A Bargain Monster from
The aquarium wanted a big hit for an attraction and got it in the giant roach, a living relic from the Eocene epoch.

Thomas Lee Mills, skipper of the shrimp trawler Norma, puffed his cigarette in the cockpit and flicked it on the fathometer. The pencil tip traced a black line and dotted it on the sheet of graph paper. "We're down to three fathoms right now," Mills said. "It won't be long before the bottom's within dropping off pretty fast. By three o'clock in the morning we'll have a good three fathoms of water beneath us."

We had been at sea for eight days, moving due south of Pensacola, Florida, in the Gulf of Mexico on an expedition to bring back living deep-water specimens for the New York Aquarium.

"But I'll tell you," he continued thoughtfully, "the way these seas have been building I ain't so sure we'll be able to work when we do get off this Royal Red shrimp territory out here in the form in between the northerlies. But as the weather's been. I don't..."
Last year they'd blow through about once a week, then it would clear up and even get pretty out here. But now these fronts come down one right behind the other, and I'm afraid that's what's happening."

"A big boat like this ought to be able to take it," I said hopefully, leaning back in the pilothouse chair, watching the sweep of the illuminated radar beam. We were alone out here, with not a blip of any kind on the screen.

Mills laughed sardonically. "Oh hell, yes, this boat can take it. She weighs 50 tons; she don't ride the waves, she flattens 'em. But you ain't gonna stand up to it. When she hits those 25-foot seas and goes to slamming, she'll beat your guts out. And when you got them big seas breaking over the bow, it don't take but a second for a man to get washed overboard. Damned if I'm gonna get drowned out here trying to drag up a mess of nasty looking sea roaches."

Thomas Lee didn't think much of our expedition. He had agreed to run the *Norma Evonne* for Aguilas Seafood in Bon Secour, Ala. only because it was January, the coldest and most wretched month of the year. His own 68-foot wooden trawler was tied to the dock, along with nearly all the other shrimp boats, because shrimping inshore had been so poor. He needed to make some money.

Finding a vessel large enough and equipped to trawl the submarine DeSoto Canyon off Pensacola in 200 fathoms (1,200 feet), where the giant sea roaches (*Bathyneuse giganteus*) lived, had proved an ordeal. Never had these grotesque joint-legged creatures been placed alive on public display. Occasionally deep-water shrimp fishermen after Royal Red shrimp would haul up a sea roach in their nets and bring it ashore dead as a curiosity. Months earlier we had gone from dock to dock, fishing village to fishing village, asking if anyone was fishing for Royal Reds. But all we got was an emphatic "No! I doubt you'll find anyone still messing with Royal Reds."

In the 1950s the Bureau of Commercial Fisheries (now known as the National Marine Fisheries Service) first discovered the large Royal Red shrimp resource. They were doing exploratory fishing in 200 fathoms and brought up a deckload of big red succulent *Hymanapeneumus robustum*, previously known from a handful of pickled specimens on the shelves of the U.S. National Museum. The crew cooked the shrimp, and overnight the Royal Reds changed from a scientific curiosity to a gourmet's delight. Adventurous shrimpers, spurred on by the discovery, rigged up their boats to work in the deep water. But fishing out there, farther than any shrimp boat had gone before, was brutal on equipment. The heavy seas would snatch the rigs off the bottom and tangle them. As cables were wound in, standard winches used on trawlers would often burn out from the strain, leaving the crew to haul in more than a mile of steel cable by hand, sometimes in howling gales. Enormous sharks attacked the nets, and when violent squalls struck, there was no nearby shore to run to for safety. After a few years of trying, most skippers gave up and went back to working inshore for the traditional pink, brown and white shrimp.

But at last we located the *Norma Evonne*, which had been especially rigged for fishing Royal Reds. With giant hydraulic winches, she was built to work out there. "But I'll tell you something," Thomas Lee said, "it damn sure don't pay to fool with them red shrimp unless there ain't nothing in shallow water. Long as I can catch three or four boxes of pink shrimp in 20 or 30 fathoms, that's where I'm gonna work. I ain't got near the expense nor the risk in getting them." Then he winked. "And the trash fish ain't nearly as boogerish-looking as this deepwater stuff."

As we headed farther and farther out, we studied the National Marine Fisheries Service computer printout of when and where *Bathyneuse giganteus* had been captured over the past 25 years. Nixon Griffis sat quietly in the galley puffing his cigarette. Nearing 60, Nick was the oldest member of our expedition. As a trustee of the New York Zoological Society, he was a longtime scientific adventurer. He had funded expeditions to study whales, dived on the Great Barrier Reef and collected fishes in Surinam. A few months earlier, in New York, he asked me, "Jack, where can we catch a monster? We need something unusual for the New York Aquarium."

"Well," I said, "we could go drag Loch Ness and get that over with. All we'd need are some of those North Sea commercial fishermen and their cod nets."

"No, that wouldn't do," he said. "British government wouldn't allow it. Besides, it would take a fortune. We need a bargain monster."

The only economical monster I could think of was *Bathyneuse giganteus*, the giant sea roach that lives at the edge of the continental shelf in the Gulf of Mexico. With a length of two feet, it is the world's largest isopod, a flat-bodied crustacean with seven pairs of sharp-hooked legs and a segmented body. Most isopods live in the ocean, although many are found in fresh water and a few live on land. The inconspicuous and ubiquitous "pill bugs" or "Roly Polys" that hide under rocks in a garden are isopods. Imagine a pill bug two feet long, with a jointed body, hooked claws, huge triangular eyes and a mouth filled with cutting mandibles, and you've got a real monster. *Bathyneuse giganteus* is a living fossil. Common 60 million years ago, it survives today only in scattered locations. In addition to the Gulf of Mexico, it is found in the Sea of Japan and the Bay of Bengal. It would have been exciting if *Bathyneuse* was 10 feet long instead of two, but scientists say that what it lacks in size it makes up in ferocity.

Anne, my wife, and her fellow graduate student in marine biology at Florida State, Joe Halusky, sat across from Nixon Griffis, in front of them a large nautical chart of the Gulf of Mexico on which they were mapping the coordinates of where the National Marine Fisheries Service had caught *Bathyneuse*.

"Latitude 29', 04 minutes north," Anne called out, "longitude 88', 40 minutes west."

Joe grinned happily. "I can't believe this," he said. His pencil made a circle next to the tight bunch of the others. "It's just too good to be true. Look at all these little rascals. They're sitting right at the edge of the continental shelf, just at that dropoff between 200 and 300 fathoms."

"How about it, Skipper?" Anne asked. "Can we drop it right down here?" She pointed to the middle of the circles.
Thomas Lee grunted. "I don't know about that. I got a chart of my own in the wheelhouse, and it's got all the bad bottoms marked. There's coral reefs out here in 200 fathoms that will tear a net all to pieces. The government boat don't mind tearing up nets or losing a whole rig; they got plenty of money to replace it. But for us... All it takes is one bad hang out here and a man can lose $11,000 in nets and cable before you can say 'Don't do it.'"

A moment later he returned with his chart, on which were drawn big red squares. "We'll put over here at the 2950 Loran line, what we shrimpers call the 'edge of the earth.' I believe we caught some of them sea roaches there before." Thomas Lee flipped through our scientific reprints scattered around on the table. He contemplated a line drawing of *Bathynomecus* and shook his head. "I don't pay no attention to the trash that comes up when I'm out here," he said. "I'm interested in only one thing—shrimp. But you don't forget an ugly-looking thing like that."

As the evening wore on, the seas began building and the 90-foot steel-hulled trawler pitched and rolled. Dishes flew out of the cupboard, and the two crewmen, Frankie and Claude, hurried to batten everything down.

The sea would have been calmer in June or July, but we hoped that we could run out to the drop-off between arctic fronts, work a few days and hurry back before the next storm broke. We had deliberately chosen to go in the dead of winter, when the surface water was the coldest. If we had any hopes of bringing our specimens back alive, thermal shock would have to be minimized. The surface water was about 70° now, the bottom was only 45°. Brining up from those depths could kill many species at any time, but hot summer water-surface temperatures of 85° to 95° F were a guarantee that everything would die.

We had gambled on the weather, and now it looked as if our bluff was going to be called. A new storm was coming through. If it stalled over land, we could work. If it didn't, the expedition would end.

We turned in, and I lay in my bunk most of the night listening to the engines revving up and down, the boat fighting the ever-rising waves. I dozed off, but the surge breaking over the bow was getting so strong that it sprayed in through a port hole above my head, making the night drag on even more uncomfortably. Then, at three in the morning, Frankie was shaking me. "Captain wants to talk to you."

The skipper's mood was somber and worried. "We're at 100 fathoms," he said solemnly, pointing to the gauge, "and from here on out it starts dropping off pretty quick. In two hours we'll be over 200 fathoms." The fathometer's stylus was now etching a sloping line going down, down, down toward the bottom of the sheet. "But, Jack, the way these seas have been building I ain't so sure I'm going to put the rigs overboard. Now it's possible that they'll lay down at daylight—they usually do. Then we'll make at least one deepwater drag, but after that I ain't promising nothing. If that wind goes to switching around bad, I don't want to be where it will drown us."

I returned to my bunk feeling lousy. All that planning, all that work and money, and now it would probably come to nothing. How foolish I was to believe that we could actually go out there and drag up a sea roach at the snap of a finger. The odds against us were too great. There were thou-

When the net spilled its load on deck, there were creatures the monster hunters had never seen.
sands of square miles of deep water out there, rolling on for an eternity. And we, with our two little trawls dragging an infinitesimally small swath of bottom from our tiny tin can of a boat, were supposed to catch a sea roach. All we were going to catch, I thought gloomily, was a severe case of seasickness. I popped another pink pill and tried to get some sleep.

At dawn we assembled on the deck, yawning gloomily and contemplating the red skies and the scruffy little clouds that hung angrily overhead. They were moving before the wind, traveling southward before the cold front. The seas were a vast panorama of icy steel gray, frothed with whitecaps, beset with huge rolling waves.

The deckhands were busy working the rigging, wearing their heavy yellow slickers, as the boat rolled from side to side. “All right, we’re setting out at 190 fathoms,” Thomas Lee shouted, raising his voice above the wind. “That’s the best we can do right now. We’ll be dragging on out to 200 fathoms.”

Then with a jerk on the lever he started the winch turning, and the 10-foot-long, 300-pound ironclad otter doors were jerked out of their brackets with a loud crash and dangled clumsily from the outriggers. Frankie threw the nets overboard, and when the winch brake was released, the trawls splashed into the sea. The green webbing sank down behind them, and they started their long journey to the bottom.

The giant drums spun wildly, spewing out fathom after fathom of steel cable. Thomas Lee hurried to the pilothouse to push the throttle down, and the Norma Evonne churned forward, her great spinning spoils of cables growing thinner and thinner. When he was sure there was enough cable out, he slowed down, and the crew locked the winches. The big steel hull strained ahead, her outriggers stretched out like the wings of a giant bird as she pulled her heavy trawls over the soft muddy bottom.

Now it was our turn to get busy. There were many preparations to be made before we were ready for the nets to come up. As I gushed seawater from the deck hose into Styrofoam containers, Joe Halusky made his way up and down the steel ladder that reached into the hold, bringing up buckets of crushed ice. Anne scooped the ice into plastic bags and tied them tightly. The ice bags were to be used to chill seawater to 45°F without letting any melted water dilute it, which would be deadly to the specimens.

We hurried about our tasks, stringing electrical lines and duck tape around the deck, checking the air pumps with which we would aerate the water in which we put our specimens. If any creatures came up alive from those depths, we were going to do our best to keep them that way.

Frankie, the deckhand, watched our activity. He was skeptical. “I don’t see what y’ all rushin’ so hard about; it’ll be three hours before we’re ready to take up. You ain’t gonna get much to stay alive in that. Most all fish I see come up from this deep water got their eyeballs burst out of their heads. This ain’t like regular shrimpin’, where everything on deck is ajumpin’ and a-floppin’.”

Three hours dragged on. We could only wait as the Norma Evonne churned through the Gulf swells. Finally, Thomas Lee started reeling in the nets. It took more than 30 minutes before we saw the two otter doors on the starboard side speeding up toward the surface, coming together and closing the mouth of the net. The heavy wooden doors broke from the sea with a splash and dangled from the outrigger, dripping water back into the sea. The other set of doors rose and hung from the port outrigger.

Frankie grabbed a long bamboo pole and hooked the lazy line that connected the doors to the end of the trawl bag. The 50-foot-long starboard net came up first. The young crewman wrapped it around the cathead and started bringing it in. With creaking groans, the rope hoisted the green webbed bag until it dangled from the boom above the deck, showering out water, gorged with life. I tried to peer through the covering but all I could see through the webbing were blotches of color, red scales, white bodies.

The skipper went forward and snatched the release ropes that kept the tail bag closed. Suddenly a few fish started spilling on the deck, then an avalanche of little orange shrimp, along with seemingly every other imaginable creature. “My Lord, will you look at the shrimp!” said Joe.

The captain and the crew didn’t seem impressed. “There ain’t no shrimp,” said Thomas Lee. “Very few that’s Royal Reds. Most of them’s those pewee Megalops, and there ain’t much of a sale for them. They’re too damn little.”

I surveyed the pile with amazement. With more than 15 years of collecting in the shallows of that very same Gulf of Mexico, I expected that I would know at least some of the creatures. But I couldn’t classify a single one. There were long flat eels with wicked-looking teeth, huge horned plated prehistoric gooseneck barnacles in 12-inch-long clusters.
The deck bounced with big, leathery-skinned white sea anemones, and scattered everywhere were moon snails, whose shells glowed with brilliant iridescent and opalescent colors. But the colorful creatures were the exceptions. The deepwater species lacked the diversity of color of those that inhabit the shallows; everything was either pale orange, jet black or pasty white.

We were dragging at the very edge of the continental shelf, where the bottom begins its sharp plunge to the abyssal plains of the sea. The animals that live on this frontier are more closely related to the bizarre forms of life that dwell on the sea floor three miles deep than to the familiar shallow-water species. What they lack in color, they make up for in diversity of form, texture and shape.

Nearly all the fish—the speckled stargazers, the red-armored sea robins and the toothy brown goosefishers—were dead on deck, their mouths sprung open, their tongues protruding, their eyes popping grotesquely out of their heads. All of these casualties had swim bladders, gas-filled sacs used to regulate their buoyancy. At 200 fathoms they existed under a pressure of 550 pounds per square inch. As the net rapidly ascended, the pressure decreased, and the gases expanded, blowing the swim bladders up like balloons and tearing the fish apart. Some that lacked swim bladders were still alive, although others had gone into shock from the abrupt temperature change.

We peered over the near-lifeless pile for any kind of movement, looking especially for _Bathybromus giganteus_. But the sea roach was nowhere to be found.

Suddenly, however, Anne cried out, "Hey! Look at this! It's a Chimera, and it's alive too!"

As she pulled it out of the pile, Nick jumped up with excitement. "That's a rattail fish," he said. "I've only seen pictures of them in books before. We've got to get that back alive. That will make the expedition right there if we never catch _Bathybromus_!"

In Greek, chimera means "monster." The name fits. This one had a bulbous nose; its skin was soft, almost mushy, like the squids on deck; its elongated coal-black body tapered to a point. A wicked spine protruded from its back, and the network of lateral lines was prominently marked over its clammy, scaleless body.
for just an instant we saw a shark follow it. The crew hoisted up the bag and it fairly whipped out of the sea, it was so light. "Goddamn!" the skipper snorted. "We made a water haul!"

Thomas Lee opened the flaccid bag and roughly 50 spiny sea robins poured out on the deck, every one of them dead. The second net also had sea robins.

"What happened?" asked Nick, stooping down to examine the dead fish.

"Shoot, we weren't even on the bottom," Thomas Lee said. "I'll bet we caught those fish in midwater when we were hauling it up. We didn't even tip-toe out here. Damn, I hate that." He looked over his shoulder. "This front is coming right along. We've got to go in."

Everyone looked depressed. All that anticipation, all that waiting, for nothing. The skipper was embarrassed. He had underestimated the amount of cable to put out, and we were waiting in silence as he cursed and muttered. "All right, I'll tell you what," he said. "We'll make one more tow. This time she'll damn sure be on the bottom, I promise you. But the way these seas are building, it's gonna be miserable. Frankie," he said to the deckhand, "tie her up. Let's go fishing. You all watch you don't get washed overboard, you hear me?"

As he turned to the wheelhouse, he said for all to hear, "I ain't got no damn sense. We ought to be heading in before we get drowned."

The sun was beginning to set, a cold orange ball sinking into the horizon, when the nets were once again on their way up. This time there was a heavy, solid look about them. The very angle of the trawls pulling solidly down into the water foretold that they were gorged with creatures. Then suddenly there was trouble.

"Sharks! Goddamn it, there's sharks all over the place!" yelled Frankie. "They're eating the nets up!" All the dead fish we had culled overboard hours ago had attracted them. The sea was boiling with sharks.

Thomas Lee shoved the throttle down and tried to outrun them. But there was no way to buck those 15-foot waves. Even as the two swollen bags were pulled to the surface in the wake of the boat, we could see the sharks lunging in, grabbing mouthfuls of the brightly colored shifting gear that protected the webbing and violently shaking their bodies to tear them loose. Fish were spilling out.

"Hold it!" Frankie shouted to the skipper. "We've got to get these nets on deck before they eat the webbing down to the hanging lines."

Desperately, he and Claude began to hoist the heavy bags, with the sharks streaking in for one last bite. As the first bag was lifted clear of the water, fish began flopping out into the sea, and the sharks greedily thrashed in and gulped them down. A moment later the second net was lifted clear and dumped heavily on the deck, riddled with gaping holes. Another minute or two and there would have been only shredded webbing left.

The sharks hung back, trailing the trawler, waiting. They knew what was coming. Shrimp boats are the best thing that have happened to sharks since whaling.

We didn't pay them any attention when the nets were on deck. We had other problems. Frankie put three wraps of rope around the revolving brass cathead, and the first big teardrop net was hoisted up to the lifting boom, where it dangled like an enormous webbed sock. Fish and shrimp began spilling out of the holes, but then they compressed, plugging the leaks. The heavy polyethylene rope groaned under the tremendous weight and stretched taut.

All that weight didn't keep the net from swinging back and forth with the ever-increasing rocking of the trawler. With each wave bigger than the last, the bag went wild, gyrating like a titanic punching bag. With a grim expression, Thomas Lee stepped forward like a wrestler about to grapple with his opponent. He grabbed the two release ropes that hung beneath the swollen bag and tried jerking them open. The net crashed into him, knocking him down.

Joe and I started forward. "Get back," Thomas Lee shouted. "This damn thing will knock you overboard. Get back!"

He arose and tried to grab on to the ropes, but they were snatched from his hand. For a moment the giant bag went wild. "Let off on it!" he shouted to Frankie, who let the big crash to the deck with a loud "plop." I shuddered to think what that was doing to the specimens. I glanced at the other shark-torn net bag, also down on the deck now. If we didn't open the nets soon and get those creatures into water, what life remained in them would have ebbed out.

"All right, bring it up," said the captain between gritted teeth. This time, when the net was hoisted back up to the mast, Thomas Lee lunged in, braced himself with all his might, his muscles bulging, and snatched at the trawler knot. The first bit of pressure eased off the constriction, and shrimp and fish began spilling out from the bottom.

Then suddenly we were staring at an enormous sea roach on the white deck. It couldn't be confused with anything else in the world, not those slowly flexing, long needly pointed legs, or that flattened purplish-white segmented body, and those huge triangular eyes and small pointed antennae. I stared at it for an instant, unable to move. It was as if the Norma Evonne had dropped her nets back into time, back to the Eocene and brought a creature from that era to the surface.

I rushed over to grab the roach before it was buried, but the skipper bellowed, "Goddamn it, Jack! Stay the hell clear of them nets, you hear me? I don't want nobody getting killed!"

In a flash our precious Bathygnomeus disappeared beneath the avalanche. But then as my eyes took in all the diverse forms, the confused flapping, the dead creatures, two more sea roaches slid across the deck. Anne grabbed one and we began hollering, "Ya-hoo! We got them, we got them!"

Nick had been hanging desperately on to the railing, fighting the rolling seas. He suddenly strode forward and picked up the other roach. He was grinning for the first time in hours. We held the Bathygnomeus aloft so Joe could snap pictures. An electrical charge went through us at the excitement of discovery. Even the skipper and crew were looking at the creatures. They were beautiful and ugly at the same time. Their antennae flexed almost mechanically; their segmented bodies rolled up like those of pill bugs. One opened its circular mouth, surrounded with cutting plates, and ejected a brown fluid.

To our delight, when we dropped them into the boxes of water they began to swim. I dived back into the pile and dug out another Bathygnomeus. By this time the other net was opened and we found continued
Most impressive of all were its huge bright-green luminous eyes. They were like two big crystal balls, so big you could look into them and see the whole world.

But when Anne gently eased her specimen into the water of a waiting Styrofoam box, it began to swim beautifully. Its fan-shaped pectoral fins spread out like an angelfish's, and it hovered gracefully in the water. Suddenly it became beautiful, more beautiful than any fish I had ever seen.

When the second net was opened, more creatures piled out, and there were more Chimerans. There were also intricately striped tan sharks with red markings and slanted green eyes. They were alive and healthy. Sharks and their kin, which include rays, skates, sawfish and Chimerans, have no swim bladders and can withstand rapid decrease in pressure. But many of the tiny dogfish sharks, sexually mature at nine inches and lacking a dorsal fin, died from the abrupt temperature change.

Our boxes were filling up with creatures: small spindly orange lobsters, hermit crabs living inside red sea anemones, delicate crabs with long flexing legs. We worked like madmen, desperately raking through the catch. Time was critical, especially with a thousand pounds of creatures dumped on deck. If we didn’t get the animals into water within a few minutes, most would die.

It didn’t take the crew long to cul the want they wanted. In 30 minutes they had four baskets heaped high with fluffly, bright Royal Red shrimp, and they shoveled all the other creatures overboard, including 300 or 400 pounds of Peneaopsis megalops, the small orange shrimp.

“Yeah, I know it’s a waste,” the skipper said, “but until they get some way to machine-process them, they ain’t worth fooling with. They’re just too small and too fragile.”

Like many of the species out here, Peneaopsis megalops was an untouched resource, although Thomas Lee spoke of seeing Russian and Japanese trawlers working out in the deep water, saving almost everything that came aboard. If we don’t utilize the tasty little shrimp and other unexploited species, apparently other countries will. Thomas Lee looked over the baskets of Royal Reds and said, “We ain’t gonna get rich this way.” But he looked pleased.

“Jack,” Nixon called, “come look at the Chimerans. I’m afraid they’re dying.” The fish were belly up, or lying flat on the bottom. I blasted pure oxygen into the water, hoping to revive them, but I knew it was hopeless. Their delicate bodies had undergone too much of a shock. Moments later I sadly lifted them out of the tank and put them into a plastic bag to preserve later.

“Skipper, we need to make another tow,” I said. “We didn’t get our sea roach and we lost our other little monsters.”

Joe had been in the wheelhouse studying the Lorain readings and his charts. He was excited. “Look, the way I figure it, we were dragging just a little bit too shallow to catch Bathynomeus. We were at 190 fathoms most of the time, and they’re a few fathoms deeper. I'll bet if we put over in 250 fathoms we'll catch one.”

“That’s about an hour’s running,” said Thomas Lee, rubbing his unshaven chin, “but we'll try it. The seas ain't picking up any worse, and they always say that if you’re catching those little Megalops shrimp, step off into deeper water and you'll hit the Royal Reds. Last year about this time we hauled the nets up and caught 6,000 pounds.” The shrimping fever was possessing him.

Now that the nets were out of the water, the Norma Ewons churned ahead, bucking head on into the big rolling swells. Her twin diesels strained; the boat began to beat loudly. It was misery on deck as we watched the creatures slopping back and forth in the styrofoam boxes. Nick puffed a cigarette, looking ashen and pale. Before long I felt that all too familiar weakness, that hopeless battle with terminal seasickness, that moment of truth that said that all the dinner of the night before, all the saltine crackers I had just eaten, were about to be lost. A run to the rail and—oops!

But we had to keep on working. The water in the tanks had to be changed periodically, replaced with pre-chilled seawater when the old became slimy from the secretions of the creatures. Anne didn’t help me much. “You know,” she said, “I heard about one oceanographer who used to go out and get seasick every time. When he’d have his students out on deck, he would start lecturing, stop to throw up over the side, and then go right back to teaching his classes.”

“Such dedication,” muttered Nick, taking another puff on his cigarette. Joe, on the other hand, was babbling about in fine spirits, whistling and snapping pictures of all the living and dead creatures in our boxes before their color faded.

Through my wretchedness, I couldn’t help wondering how those creatures must have been feeling. Even though the bright little chain dogfish were alive, they must have been blinded by the sunlight. No light makes its way down into the depths. What a strange group of creatures there were in our catch, squids that looked like octopuses and octopuses that resembled squids.

As I watched the hard round sea anemones sloshing back and forth in the boxes, I wondered how they were reacting to this unfamiliar wave action. Down where the Chimerans glide like fairy creatures over the bottom and sea roaches tunnel through the soft ooze, there is no wave action. Yet Royal Red fishermen spoke of violent underwater currents that were so strong they could catch the nets and nearly pull a shrimp boat over.

The ecology of the depths of the Gulf is poorly understood at best. The bottom is made up of the nearly microscopic shells of billions upon billions of fossilized single-celled organisms that have died and sunk into the depths over millions of years. So stable is the bottom temperature, salinity and other environmental conditions, that the shells have never deteriorated. Consequently, they cover the sea floor with a thick layer of fine fossilized sediment.

We were now dragging in 230 fathoms. Three more hours had passed, and it was time for the net to come up again. It was getting cold; the vanguard of the front had broken through and the winds were starting to switch around hard to the north, as the captain had feared. Those puffy clouds were on the move, pushed along by the wind, leaving a cold, empty sky behind.

By the time Thomas Lee said, “All right, let’s get her,” we were wearing heavy jackets beneath our foul-weather gear. Once again we waited on deck, watching the winch spools grow faster and faster as the cable coiled around them. Finally the etter doors rose from the surface and dangled from the davits. The net rose lightly up behind them, and continued
three more. The rolling boat and blustery winds made it hard even to squat and glean through the catch without falling face first into its midst. But excitement banished our discomfort. There were more treasures: sculpins, spiny deep-water crabs, more feebly gasping rattails, large skates and gray dogfish with giant green eyes. The crew was caught up in the excitement, too. Frankie and Claude were shoveling the trash to the sharks, culling out the Royal Reds and helping us pick out anything alive. And Thomas Lee Mills, the man who had come on this trip only because he wasn’t catching any shrimp inshore with his smaller boat, was in there with us with his own little camera, shooting off flash cubes.

“You know,” he said, “I ain’t never paid no attention to this stuff before. I hate to think of all the critters I’ve shoveled overboard and never even looked at them. But dammed if there ain’t something special about all this. I want pictures so I can show my family.”

Our boxes were getting crowded. Frankie tossed a mackerel-like fish into a box with the largest Bathynomeus, a sea roach that measured a full 24 inches in length.

“Good Lord,” he said, his eyes wide, “will you look at this?”

The fish lay gasping limply on the bottom; obviously its swim bladder had been ruptured. The giant sea roach crawled forward and grasped the hapless creature with its hooks. It abruptly spun it around, opened its round, plated mouth and shut down on its tail. Then, using its seven pairs of claws, it began to grind the entire creature into its mouth. It was almost like seeing a snake swallow a rat, only the sea roach’s jaws were so powerful that they simply sheered away muscle and bone. In two minutes the fish was chewed to bits, leaving only the head and the gawed-down backbone. Here the creature had come up from a depth of 1,500 feet, had been hoisted out of the water to an alien environment, and the first thing it did was to eat.

We finished culling under the glare of the deck lights, surrounded by darkness and a star-studded sky. When the last of the trash was shoveled overboard and the five baskets of Royal Red shrimp stashed below, the crew got the boat ready for the return voyage. Frankie crawled out on the outrigger, hanging above the rolling black seas, clutching the steel ladder, and looped a rope around the heavy outer doors so they could be hauled up on deck. One slip and those chilly, rolling swirls of darkness would swallow him up. Even without the sharks, there would be no saving him. But there was no problem; in a moment he was back safely, manipulating the doors into their brackets.

Then the grueling voyage back to port began. As 25-foot seas slammed over the bow, the sea foamed around the wheelhouse and flooded the aft decks. Periodically we would get up from our exhausted sleep, clutch the railings and check on our specimens; we had to keep the heavy, weighted Styrofoam boxes from being swept overboard as we crept back slowly toward shore. We were making little headway. Fifteen hours passed, then 20, and still no sight of land. It had taken only 10 hours to get out.

It was late in the afternoon before we inched into Mobile Bay and tied up at Bon Secour. Frantically we repacked the specimens, sealing and labeling boxes and loading them on a truck to meet the evening flight to New York. At the Pensacola airport, the freight manager looked with chagrin at the 20 boxes stacked up before the ticket counter. “You serious? You really want to ship all this through as luggage?”

But we did. Once again darkness fell, only this time Nixon Griffiths and I were 20,000 feet up and climbing. Nick has spent more time traveling across the skies from one expedition to the next than anyone I know and he immediately settled down with a martini and a magazine. But I couldn’t sit still, I was too excited. I was having trouble comprehending the events of the last 24 hours. Yesterday at this time we were aboard the Norma Evonne hauling up creatures from the depths of the sea, creatures that lived in the same cold, dark environment as their ancestors had for hundreds of millions of years with very little change. And now, a few hours later, we, and some of those ancient life forms, were flying above the clouds headed for New York.

Thirty thousand feet beneath us were forests, animals and people. As I looked at the lights of the cities and those of the cars on the highways, I was reminded of the bioluminescence of the depths and I almost felt that it was time to drop the nets down again and see what they would bring up. The full impact of it all was beginning to sink in: we had really carried it off. We had gone forth against immense odds, traveled to the proper location in that enormous sea, arrived at the right time and actually captured what we went after—giant sea roaches. Was it magic, or was it luck? Or is there any difference between the two?

At six o’clock the next morning we finished unpacking the last of the specimens at the New York Aquarium in Coney Island. Only vaguely can I remember the excited voice of Hank Dols, the aquarist, as he opened each new box of unfamiliar creatures and carefully placed them in temperature-controlled and darkened aquariums. Later, I had barely dropped off to sleep at Nick’s Manhattan apartment when I heard the phone ringing insistently, and Nick’s sleepy voice answering it. It was 11 a.m. The public-relations department of the New York Zoological Society, which operates the aquarium, was insistent. “Hurry up, you’ve got to get down to the aquarium right away. The press is coming.”

Before the blazing lights of television cameras, goose neck barnacles expanded their featherly scarlet legs. Tan- and black-striped chain dogfish sharks glided along the bottom of the tank, and one laid an egg. Most sharks are viviparous; these are among the few that are oviparous. Reporters from The New York Times and the Daily News gazed upon luminous moon snails and deep-sea lobsters. And six giant sea roaches peered out from behind the glass walls of their new home with their huge triangular eyes, looking like something from outer space. Nick happily held one up for the reporters to see, keeping his fingers clear of the mandibles and hooked claws. The wire services picked up the story of our catch, and letters poured in from France, from Japan, from all over the U.S. Later, millions of viewers awoke to see our giant sea roaches swimming across the television screen on Good Morning America.

Crowds flocked to the New York Aquarium, even in the dead of winter. Admissions soared. The sea roaches, our bargain monsters, had proved to be a monster bargain. They lived in captivity for almost a year.