



Learning to Love a Fish *The motherly keepers of Calvert Marine Museum*

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Ken Kaumeyer's purchase order for 100 pair of No Non-sense pantyhose raised a red flag at the county government office, but not at the Calvert Marine Museum in Solomons, where he is the curator of Chesapeake Bay marine life. A pair of pantyhose from the local drugstore already had proved its worth for holding activated carbon to filter the museum's aquarium water.

In a behind-the-scenes tour, we follow Kaumeyer into a dim back room crammed with exposed plumbing and cardboard boxes. He stops at a barebones aquarium, a quarantine tank. Freshly caught black drum and two small rockfish swim over gravel. One of the rockfish hides in a short length of white plastic pipe. Every tank needs a refuge, we learn.

Kaumeyer and three aquarists collect and care for the Chesapeake Bay creatures that live in the tanks. The painstaking, never-ending task demands ingenuity and empathy. Museum employees are surrogate parents to these water denizens in their unnatural homes.

The Care and Feeding of Fish

"As soon as we collect a fish," Kaumeyer says, "its whole world changes." The fish becomes depressed, and its immune system degrades. "Think what would happen if somebody locked you in a closet," he says. The capture knocks off some of the protective slime layer and scales, making the fish susceptible to disease.

A new fish has to be healthy and free of parasites before it can join those already on display. Yet instruction manuals for such procedures are almost nonexistent, and much has been learned through trial and error. Kaumeyer's 25 years of experience bodes well for most new specimens joining the museum.

For these particular arrivals, Kaumeyer adds antibiotics to the water to help the fish heal their wounds. He sprinkles in copper powder to start killing the parasites; this procedure has to be sustained for six to eight weeks, the length of the parasites' natural life cycle.

Sometimes the copper treatment isn't enough. The gills of one fish were infested by ugly isopod parasites, crustaceans with 14 legs. "We anesthetized the fish and operated to remove the isopods, picking them off one by one," Kaumeyer says.

Feeding can be tricky. Some species will not take dead food. "They'll starve to death with it right in front of them in the water," he says.

Newly captive bluefish often are reluctant to eat. Kaumeyer, an experienced fisherman who has witnessed many bluefish feeding frenzies on the Bay, stimulated a feeding frenzy in the quarantine tank by getting other species of fish to go after the offered food. The bluefish joined the throng and ate.

Back in the public area of the museum, we pause at the exhibit "Chesapeake Bay Cedar Point." Nine species are in the tank, a lovely blue semicircle 11 feet wide that's back in service after two months of repairing and painting. "The life support system was collapsing," Kaumeyer explains.

In the aquarium, three bluefish patrol earnestly. A striped burrfish rockets diagonally from the bottom to the surface. A sharksucker hangs mournfully in a corner, seemingly upside down.

Each fish in the museum, unlike its uncounted cousins in the Bay, is a known individual with history, personality and needs.

"Years ago we had a very mellow red drum in here," Kaumeyer says. The drum turned belly-up after each meal; it had to be netted and held upright to recover. Kaumeyer read up on fish dietary deficiencies and found that porterhouse steak was rich in a needed amino acid. Then he found that eel works, too, and is cheaper.

Of Skates and Rays

Behind the scenes again, we watch two clearnose skates circle in a large, open tank. Two feet long, the tan skates sport panels clear as glass on either side of the nose, like windshields on fighter jets. One hops vertically, over and over, getting his eyes above the water and inspecting us. Satisfied, he resumes swimming.

"They like looking at us, just like we like looking at them," Kaumeyer says. This adult couple has been evicted from the museum's signature skates and rays exhibit for biting the tails of the cownose rays.



Chesapeake
Winter

Setting up the skates and rays exhibit took two years. Rays like warm water, while skates like it cool. There was space for only one tank in the exhibit room.

“We found a temperature both species could live with,” Kaumeyer says. Skates and rays normally are not compatible because larger skates get aggressive, so he sticks with juvenile skates. In the public tank, the skates and the rays live peacefully and settle down in separate places for the night. Lights go off so they can sleep, just like in the Bay.

Creating the skate hatchling display was a challenge. Skate egg pouches, called mermaid purses, are dark, rectangular bags with stringy trailing corners. After the skates hatched some 100 embryos, Kaumeyer knew to keep the water between 61 and 68 degrees. “Our survival rate probably is better than in the wild, where sharks and other predators eat the mermaid purses,” he says.

Cownose rays swim over to look at us. “Their skin is like velvet,” says an exhibit guide. This once was a touch tank, but no longer after a visitor pinned a ray to the bottom so his young son could get a better look.

The ray later died. The man was lucky, we learn, as a ray’s sting is as bad as a rattlesnake’s, but the species is docile and strikes only as a last resort.

Walking back to our nearby home — the trawler Bright Pleiades — we realize we are conversing about the personalities of fish. The Bay’s inhabitants, at least those in the tanks, have become, for us, more than mere biomass or supper.