



Reaping the harvest of Duxbury's waters

BY JOEL BROWN / ③ CYDNEY SCOTT

WINE CONNOISSEURS talk about the power of terroir, the natural elements of a particular vineyard. Oyster lovers cite a similar influence on the taste of their chosen delicacy. It's "merroir," says John Brawley, an oyster farmer on Massachusetts' Duxbury Bay, and the nomenclature is no joke.

"It has to do with the specific characteristics of the body of water and the watershed," he says. "We have lots of tidal flushing, like Wellfleet, with a 10-foot tide on average, so it's clean water and somewhat briny because of that big exchange with the ocean."

Working in waders on a November morning, Brawley (GRS'92) pulls out his new oyster knife and wriggles the point into the hinge of a freshly dredged oyster, popping it open. The glistening white meat all but fills its half shell.

"I didn't bring any lemon," Brawley says. He is dumping crates of cockled bivalves onto a battered table in the center of his wooden work hut, which floats a quarter mile offshore. Seaweed, razor clams, and flailing spider crabs are tossed overboard, while the oysters are sorted by size. Later he'll bag them for sale under his Sweet Sound brand.

"These are regulars," he says as he sorts. "These are jumbos. These are returns, too small or too skinny or too bent up. I can put them back for a while, and they might straighten out a bit."

Brawley, a marine scientist who has done stints

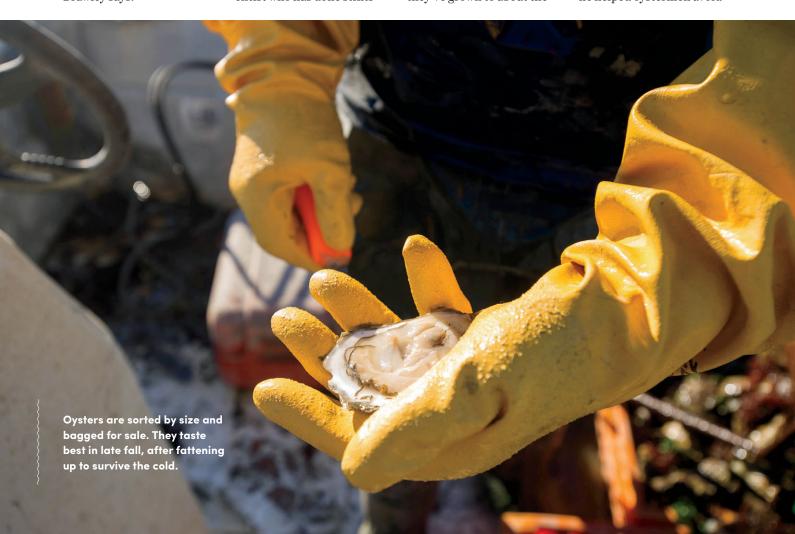
as a shellfish consultant in the Gulf of Mexico after the catastrophic Deepwater Horizon oil spill in 2010 and as a marine ecologist at the Woods Hole Group, has been running his oyster farm for the last nine years. He leases three acres from the town in three separate plots around the bay, and he works 52 weeks a year, planting and nurturing and harvesting Crassostrea virginica, the species of oyster native to the US East Coast and the Gulf of Mexico.

Farmed oysters live two to three years between conception and plate, and they are usually spawned in a nursery in the winter. Larvae so tiny they can barely be seen are fed various types of algae in tanks until they set their calcium carbonate shell. They typically spend July and August growing in wooden racks and bags, and when they've grown to about the

size of a pinkie nail, in early fall, they are "broadcast" by the shovelful across Brawley's two main plots near the barrier beach that separate Duxbury and Cape Cod bays.

The bivalves go dormant in winter, then reach harvestable size in the summer of their second year. Brawley says they taste best in late fall, after fattening up to survive the cold.

Brawley earned a master of arts in energy and environmental studies studying groundwater hydrology at BU and a doctorate in marine science at the University of Maryland, College Park, where he studied the nitrogen cycle in estuarine environments at its Chesapeake Biological Laboratory. He still consults, most recently for the Wellfleet group SPAT (Shellfish Promotion and Tasting, Inc.), where he helped oystermen avoid





the bacteria Vibrio parahaemolyticus, which can cause intense and painful gastrointestinal problems. Vibrio, which needs warm water to flourish, has been a longterm problem in southern states, but hadn't made its mark in New England until 2011. Scientists, including Brawley, who has recorded water temperatures in Duxbury Bay for eight years, have yet to determine if its northward journey should be blamed on climate change or on a healthier strain of the bacteria. He is one of a group of scientists with a grant from the National Oceanic and Atmospheric Administration to study how Vibrio growth in the water, in the mud, and in oysters is affected by temperature and other variables, such as salinity and whether the oysters live on the bottom of the bay or in the water above

Brawley sells about 250,000 oysters a year.

in racks. In Duxbury and Wellfleet, he collects field samples, which are taken to a lab at Roger Williams University for analysis.

It was Skip Bennett, the founder of Island Creek Oysters, who put Duxbury oysters on the map when he started farming there in 1995. At the time, Brawley was working at Battelle, a science and technology research nonprofit, which had a small campus on the harbor.

"I'd see Skip driving by with oysters in his truck and having a lot of fun and starting to make some money,"

Brawley says. "So back in 2002 I put an application in to get a lease out here."

He and his friend Alex Mansfield waited out a town moratorium on new leases and got the go-ahead to start planting seed in 2006. They borrowed the money for floats, nets, and boats from a low-interest federal program. A year later, they began dredging oysters and selling them to Island Creek.

Brawley sold exclusively to Island Creek for years, and only recently has looked around for new markets. He gets \$40 to \$60 for 100-count bags, which he sells mainly to restaurants and to a market or two in Vermont. Most years, he'll bring 250,000 oysters to market.

He motors his well-worn 19-foot Carolina skiff eastward toward Duxbury Beach, gulls and cormorants swooping overhead.

The ovsterman has named his two boats after the stars of Bart Simpson's favorite cartoon. *Itchy* is in dry dock these days so, using the worn GPS on the console, Brawley steers Scratchy toward Powder Point Bridge and the entrance to Back River Marsh. He drops the iron jaw of the dredge over the side, then turns in lazy circles, dragging the dredge through one of his two main plots. He watches the line slice the water's surface, then suddenly cuts his engine back to idle. After nine years on the bay, he can tell from the feel of things when the bag is full.

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