

# La. scientist's oysters safe from oil, but pricey

August 20 2010, By CAIN BURDEAU , Associated Press Writer

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In this July 1, 2010 picture, Louisiana State University assistant research professor John Supan holds an oyster shell containing oyster larvae, seen as black dots, in his bivalve hatchery at the Louisiana Wildlife and Fisheries Laboratory in Grand Isle, La. Unlike traditional oysters that spawn and get skinny in the summer, Supan has developed sterile, "super" crossbreeds that remain fat, making them one of the best hopes for restoring Louisiana's oyster industry. (AP Photo/Patrick Semansky)

(AP) -- Biologist John Supan thinks he has developed what may be the holy grail for oyster lovers: a hardy breed of the delectable shellfish that stays fat enough for consumers to eat throughout the year.

And unlike many [oysters](#) across the Gulf Coast, ruined by BP's massive oil spill and the [fresh water](#) poured in to fight it, Supan's oysters are all alive.

Now, nearly four months after the spill, Supan's oysters may offer the Gulf oyster industry a chance for a better long-term recovery. But his special breed of modified oysters, which some say are prohibitively expensive, could be a hard sell to an industry reeling from the BP disaster.

Most oystermen agree that few oysters will be harvested from the Gulf Coast in the next year or two, signaling a potential calamity for shucking houses, oyster farmers and people who love a half dozen oysters on the half shell. As much as 65 percent of the nation's oysters come from the Gulf.

Oysters are particularly susceptible to pollution, taking longer than fish or shrimp to clear [oil contamination](#) from their bodies.

Supan's oysters are bred for performance, making them more fit to deal with viruses and other [contaminants](#). Being sterile, they don't go through the stress of reproduction, so they stay fat and juicy all year round. Supan says his oysters are sweet, plump and meaty in summertime when other oysters become thin and watery.

But the most crucial advantage this year was their mobility.

Unlike the vast majority of oysters in the Gulf, which spend their lives on the bottoms of bays and sounds, Supan's oysters dangle in the water in cages at a hatchery on the inland side of this island.

When the Deepwater Horizon rig exploded on April 20 just a few dozen miles from his hatchery, the 57-year-old Louisiana State University oyster biologist evacuated his broods to a research hatchery in Alabama and a wildlife preserve in western Louisiana. Then he brought them back.

"In my opinion, this is the most important brood of oysters in the history of the Gulf of Mexico," Supan says. "But you know, you ask an oysterman that and they will say, 'Huh?'"

He said the day is coming when all the Gulf's oystermen will know what he's talking about.

For three decades, Supan has been developing new oysters by mixing up their chromosomes in a process known as triploid production. He breeds a rare oyster that has extra chromosomes with a normal oyster and produces a sterile hybrid. The process is common on the East and West coasts but still untried in the Gulf, besides Supan's batch.

"I don't know if it's the future with a capital 'THE,' but it's very important," said Bill Walton, an Auburn University shellfish biologist. "It can give you a faster growing oyster. It cuts down production time and it does seem to solve the problem of 'water bellies' in the summer when oysters spawn and you have a tired, thin oyster."

"For the long-term viability of oysters in Louisiana what (the hatchery) is doing is the kind of pioneer work," said Mike Voisin, an oyster processor and leader in the Louisiana oyster industry.

The industry in Louisiana faces daunting threats from the oil pollution, oyster diseases and pressure from state and federal officials who want to reclaim lost marshland by opening up the Mississippi River even more often. If that happens, traditional oyster grounds could be ruined in many of the inland bays where they are grown today.

Helen Skansi, a 75-year-old Plaquemines Parish oyster company owner with more than 1,000 leased acres, is painfully aware of the problems.

"Things will never be the same with the bedding grounds they had before

with the oil," she said.

Kenneth Fox, who leases 15,000 acres of state waters to grow his oysters, is equally concerned.

"I lost 95 percent of my leases with this oil spill," he said. "Everything is dead on the west side of the river."

Asked about Supan's super oysters, however, he was unconvinced.

"I think the research is great, and I think what he's doing is going to be a big help. But that is going to be a costly process."

Supan would like to see his special oyster larvae distributed through hatcheries across the Gulf to oyster growers. He said he could start distributing the larvae now.

But a lot has to happen for that to materialize. Ideally, the sterile oysters would be grown in cages in special areas designated as marine farms. And a host of permitting and zoning issues would have to be resolved.

Growing oysters the way Supan does is tricky. They are raised in structures propped up off the water bottom. That requires new harvesting equipment. Oystermen currently use mechanical devices like plows to scour their catch from the Gulf floor. It also would require new permits.

It takes about two years for an oyster to grow to market size.

Once the special summer oysters grow to adult size, then the oyster growers would have to find buyers. Typically, a dozen oysters cost about \$12 at an oyster bar on the [Gulf Coast](#). Supan said a cost analysis has not been done to figure out how much the summer oysters would cost. He

says the market would take care of that.

"That's a big investment on a gamble," Fox said of Supan's experiments. "I'm not saying it won't happen one day, but the way Louisiana is set up, it's going to be hard to make happen. Half the people in the industry would have to get out of the business for the other half to make a profit."

Still, some institutions that fund research are persuaded that Supan's technique holds promise.

Supan's research has been backed by federal and state grants over his 30-year career. The National Oceanic and Atmospheric Administration recently awarded Supan and other researchers a \$250,000 grant to develop more hatchery technology.

Inside his algae room, Supan looks like a winemaker as he surveys tanks of algae he feeds to his oysters. The bacteria grows under ultraviolet light.

"It takes a wet green thumb to grow algae," he said. "You got to be patient with it. It's very intuitive. Just like growing a garden. Some people say they talk to their house plants; well, my algae and myself have conversations all the time."

Supan has big plans.

He hopes the state will build an oyster dock where he can teach oyster farmers to grow oysters in saltier Gulf farms similar to his, where the oysters are reared to market size on platforms that thwart predators such as snails and bottom-feeding fish.

"With all these calamities - the hurricanes and the oil spill - we're five years behind schedule," he said.

**More information:** Louisiana Sea Grant Bivalve Hatchery:  
<http://bit.ly/aSWU6Z>  
Auburn University Shellfish Laboratory: <http://bit.ly/9tDdnB>

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Citation: La. scientist's oysters safe from oil, but pricey (2010, August 20) retrieved 20 April 2024 from <https://phys.org/news/2010-08-la-scientist-oysters-safe-oil.html>

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