

Maturing oyster recovery efforts bring calls for money

Small-scale projects to restore oysters in wild

By WAYNE PERRY
Associated Press

LITTLE EGG HARBOR, N.J. — Oysters were once so abundant in New Jersey that vacationers would clamber off trains, wade into the water and pluck handfuls to roast for dinner. Their colonies piled so high that boats would sometimes run aground on them, and they were incorporated into navigation maps. Even earlier, Native American tribes would have oyster feasts on the banks of coastal inlets.

But over the centuries, rampant development, pollution, overharvesting and disease drastically reduced the number of oysters, here and around the country; many researchers and volunteer groups estimate oyster populations are down 85 percent from their levels in the 1800s.

That has sparked efforts throughout the coastal United States to establish new oyster colonies, or fortify struggling ones. Though small in scale, the efforts are numerous and growing, and they have a unified goal: showing that oysters can be successfully restored in the wild, paving the way for larger-scale efforts and the larger funding they will require.

While a main goal is increasing the numbers of succulent, salty shellfish bound for dinner plates, oysters also serve other useful purposes. They improve water quality; a single oyster can filter up to 50 gallons of water a day. They also can protect coastlines; the hard, irregular oyster beds serve as speed bumps that obstruct waves during storms.

"It's many years and millions of dollars away, but it is attainable," said Steve Evert, assistant director of the Marine Science and Environmental Field Station at New Jersey's Stockton University, one of hundreds of organizations working to start or expand oyster colonies.

Most of the projects are small-scale, funded by government grants and volunteer donations. Helen Henderson, of New Jersey's American Littoral Society, which is growing an oyster reef in Barnegat Bay, hopes successful demonstration projects can lead to an exponential increase in funding for bigger projects.

"Nature has shown us this can be done; we're just giving it a kick-start," she said. "Hopefully funding will flow from that once we can show successful outcomes, and we can really make a difference on a much larger scale."

The Barnegat Bay Partnership put up \$52,000 for the oyster project Stockton is undertaking in New Jersey; matching funds came from the university, the Littoral Society, and a shellfish business that has invested many times that amount on equipment and oyster seedlings.

Fledgling oysters need to attach themselves to a hard surface in order to grow, preferably a three-dimensional one with plenty of nooks and crannies.

The projects usually involve dumping shells onto the sea bed, where free-floating oyster seed attaches to them, though some projects pre-load the shells with tiny oyster seedlings before dumping them at a reef site. Some involve transporting more mature oysters from established colonies to new sites.

Oyster restoration projects are underway or have recently been completed in San Francisco Bay; Puget Sound near Seattle; New York Harbor and the Hudson River; in coastal salt ponds in Rhode Island and the state's Narragansett Bay; in the Carolinas, as well as Florida and the other Gulf Coast states; New Hampshire; and particularly in Chesapeake Bay in Maryland and Virginia, where some of the nation's biggest oyster restoration programs have been underway for years.

In 2014, U.S. fishermen and growers produced nearly 36 million pounds of oysters worth nearly \$250 million, according to the National Marine Fisheries Service. But oyster landings have plummeted from their heyday in the 1800s.

In Chesapeake Bay, 120 million pounds of oysters were brought ashore in 1880; by 2008, the amount was around 1 to 2 million, according to the National Oceanic and Atmospheric Administration.

"We've knocked this resource down so far that it would be impossible to get it back to 100 percent of its historic high," said Bill Goldsborough of the Chesapeake Bay Foundation. "I'd feel wonderful if we could get it back to 50 percent, but we'll probably fall short of that. But remember: Today we're in single digits, and it would still be a phenomenal improvement."

Businesses are getting involved, too. Commercial shellfish processors, which steam whelks, a type of sea snail used to make scungilli salad, donate the animals' large, crevice-filled shells to reef restoration programs; North Carolina



AP Photos/Wayne Parry

Nate Robinson, left, and Dave Ambrose, right, dump whelk shells with tiny oysters growing on them onto a research boat in Little Egg Harbor, N.J., that was to dump them into Barnegat Bay to become the foundation of a new oyster colony. Efforts to restore once-abundant oyster populations are underway throughout the United States, and researchers and volunteers say they are optimistic the small-scale efforts will pave the way for a major comeback of oysters, whose populations have dwindled drastically from levels seen in the 1800s.



Dale Parsons Jr., a fifth-generation oysterman, holds a whelk shell on which tiny oysters are growing in Little Egg Harbor, N.J.



Here are 3-week-old oysters visible as tiny specks on a whelk shell, left, and 3-month-old oysters growing inside a clam shell, right, in Little Egg Harbor, N.J.



Dave Ambrose, a Stockton University graduate, dumps whelk shells with tiny oysters growing on them from a metal cage onto the deck of a university research ship in Little Egg Harbor, N.J., which was to dump them overboard in Barnegat Bay to form the basis of a new oyster colony.



Whelk shells, on which tiny oysters are growing, are piled up in Little Egg Harbor, N.J.

olina even gave a \$1 per bushel tax credit to firms that donated shells until discontinuing the incentive in 2013. Restaurants nationwide now collect and donate shells to conservation groups for use in reef-building.

Dale Parsons Jr., a fifth-generation oyster-

man from New Jersey, has invested a small fortune in shellfish aquaculture, as well as wild oyster restoration.

"You have to listen to what nature tells you," he said. "The water is proving it can sustain oysters. We're just trying to help it along."

Projects across the country

By WAYNE PERRY
Associated Press

Efforts to restore or expand oyster colonies are underway around the coastal U.S. A look at some of them:

ALABAMA: 1,100 acres of oyster reefs created from 2009-14; additional work ongoing.

CALIFORNIA: Restoration programs in San Francisco and Richardson bays, among others.

CONNECTICUT: State borrowed \$5.3 million for oyster restoration since 1987; enhanced 3,000 acres of existing beds.

DELAWARE: From 2005-09, a joint New Jersey-Delaware program deposited 2.4 million bushels of shells onto existing reefs in Delaware Bay.

FLORIDA: Multimillion-dollar restoration project in Pensacola Bay using limestone, recycled concrete and marsh plantings. State has restored coastal habitat including oyster reefs since 1994 through a grant program, has built 11 reefs throughout Florida panhandle and recycles shells from 28 restaurants; 900 oyster reefs established along 2 miles of shoreline in Santa Rosa County over past 20 years; MacDill Air Force Base installed half-mile oyster reef; volunteer groups restored 42 oyster sites since 2005.

GEORGIA: State completed 10 restoration projects from 2008-14, funded in part by state fishing license fees; state manages eight shell recycling facilities

LOUISIANA: Six 200-acre oyster plots built from 2011-2014; oyster reefs installed as shoreline protection in Cameron and Vermillion parishes; Lake Athanasio, among other spots.

MARYLAND: Some of nation's largest and most numerous oyster restoration programs underway in Chesapeake Bay.

MASSACHUSETTS: Towns of Barnstable and Wellfleet launched their own oyster restoration projects; nonprofit groups seeking to restore oysters in Boston Harbor.

MISSISSIPPI: State and volunteer groups doing numerous restoration projects, including at Deer Island, Mississippi Sound and Back Bay.

NEW HAMPSHIRE: Numerous programs, including one by University of New Hampshire involving restaurants and volunteers that has added more than 18 acres of oyster reefs and more than 3 million oysters to the ecosystem in the past six years.

NEW YORK: Restoration programs, including the "Billion Oyster Project" in New York Harbor; Hudson River; Great South Bay, Peconic Bay and Bronx River.

NEW JERSEY: 2.2 million bushels of shells planted on 1,350 acres of existing oyster beds from 2003-14; projects ongoing in Barnegat Bay; Great Egg Harbor; Mullica and Navesink rivers.

NORTH CAROLINA: State established 12 oyster sanctuaries totaling 228 acres; has run oyster shell recycling program since 2004.

OREGON: Restoration projects in Coos and Netarts bays.

RHODE ISLAND: Numerous restoration projects in Narragansett Bay, including one in which volunteers grow bags of oysters attached to their docks until they grow enough to be transplanted to reefs in the bay, in coastal salt ponds and on Block Island.

SOUTH CAROLINA: Planted 150,000 bushels of oyster shells from 2002-2006 at 34 sites covering 9 acres; since 2001, more than 400 reefs built at 44 sites from Hilton Head to Murrells Inlet.

TEXAS: State has been restoring oysters since 2007 in Galveston Bay and Sabine Lake.

VIRGINIA: Restoration projects at Tangier Island; Rappahannock, Great Wicomico and Lynnhaven rivers; numerous local government and volunteer projects.

WASHINGTON: Restoration projects in Puget Sound and Port Susan and Woodward bays; local restoration project in Olympia.

Sources: The Nature Conservancy; Mississippi-Alabama Sea Grant Law Center; AP research

Coast River BUSINESS JOURNAL

VOLUME 11 • ISSUE 3
Includes 100+ pages of business news, trends and inspiration

ALICIA PHILLIPS
Theater and Performance

JOHN HOFFMAN
Cannery

SPRING CROP
A NEW GENERATION OF OREGON COAST ENTREPRENEURS

JENNIFER HOSNER
The Naturalist

SLOW LANE
Austria restaurant has soft opening. See Page 18

Now available in the
The Daily Astorian and
Chinook Observer

For more information call 503-325-3211

Coast River
BUSINESS JOURNAL
crbizjournal.com