ALTERNATIVE OYSTER CULTURE IN LOUISIANA

Denise Kinsey | GSMFC | October 15, 2024

Alternative Oyster Culture (AOC) Permitting Overview

- Louisiana Department of Wildlife and Fisheries (LDWF) has issued 13 AOC permits since ~2014.
- Permits are eligible for annual renewal for up to 10 yrs.
- In 2024:
 - 10 active permits
 - 8 unique entities
 - o 169 acres permitted
 - 17 authorized users (AOC farmers) working within permitted AOC farms

Year	Permit Number	Parish	Waterbody	Acres		
2022	AOC0001	Lafourche	Bay Des llettes	6		
	AOC0003	Jefferson	Barataria Bay	15		
	AOC0005	Plaquemines	Bayou Huertes	40		
	AOC0006	Lafourche	Little Lake	8		
	AOC0007	Lafourche	Picciola Tract - A	4		
	AOC0008	Lafourche	Picciola Tract - B	44		
	AOC0009	Lafourche	Bayou Pierre Et Lee	1		
total	7			118		
	AOC0001	Lafourche	Bay Des Ilettes	6		
	AOC0003	Jefferson	Barataria Bay	15		
	AOC0004	St. Bernard	Little Bayou Pierre	3		
	AOC0005	Plaquemines	Bayou Huertes	40		
2023	AOC0006	Lafourche	Little Lake	8		
7	AOC0007	Lafourche	Picciola Tract - A	4		
	AOC0008	Lafourche	Picciola Tract - B	44		
	AOC0009	Lafourche	Bayou Pierre Et Lee	1		
	AOC0010	Terrebonne	Bush Canal	1		
total						
	AOC0004	St. Bernard	Little Bayou Pierre	3		
	AOC0005	Plaquemines	Bayou Huertes	40		
	AOC0006	Lafourche	Little Lake	8		
	AOC0007	Lafourche	Picciola Tract - A	4		
2024	AOC0008	Lafourche	Picciola Tract - B	44		
	AOC0009	Lafourche	Bayou Pierre Et Lee	1		
	AOC0010	Terrebonne	Bush Canal	1		
	AOC0011	Lafourche	Leeville	23		
	AOC0012	Lafourche	Leeville	34		
	AOC0013	Terrebonne	Madison Bay	11		
total	10			169		

AOC Parks

Grand Isle Port Commission

- GI AOC Park #1—Caminada Bay
 - ~25 acres / 8 plots / 2-acre plots
 - Currently, no plots are leased due to water being too deep. There is some interest from farmers wanting to
 use Shellevator™
- GI AOC Park #2—Bayou Rigaud
 - ~28 acres / 16 plots / 1-acre plots
 - Expanded in 2024 from its original size (14 acres/8 plots)
 - 8 plots are leased and there is a waiting list for plots in recently added area, but leasing has not yet begun in expanded area (waiting on CUP and USCG permitting approvals)



AOC Parks

Cameron Port Commission

- Cameron AOC Park—Calcasieu Lake
 - o 46 acres / 15 plots / 2 acre plots
 - o 4 farmers
 - o All 15 plots are leased.



Grand Isle AOC Parks and AOC Permits





Out-of-State Oyster Importation Overview

- Hatcheries that are located within Mississippi and Alabama and work exclusively with *C. virginica* from the GOM are permitted to have their oyster products imported into Louisiana for placement into Louisiana waters.
- Florida and Texas hatcheries may qualify as oyster source providers under the condition that the imported product will NOT be placed directly into Louisiana waters.
- Must have a Molluscan Shellfish Permit from LDWF (separate from the oyster importation)
- Imports must be disease tested using standard methods of histopathology (e.g., Ray's fluid thioglycollate method (RFTM)), and health certificate must state oysters are free of disease, parasites, and invasive species
 - MSX (Haplosporidium nelsoni)-No detection
 - o Bonamiosis (*Bonamia exitiosa*)-No detection
 - Dermo (*Perkinsus marinus*)- <10% prevalence.
- Health certificates valid for 60 days from date of testing and are specific to batch to be imported.
- LDWF does not certify testing facilities; applicant responsible for testing



Out-of-State Oyster Importation Overview

Import Source	2018	2019	2020	2021	2022	2023	2024
Alabama (5 hatcheries)	2	4	2	3	3	3	5
Mississippi (4 hatcheries)	0	0	1	0	1	2	3

Year	Permits Issued		
2018	4		
2019	6		
2020	7		
2021	5		
2022	6		
2023	9		
2024	14		

- Permits may include multiple sources
- 14 applications for 2024 to date
 - 5 Alabama hatcheries
 - o 3 Mississippi hatcheries



Alternative Oyster Culture Funding

2021-2023 AOC Grant Programs

LDWF awarded a three-year contract to Louisiana Sea Grant to implement goals to sustain, enhance, and expand the AOC fishery through oyster seed production grants.

- 1st Round Allocated Funds (February 2022)
 - \$285,000 (4) nursery farms, (6) grow-out farms
 - \$225,000 (1) Hatchery
 - \$100,000 (1) AOC Park
- 2nd Round Allocated Funds (November 2022)
 - \$390,000 (2) nursery farms, (8) grow-out farms
 - \$200,000 (2) AOC Parks

- 3rd Round Allocated Funds (March 2023)
 - \$180,000 (4) grow out-farms
- End of program administered by LA Sea Grant (December 2023)
 - \$1,380,000 Total allocation
 - \$165,000 Returned
 - \$225,000 Unspent



Alternative Oyster Culture Funding

2024 Extension and Outreach Efforts for the AOC Program

- To supply the Louisiana AOC industry, state agencies, and public with the education and training necessary to make informed decisions related to AOC.
 - Funds available --\$386,582.00
 - Unused funding from 2021-2023 grant program rolled over in Extension and Outreach funding
 - 2-year contract through December 2025



Louisiana AOC Current Issues

Economic Analysis of Alternative Oyster Culture (AOC) in Louisiana Dan Petrolia, Miss. State Univ. (August 2023)

- Initial investment is estimated to range from ~\$60,000 for a single line of floating bags to over \$200,000 for twenty-four lines.
- Total annual cost is estimated to range from approximately \$50,000 to approximately \$250,000
- The break-even price exceeds \$1 per oyster for production levels at or below 120,000 oysters planted.
- Small-scale operations are not expected to be profitable and estimates it is necessary to operate at or above levels of 720,000 oysters planted on three acres to realize positive average annual profit.
- Louisiana AOC growers have disputed values presented in report and have stated that they are profitable farming from their (1 acre) AOC Park plot(s)



Louisiana AOC Current Issues (Con't)

RFP for Large-Scale AOC Operations Grant

- Utilizing funding provided by the Louisiana Legislature through the Coastal Protection and Restoration Authority (CPRA), LDWF has announced funding availability for large-scale AOC projects in Louisiana.
- Program to provide assistance to projects able to produce two million oysters per year utilizing AOC techniques.
- Application deadline--August 31, 2024

Crop Insurance

- The U.S. Department of Agriculture (USDA) has introduced several programs that are available for insurance and disaster assistance.
- Insurance options for the AOC industry can be classified into six general groups: Crop Mortality, Liability, Property, Auto, Commercial Boat, and Workers' Compensation/Jones Act.



Denise Kinsey

LDWF AOC Permit Coordinator

LDWF Out-of-State Oyster Import Permit Coordinator

dkinsey@wlf.la.gov

225-765-0175

