

# PEARL OF AN IDEA?

## New effort aims to create sustainable model for harvesting Gulf oysters

By Emily Foxhall STAFF WRITER



Brett Coomer / Staff photographer

Shannon Batte of the Galveston Bay Foundation dumps oyster shells from restaurants that later will be returned to the bay.



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Shannon Batte of the Galveston Bay Foundation dumps oyster shells from restaurants Wednesday in Pasadena. Wildlife will eat any leftovers, and the sun will decontaminate the shells before they are used to rebuild reefs.

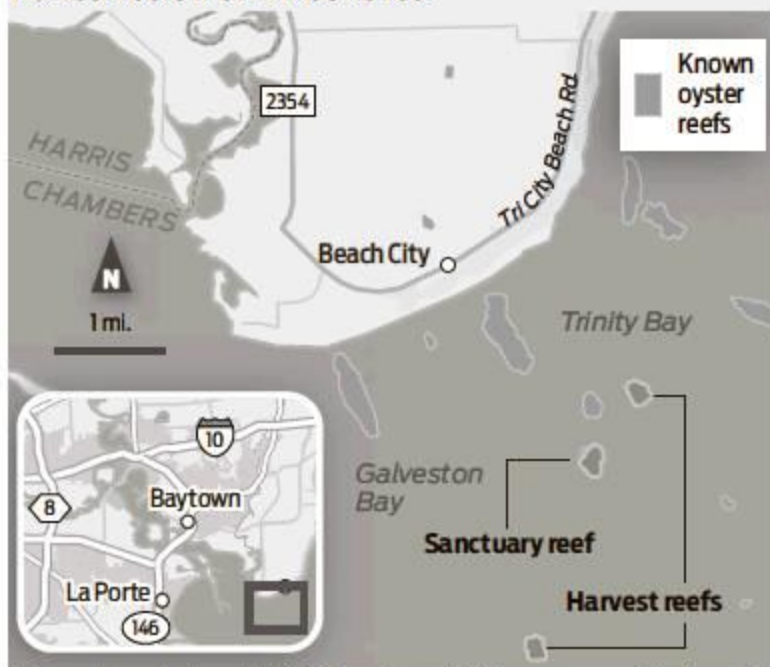


Ian Terry / Contributor file photo

Workers plant poles to mark out areas for proposed reef rows off the coast of Matagorda in 2013.

## An oyster experiment

The Texas Parks and Wildlife Department, along with two advocacy groups, is trying out a new way to help oysters. They built a sanctuary reef, which is protected from fishing, in hopes that it will repopulate two other harvest reefs that will be fished.



Source: Texas Parks and Wildlife Department; ESRI

Staff graphic

Three new piles of limestone rocks sit at the bottom of Galveston Bay, dropped there in December as an experiment in helping hard-hit oysters. The coastal area was once a top Texas oyster producer. Then came drought — and Hurricanes Ike and Harvey.

A state agency and two environmental groups are carrying out this latest attempt to support the bivalves. Officials last week banned harvesting over a 40-acre site to let the oysters grow. After 21 months, one rock pile will remain protected. The other two will be harvested.

If all goes as hoped, the protected population will repopulate the fished ones, creating a sustainable model for how to harvest. The idea could be replicated throughout this bay and others to support an animal — and industry — that experts say is threatened globally by over-harvesting, storms and disease.

Gulf oysters comprise the world's largest native harvested population, said Jennifer Pollack, chair for coastal conservation and restoration at Texas A&M's Harte Research Institute. Texas and Louisiana are top producers. More than 5 million pounds of eastern oysters, worth \$33.5 million, were harvested in Texas in 2019.

Still, the amount of Texas oysters collected is trending down. And while Galveston Bay historically played a big role in the business, storms and drought have accelerated the decline of its population. Researchers and advocates recreated reefs, but so many oysters there now are so young that Texas recently banned public harvesting in the bay altogether.

The oysters' world is also only getting trickier to live in: Climate change is expected to make more frequent the intense storms that can decrease the bay's salinity with rain, making oysters seal up, or bury the oysters in sediment with a surge.

The newest project is a joint effort of the state, The Nature Conservancy and the Galveston Bay Foundation. It highlights a shift toward thinking broadly about the bay, instead of reef by reef, organizers say. It comes amid growing public interest in where seafood comes from — and how it's harvested.

“These are very valuable, iconic things about our coast,” Pollack said. “So if it's going down, we need to think about these different strategies for managing it. It's not just business as usual anymore.”

### **‘A lot of sense’**

Bill Rodney, a coastal ecologist with the Texas Parks and Wildlife Department, is among those waiting to see if baby oysters waft over to the new rocks and glom on.

Rodney has devoted much of his career to helping this creature, struck by how oyster reefs provide homes for lots of marine life. The reefs are basically oyster shell piles on which oysters grow. Those shells, its habitat, are removed when they're fished. Storms can also bury them in sediment. To address this, Parks and Wildlife puts material such as limestone in the bay to build reefs back, and it requires fishermen to return — or pay to replace — some of the shell they collect.

But that's just one approach. The Galveston Bay Foundation, unlike the state, often rebuilds reefs too close to shore to be harvested. Their strategy stems from how much work goes into it. Shannon Batte spends three days a week driving to restaurants to collect shells from oysters that people have eaten, discarded in blue bins with stray lemons, forks and Tabasco packets.

Batte on Wednesday drove 14 bins to a clearing on a wooded lot in Pasadena, shoving them off a trailer with gloved hands and spilling their stinky contents on the ground. A piece of oyster wound up on her shoe. Wildlife will eat the leftovers and the sun will kill anything unwanted before staff pick out the trash and return the shells to the bay.

The new reef rebuild model is something neither has tried, a hybrid of allowing fishing and protecting. It tests the idea that oyster populations aren't necessarily on the same reef but connected through currents, as larvae fertilized in the water float around to find a home.

Rodney was following the restoration literature, and, he said, “it just seemed like it made alot of sense.”

### **Common goal**

When a chance arose to apply for funding after BP's 2010 Deepwater Horizon oil spill — which shut down Louisiana oyster fishing and increased demand in Texas — Rodney worked on a proposal. Someone at The Nature Conservancy had a similar idea. (They have a like project going near Rockport in Copano Bay.)

Both groups, with the foundation, received \$2.3 million in grant funds to test it where Trinity and Galveston bays connect.

All recognized the once-thriving spot needed a boost. In 2008, Hurricane Ike suffocated a significant chunk of oysters with sediment. Drought also made the bays salty. Disease spread, as did snails that make holes in oyster shells and eat the gooey animals.

Next came heavy rains, which triggered massive spring floods in 2015 and 2016 and devastated the region during Hurricane Harvey in 2017. The bays became less salty. Oysters sealed up and stopped filtering water for food and oxygen. Oystermen all the while kept fishing as allowed.

Luckily, oysters tend to bounce back, said Haille Leija, habitat restoration manager with the Galveston Bay Foundation. Those helping to run two big oyster businesses on the bay — Prestige Oysters in San Leon and Jeri's Seafood in Smith Point — agreed the population now seems improved.

“It's like anything else,” said Tracy Woody, Jeri's president, “you have to manage your harvest.”

Woody thinks this sort of project might help. So does Raz Halili, who learned about oysters from his parents. Now vice president of Prestige, he didn't see the state's project as “the savior” or single miracle for the industry, but part of a needed broad effort toward a single goal: having a healthy ecosystem. [emily.foxhall@chron.com](mailto:emily.foxhall@chron.com)