

Discarded oyster shells recycled

By Associated Press
FEBRUARY 26, 2017



In Photo: A member of the Coalition to Restore Coastal Louisiana walks on a reef constructed from recycled oyster shells in Saint Bernard, Louisiana, on November 18, 2016. The oyster shell-recycling program, spearheaded by two environmental groups, in coordination with area restaurants, aims to take a waste product that used to fill landfills, and instead make it into a structure that tiny oyster larvae can latch onto and grow. The structures, in turn, can slow erosion and storm surge that is swiftly eating into Louisiana's coast, as well as provide other environmental benefits.

ON LAKE ATHANASIO, Louisiana—If you slurp oysters from the half-shell in New Orleans, you may be doing more than satisfying a culinary craving: You could be helping to construct reefs that environmental groups hope will save a bit of Louisiana's coastline.

Since 2014, restaurants have contributed nearly 2,600 tons of shells to the Coalition to Restore Coastal Louisiana and The Nature Conservancy, which have already used a quarter of them to construct a half-mile-long reef about 40 miles outside of New Orleans.

Tiny oyster larvae like nothing better than oyster shells to cement themselves to as their permanent home. Up to 10 of the larvae, known as spat, can stick to a single shell.

Left undisturbed, the reef grows up and out, providing homes for other types of marine life and slowing the waves that chew continually at Louisiana's coast. The oysters also filter up to 25 gallons of water a day, improving water quality.

For thousands of years, people have been hauling oysters out of the sea, chowing down on the ounce or so of meat inside, and then tossing the shells. Prehistoric Indians left oyster and clamshell heaps up to 600 feet long and 50 feet to 100 feet high on every US coast. These days, the shells either end up in landfills or are ground up into road material or chicken feed.

Although Louisiana's oyster fishery is the nation's largest—producing nearly 6,600 tons in 2015 alone—until recently the state built shallow-water reefs mostly of concrete or limestone, not shells. Recycling oyster shells was inspired by programs in other states, including Texas.

A 245-foot-long, more-than-20-foot-wide reef in south Texas's Aransas Bay has had visible results since it was started in 2011, said Gail Sutton of the Harte Research institute at Texas A&M University.

She points to Google Earth photos of a fishing pier at Goose Island State Park in 2011, showing a thin white line of easily erodible sand nearby. Photos taken in

2016 show that sea grass has grown over the sand, its roots holding the fragile land more securely, she said.

Prior to the reef's installation, "the wave action was so severe that the sea grass could not latch down and stay put," she said. "Now we're seeing it fill in.... It's changing the whole side of that one cove."

The new reef off Louisiana's coast, completed last November, consists of about 650 tons of shells, bagged and then placed into steel-mesh boxes known as gabion baskets measuring 6 feet long, 3 feet wide and 3 feet high.

The baskets, each of which holds 2 tons of shells, are laid end-to-end about 20 feet from shore, with gaps to match inlets in the marsh along the shore of Lake Athanasio—really a Gulf Coast bay on the ragged edge of Saint Bernard Parish. The top is only about a foot below the surface at high tide, so signs have been set up to alert boaters.

"We're going to measure success by its growth over time," said Kim Reyher, executive director of the Coalition to Restore Coastal Louisiana. The remaining shells already donated and those still being added go into huge heaps on land owned by the Department of Wildlife and Fisheries, where they cure in the sun until they are ready to be used for future reefs. The state department doesn't charge rent, but gets a percentage of the shells for its own programs.

New Orleans' shell-collection program has grown much faster than those in other states, thanks to a \$1-million grant that covered its first three years and let the Coalition to Restore Coastal Louisiana and The Nature Conservancy haul away shells without charging restaurants. But now that the grant has expired, restaurants are being asked to pay about half the cost: \$150 per 32-gallon collection bin. Consequently, more than half of the 26 participating restaurants have dropped out—including one that provided 484 tons of shells. That

restaurant might have had to pay as much as \$3,000 a month to stay in the program.

The coalition is applying for additional grants to keep funding the program; in the meantime, the restaurants that are sticking with it include some of the largest contributors. Overall, the 10 remaining restaurants donated more than one-third of the total received in the program's first three years.

Among them is the No. 2 shell contributor, Bourbon House, whose general manager, Steven Schnell, estimates the recycling program will cost the restaurant about \$900 a month going forward. Schnell says the restaurant has provided about 334 tons of shells so far.

“It takes about 700 tons to build one of these reefs,” he said. “So we’re really proud of the fact that half a reef is coming directly from this restaurant.”

Image Credits: [AP/Janet McConnaughey](#)

<http://www.businessmirror.com.ph/discarded-oyster-shells-recycled/>