did not want for food.

To this day Little Oyster is in Glenn Heights School and the school children look at him often. They are learning about life in the sea through observations, caring for Little Oyster and reading books and magazines about oysters and other marine animals.