## Texas Oyster Aquaculture

## Providing economic stability and environmental resilience for the Texas coast

Sustainable Texas oysters from bay to plate - is it possible? The Texas oyster fishery is in a historic decline as increased fishing pressure, hurricanes, freshwater floods and chemical spills have threatened the production. Texas is overdue for an oyster aquaculture revolution.

The Harte Research Institute for Gulf of Mexico Studies has partnered with Texas A\&M AgriLife Research, Texas Parks and Wildlife Department, Coastal Conservation Association and the Texas Restaurant Association to identify how oyster aquaculture could become an important part of the Texas economy, ensure sustainable and adaptable fisheries, and restore damaged reefs in our bays.

Oyster aquaculture will reduce the need for importing oysters, satisfying demands across Texas by providing new product for the half-shell market that can be grown rapidly and even bred for improved quality. The benefits aren't just economic - oysters are traditionally harvested from public fishing grounds by dredging, which destroys the sea bottom as it brings up its catch, losing the natural benefits oyster reefs provide as hurricane protection, water filtration and fisheries habitat.

Our research will show how oyster aquaculture can better support the state's economy and environment with sustainable seafood now and into the future.


Aquaculture provides year-round production of oysters

$70 \%$ of oysters are harvested from the Gulf of Mexico



Specific selection of seed oysters grown in hatcheries can produce unique flavors


An aquacultured oyster can be harvested in as little as 8 months

## What is oyster aquaculture?

Also known as mariculture, oyster aquaculture involves growing oysters under managed conditions in a bay within a cage or bag until achieving market size for consumption. Aquaculture is "farming in the water:"

Why farm Texas oysters?
To offer a locally-sourced sustainable supply of oysters! Texas has over 3.000 miles of coastline, so why not embrace the farm-to-table concept with oysters? By employing sustainable practices, we can offer a year-round supply of oysters.

Plus: everything is better in Texas!

## Does Texas allow oyster aquaculture?

Yes! House Bill 1300 was signed by Texas Governor Greg Abbott on May 27, 2019, allowing oyster aquaculture in the state of Texas.

What are the benefits of oyster aquaculture? Economically, aquaculture could produce a year-round dependable supply of oysters of consistent quality that are designed for the half-shell industry, enhanced value through branding, new job and business opportunities, and helps meet the growing demand for seafood. Environmentally, aquaculture reduces the pressure on wild-caught oysters. Also, farmed oysters
live and grow in the same water as wild oysters and help to enhance biodiversity, provide additional ecosystem services, and protect shorelines from erosion by storms.

## Will permits be required for commercial oyster aquaculture?

Likely, as with other states practicing oyster aquaculture. The permitting process is being developed among state agencies and could involve any of the following groups: Texas Department of Agriculture, Texas Parks \& Wildlife Department, Texas General Land Office, and the U.S. Army Corps of Engineers. Oyster aquaculture practices will likely be regulated and monitored by the Texas Parks \& Wildlife Department.

What species of oysters can I farm in Texas? The Eastern oyster (Crassostrea virginica) and its subspecies

How do I farm a Texas oyster?

1) Obtain the necessary approved state and federal permits for an approved culture area; 2) identify a source of seed oysters for stocking your farm; 3) identify a market for your oysters; 4) set up your farm infrastructure; 5) grow oysters to an appropriate size for your market; 6) continue to develop product for the market (i.e. market recognition/branding)

Where can I grow oysters in Texas? Specific locations within bays where oyster aquaculture will be permitted are currently being identified by the Texas Parks \& Wildlife Department. At present, the Harte Research Institute for Gulf of Mexico Studies is developing methods for identifying sites with the potential for farming success.

When can I get aquacultured Texas oysters to sell in my restaurant or business?
Regulations governing oyster aquaculture in Texas waters are projected to be in place sometime in Fall 2020.

How can I learn more about Texas oyster aquaculture?
Visit www.growTXoysters.org or email texasoysters@tamucc.edu

