



FALL OF THE OYSTER KINGS

Brittany's seaside industry is a shell of its former self

Story and photographs
by Randall Hyman

JACQUES DANET strides past crates of Japanese oysters stacked outside his packing plant in northern France. "We were kings here in Brittany when we could still raise the European flats," growls the 60-year-old oysterman.

Danet's eyes flash as he gestures at the sea. Out toward the dark blue waters of the Elorn River estuary, countless oyster stations nestle among the granite bluffs. Not long ago, prized flats were nurtured there. "Everyone did well then. It was an *époque formidable!*"

But now it is an epoch past. The French oysters have been largely supplanted by Japanese imports, and the gnarled watermen face unprecedented troubles. Plagued by disease, their oysters have declined dramatically, threatening a colorful way of life synonymous with the wind and tides. In food-conscious France, where the tasty bivalves are as coveted as fine wines, the problems are especially poignant. Today, longtime residents can only cling to scant hope that scientific breakthroughs may yet resurrect the native oysters and rescue part of a culture uniquely tied to the sea. On a broader level, their plight illustrates the fickle give-and-take between people

who use nature, and the not-always beneficent character of nature itself.

The delicate flavor of European flat oysters has been cherished for centuries by the French, who call them *plates*. The shells reach a maximum of 4 inches in diameter, and the bottom half is absolutely flat, prompting the oyster's name. Moreover, the cool water temperature along the Brittany Coast is ideal for growing the delectable mollusks.

But ten years ago a seemingly innocuous shipment of European flats from California brought to Brittany a protozoan parasite, *Bonamia ostrea*, that ravaged stocks by attacking oyster immune systems. (The California-bred European flats had been purchased by Bretons trying to beef up oyster stocks already hard hit by another protozoan attacker.) In the decade since *Bonamia* invaded Brittany, there has been no relief. Where once there were

50,000 oyster farmers in the region, there are now 10,000. Part of Brittany's economy was crippled, and all of France was hit right in the palate.

The European flat is the country's only native oyster. French connoisseurs insist its mellow, sweet taste makes it superior to all other varieties. Shucking and canning the revered shellfish is inconceivable; one eats flats on the half shell. Nor is there such a thing as an eat-and-run oyster bar. Instead, one sits down with a bottle of fine wine at a seaside cafe, orders a platter of *plates* and . . . savors! Or at least one did when flats were plentiful.

These days, European flats account for just 10 percent of Brittany's oyster harvest, and while scientists in Europe and the United States are looking for ways to bring the bivalves back, it may be too late to revive Danet's "*époque formidable*," too late to restore a way of life.

Southern Brittany's Morbihan district, with its mile-wide coastal mudflats, was especially suited to the growing of European flats. In Morbihan's heyday, thousands of Bretons worked feverishly here each June, setting out 40 million ceramic tiles, the traditional larvae-collecting device. Coated with lime so workers could

Dredge captain Pierre Dano (left) samples a native French oyster during an operation to help stem the decline of the European flat. A downturn in the fishery for the prized oyster (above) has had culinary repercussions across France.

scrape off the baby oysters nine or ten months later, the tiles were the foundation for a flourishing cottage industry that provided seed oysters for much of the European continent.

Heaps of abandoned tiles now line the shore as haunting reminders of those prosperous times. In defiant tribute one retired oysterman used thousands of tiles to build an elaborate garden wall around his home. "If you could have been here several years ago, you would have found a completely different scene," says silver-haired Joseph Camenen as he leans against his tile wall and gazes reflectively across the now quiet cove. "All the women calling 'bonjour' to you as they worked on the tiles. . . . It's incredible how much life can change from one day to the next."

"Oysters taste different from one estuary to another, just like wines and their vineyards."

In the shallows of southern Brittany's Quiberon Bay, about 100 families stubbornly continue to set out tiles. Farthest from shore, at the edge of the sand flats that extend a mile toward the sea during low tide, Suzanne Barbeau and her son tend the tiles of the family parcel. The returning tide creeps stealthily up their boots as the workday lengthens.

"Now, *plates* are just for the rich," Barbeau says bitterly. Most of her fellow oyster farmers have switched to *creuses*—Japanese oysters—considering them a necessary evil. Suzanne Barbeau refuses, despite the fact that few growers buy her seed oysters anymore. Her tiny European flats bring the rock-bottom price of 17 centimes—about a penny apiece. Even at that price, there are few takers. The risk of spreading the disease to other oysters is too high.

In 1978, Brittany harvested 4,000 metric tons of flats. By 1987, the harvest was down to 2,000 tons. Mature flats these days are not only delicacies but expensive rarities. The gourmet shopper at a farmer's oyster-selling station will pay 30 francs for a kilo of flats, only 9 francs for the same quantity of Japanese oysters.

"We can't even get them in the interior," complains Maurice Paul as he buys a supply of *plates* one soggy Sunday afternoon at an oyster stand in the north Brittany town of Cancale. "I've come from Grenoble, 800 kilometers from here. Years ago, during the wintertime, our fish vendor would automatically send us a basket of *plates* every week, like a newspaper."

Racing the tide, an oysterman tends to his *creuses*, the disease-resistant Japanese oysters now grown in Quiberon Bay. Connoisseurs say the Asian mollusks lack the mellow, refined flavor of flats.

In Paris, oyster lovers are just as ardent. The city has scores of seafood stands, with professional oyster openers on hand to serve patrons.

"In the old days, our clients always ordered the *plates*," says Pierre Milleret, manning the oyster stand outside Wepler's Restaurant, in the chic Paris neighborhood of Place Clichy.

Milleret deftly pries open two dozen flats and arranges them in a glistening circle on a silver tray heaped with ocean delicacies. Pointing with his knife at the bins of Japanese oysters that flank the flats, he says, "Now people are growing accustomed to the *creuses*."

The now-dominant Japanese oyster is unaffected by *Bonamia* (nor does the protozoan harm humans). Introduced to France in the early 1970s, the upstart orientals added insult to injury by reproducing best in warmish 72-degree F water. Brittany's shores are thus too cold for breeding the Japanese oysters, and the lucrative business of hatching oysters has moved south in France. Brittany's oystermen have been reduced to leaving their own region to buy baby *creuses*.

Some observers say the fall of the flat is at least partly due to Breton stubbornness. Henri Grizel, an internationally acclaimed mollusk pathologist, has battled *Bonamia* and Breton recalcitrance for years. Despite Grizel's warnings in the early days of the infestation, Brittany's oystermen continued to transfer the disease across the province by sticking to their tradition of shuttling oyster crops from one bay to the next.

"Oysters taste different from one estuary to another, just like wines and their vineyards," Grizel says. "The Bretons move their oysters between different waters up to five times before selling them on the market. This speeds growth and improves the flavor."

But when farmers insisted on moving their diseased oysters to clean, *Bonamia*-free areas, in the hope of saving stricken bivalves, they instead spread the devastation, explains Grizel.

Now, in their fight to keep the European flat from disappearing, Bretons have been taking three- and four-year-old *plates* from natural banks in northern Brittany and dumping them in southern Quiberon Bay



during the summer breeding season. Because *Bonamia* usually kills oysters before they reach two years of age, scientists believe the older oysters must have escaped the disease due to some natural defense. The hope is that some oyster offspring are inheriting a resistance to the parasite.

But Grizel is not content to leave the *Bonamia* battle to nature. He and his team of biologists at the French Institute for Research and Exploration of the Sea are also using *Bonamia* cultures in an effort to breed a super-oyster that can resist the disease.

Meanwhile, 6,000 miles away at the Battelle Marine Research Laboratory on Washington state's Olympic Peninsula, Ralph Elston may have already happened upon that more perfect plate. Elston was testing whether *Bonamia* was transmissible from European flats to their American cousin, the Olympia oyster. In the process, he found a flat that is already highly resistant to the parasite.

Elston discovered that a strain of European flats being grown in Washington's San Juan Islands (for consumption in the United States) carried the parasite. But these oysters were not being wiped out like their French counterparts. The scientist learned that the San Juan flats were from stock that had been seeded from the same California hatchery that, ten years ago, unwittingly sent a planeload of *Bonamia*-infected oysters to Brittany.

Successive generations of the U.S. oysters, says Elston, seemed to have somehow "developed some resistance" to *Bonamia*.

Now Elston and Grizel are collaborating on *Bonamia* research. Recently, French flats free of the disease have been shipped to the Battelle Lab, where their susceptibility to the parasite will be compared to that of Washington-bred flats. The object is to determine whether the American flats are indeed more resistant to infection.

While the scientific effort offers hope, oystermen in Brittany remain skeptical. Many sound the pessimism that comes from 20 years of decline, dating back to an earlier invader. In 1969 the *Maritellia* protozoan struck the province's oysters, attacking the mollusks' digestive glands. That year and the next, the only oysters that escaped infestation were ones raised in open waters like those of Quiberon Bay.

By the late 1970s, however, Brittany's



In the battle against a parasite called *Bonamia*, biologist Dominique Chagot (above) prepares a slide from an infected oyster. Efforts to breed a stronger flat would cheer patrons of Wepler's, in Paris, where Paul Milleret (right) flourishes aux fruits de mer.

oyster stocks were on the rise. Then *Bonamia* hit. Unlike its predecessor, this parasite was transmitted directly from one oyster to the next. Far more debilitating, the new disease indiscriminately killed oysters in all depths of water. This time there was no refuge for the flat. Most oystermen were ruined.

One magnate who had borrowed heavily to expand his holdings saw no way out. He killed himself. Other farmers reluctantly adapted to the less-profitable Japanese oyster, convinced the two epidemics had changed their industry forever.

Francois Cadoret, a wealthy Morbihan oyster king whose palatial processing station is secluded behind locked gates on a private peninsula, articulates the pessimism of the old guard.

"I always believed in the plate, but now I think it's really finished," says Cadoret. "There are just too few left to breed," he continues. "A page in the book has been turned—and that page is the plate."

An hour's drive from Cadoret's station, however, two optimistic brothers believe the page has been turned to a new chapter. At their hatchery on the Etel River, Patrick and Didier Valoteaux breed oysters, clams, cockles and sea urchins. In 1986, they began year-round breeding of European flats.

Inside the white concrete walls of their building, long basins are filled with 3-foot-deep, clean, cold water. Woolly bearded Patrick eagerly rolls up his sleeve and plunges his arm into the nursery basin, pulling out an amazing treasure—hundreds of two-month-old oysters cradled in the palm of one hand.

"Hatcheries are the future for the oyster industry," he says proudly. "This year we plan to produce 30 million."

But in southern Brittany, where tradition dies slowly, Bernard Lorgeoux, president of the powerful Interprofessional Shellfish Committee, answers a question about hatchery oysters with a glare. His guild represents affluent owners of large oyster farms. "Hatcheries will never replace the aquaculture of our Good Lord," he insists.

So far, Lorgeoux is right. Only one-tenth of France's baby flats came from hatcheries in 1986. Wild breeding in the Morbihan, despite the miseries of the industry, accounted for all the rest.

Back at Jacques Danet's operation on the Elorn River, a raucous chorus of gulls circles overhead while the evening chill fills with the salty pungency of the packing station.

Danet considers the wide reach of beds filled with Japanese oysters. He speaks expertly of the deft hand needed for cultivating European flats—and of the years it takes for a grower to know when it is best to transplant oysters from one estuary to another.

"In spite of the maladies, we must restore the flats," says Danet. "If we older ostreiculturists don't pass on our knowledge, the youth will go on to something else. Raising the flats . . . is a craft that will be lost." And that, for an old oyster king, is a fate unimaginable.

Free-lance writer/photographer Randall Hyman wrote about Brazil's embattled rubber tappers in the September-October 1988 International Wildlife. When not savoring plates, he lives in St. Louis.

