WHAT IS ALTERNATIVE OYSTER CULTURE?

In Louisiana, any on-bottom, off-bottom, or other means of growing oysters apart from directly on reefs or water bottoms is referred to as alternative oyster culture (AOC). This differs from traditional oyster aquaculture fishing methods in which oysters are harvested directly from natural or artificial reefs with a scraper or tongs.

While there are many different ways to operate an AOC oyster farm, they generally have a few key things in common: 1) oysters are containerized for growing, 2) oysters are grown as singles (i.e. not in clusters), 3) seed oysters are often produced in oyster hatcheries.

Oysters produced through alternative oyster culture are more appealing to both chefs and consumers because they are typically uniform in size, meatier, and have less grit, making them more ideal for either cooking or for raw consumption.

BREEDING OYSTERS FOR AOC

AOC farms use oyster hatcheries which produce seed oysters for "planting." One advantage is that the supply of seed oysters can be independent of wild oyster production. Hatcheries also allow oysters to be bred for improved or selected qualities that are desired both on the farm and on the plate.

Another aspect of oyster breeding comes in the form of triploid oysters. These are also known as spawnless oysters, as they are sterile. Since they do not reproduce, triploid oysters expend their energy into fast growth (good for the farmer) and fat meats all year long (good for the consumer). Non-triploid or wild, typical oysters expend their energy into spawning or milking primarily during the summer months.

Triploid oysters are produced using a traditional breeding technique that is often found in the production of fruits. Some examples of triploid crops are bananas, ginger, seedless watermelons, strawberries, and most satsuma varieties.

SUSTAINABILITY

Farming oysters is one of the best examples of what sustainable farming can look like. In addition to being sustainable, oyster farming both on reefs and AOC provide significant environmental benefits. A growing body of research is documenting the large impact oyster farms have on water quality, nutrient removal, and habitat availability for other economically and ecologically important juvenile fish and crustaceans.

Authors: D. Seibert, B. Callam
06/2020