

2019 Delaware Inland Bays Shellfish Aquaculture Report

Planting, harvest, and survey of participants



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DNREC, State of Delaware
Division of Fish & Wildlife
Dover, DE



We Bring You Delaware's Great Outdoors through Science and Service

History of leasing:

Delaware’s Inland Bays Shellfish Aquaculture Program issued its first lease in December of 2017. Additional leases were issued in 2018 and 2019. The first harvest of oysters from the Inland Bays took place in 2018. Lessees are required to submit monthly planting and harvest reports (or null reports), but Delaware’s Department of Natural Resources and Environmental Control (DNREC) abides by the “rule of three” to protect the confidentiality of individual participants (if there are fewer than three lessees reporting, than the harvest/planting information is not distributed to protect the privacy of business information). Sufficient numbers of lessees reported harvest and planting for Inland Bays aquaculture leases to allow partial reporting on aquaculture activities for 2019.

Number of leased acres:

In 2019, 51 total acres were leased in Delaware’s Inland Bays for shellfish aquaculture. All of the leased acreage was within the Shellfish Aquaculture Development Areas (SADA). DNREC does not limit leasing to the SADAs, but the permitting process is expedited for applicants in those areas. Lessees may, by law, lease up to five acres total, in whole acre increments, in Rehoboth and Indian River Bays, and/or up to five acres in the Little Assawoman Bay. Shellfish aquaculture is limited to oyster culture in Rehoboth and Indian River Bays, and the Little Assawoman Bay is limited to clam culture. Rehoboth Bay had 44 acres leased, there were two acres leased in Indian River Bay, and there were five acres leased in Little Assawoman Bay.

Leased in the Inland Bays

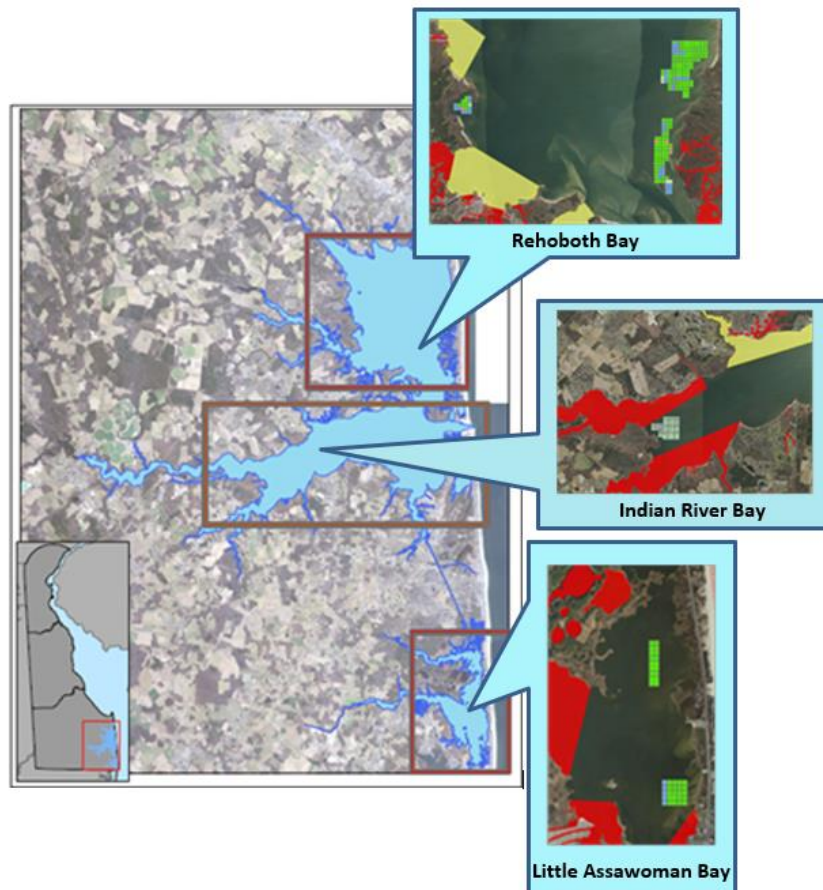


Figure 1. Location of SADA acreage within Delaware’s Inland Bays.

Number of lessees:

In 2019, there were 11 total lessees. Ten lessees were commercial leases, and one scientific lease was in place.

Hard clam aquaculture

Hard clam (*Mercenaria mercenaria*) culture is permitted on leases in the Little Assawoman Bay. In 2019, five acres were leased in Little Assawoman Bay to a single lessee. Planting and harvest data are confidential.

Oyster aquaculture

There were ten lessees participating in commercial Eastern oyster (*Crassostrea virginica*) aquaculture in Delaware's Inland Bays in 2019.

Planting

There were 1,453,951 oysters reported planted on commercial leases in 2019. All of these oysters were placed in gear, as is required in the Inland Bays. Lessees elected to use a variety of gear types including Hexcyl baskets, floating bags, floating cages, and bottom cages. As Delaware does not have a commercial oyster hatchery, all cultchless oyster seed was originally produced out of state. There is a commercial oyster nursery operating in-state.

Table 1. Inland Bays shellfish aquaculture oysters harvested, and average dockside price paid by month in 2019.

Month	Total # Oysters Harvested	Average Dockside Price/Oyster*	# Growers Harvesting
January 2019	<i>Confidential</i>	<i>Confidential</i>	1
February 2019	<i>Confidential</i>	<i>Confidential</i>	1
March 2019	<i>Confidential</i>	<i>Confidential</i>	1
April 2019	<i>Confidential</i>	<i>Confidential</i>	1
May 2019	<i>Confidential</i>	<i>Confidential</i>	1
June 2019	<i>Confidential</i>	<i>Confidential</i>	1
July 2019	<i>Confidential</i>	<i>Confidential</i>	2
August 2019	11,652	\$0.56	4
September 2019	18,510	\$0.55	4
October 2019	17,095	\$0.45	4
November 2019	27,669	\$0.52	4
December 2019	36,723	\$0.40	4
Total (August-December 2019)	111,649	\$0.48	

*please note: there was a wide range of prices reported, and limited sample size

Reported Dockside Price

There was a range of dock-side prices reported by lessees. The average price per oyster varied by month. It is important to note that there were four lessees reporting oyster harvest for August-December 2019, so the sample size is limited.

Survey of Participants

A survey was sent to commercial lessees in December 2019. Lessees reported man hours, acres used for growing shellfish, and sales wholesale vs. direct to consumer.

Hours worked on Lease

The hours that the lessee reported working on the lease themselves were quite variable, with some lessees also breaking down hours worked by season, with spring and summer requiring more time. The self-reported hours spent by the lessee on the lease ranged from 2 hrs/week to 80 hrs/week.

Volunteer and hired workers

The lessees reported using more self- and volunteer-working hours on the leases in 2019 than hired labor.

Acres of Lease Used for Shellfish

Growers were asked to indicate how many acres they used for shellfish culture during the year, irrespective of how many acres actually leased. Lessees reported using an average of 1.5 acres to culture oysters.

Wholesale vs direct sale

More than 75% of total oyster sales were made to a wholesaler/dealer/retailer rather than direct to consumer.

Summary

Overall, the Inland Bays Shellfish Aquaculture Program showed a modest increase in number of lessees, acres leased, and shellfish planted and harvested during 2019 from the previous year.