ALABAMA SHELLFISH AND AQUACULTURE SITUATION AND OUTLOOK REPORT: PRODUCTION YEAR 2019

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This report is based on data generated by the Auburn University Shellfish Lab, Oyster South and the Mississippi-Alabama Sea Grant Consortium.
Introduction

Currently, Alabama’s shellfish aquaculture industry produces oysters (Crassostrea virginica) through off-bottom farming using an adjustable long-line system and/or floating cages. An anonymous survey was developed and administered to operators in Alabama to obtain the information that was used to publish this report. All values are compiled so individual responses are not revealed. In addition, total values are based solely on responses provided and thus are likely underestimated.

The survey was modeled after the shellfish aquaculture survey program conducted by the Virginia Institute of Marine Science and Virginia Sea Grant, as well as the Rutgers University New Jersey Agricultural Experiment Station and New Jersey Sea Grant.

Highlights for 2019:

- There were 21 commercial oyster aquaculture operations in Alabama per Alabama Department of Public Health.
- Farm gate value for Alabama oyster commercial operations was at least $1,452,000.
- Total number of single market oysters sold in 2019 was at least 2,425,000.
- Oyster market prices realized for respondents ranged from $0.50 to $0.70 with a weighted average price of $0.59, and the mode was $0.50.
- Operators reported 34 full-time employees and 30 part-time employees.
- There were at least 74 acres permitted for oyster aquaculture with at least 40 acres used in production.

Methodology

The 2019 Alabama Shellfish Aquaculture Survey was conducted through use of the web-based tool Qualtrics®, supplemented with data from the Alabama Department of Public Health. The survey was anonymous and did not track the IP addresses of the respondents. An introductory email with the link to the survey was sent to all shellfish operators who were certified by the Alabama Department of Public Health. The email and the question set are presented in Appendix 1. Two follow-up requests were sent to all Alabama farmers to encourage them to complete the survey if they had not completed it. For this survey, seven surveys were completed and usable.
Summary of Findings

There were 21 oyster aquaculture operations in 2019 as certified by the Alabama Department of Public Health versus 22 in 2018.

Hatchery and Nursery Operations

Three respondents reported combined sales of approximately 5.5 million seed compared to 18 million seed reported in 2018, though this appeared to be an artifact of reporting versus actual production which was observed qualitatively to be up from the prior year.

Oyster Sales and Prices

There was a 26% increase in year-over-year reported harvest for 2019 (2.4 million up from 1.9 million oysters in 2018) and a 37% increase in farm gate value ($1.5 million up from $1.1 million).

Employment

The respondents reported a total of 36 full-time employees and an additional 30 part-time employees. The 30 part-time employees averaged 19 hours per week, which equates to 14.25 full-time employees per year. Employment numbers were relatively unchanged from 2018.

Challenges

In 2019, the Alabama oyster aquaculture industry dealt with natural eventsthat had negative impacts on profitability and sustainability of the industry.

- There were prolonged closures due to rainfall in some of the growing areas. On average, Alabama waters were not open to harvest a total of 87 (see chart below). Area II, which includes several large farms, was closed for 43 days.

![Harvest Days Open vs Closed By Year](chart.png)
Opportunities and Outlook

In 2020, Alabama oyster aquaculture likely will grow in number of operations and permitted acres for farming. Additionally, there is growing interest in commercial aquaculture under existing piers, which has an easier, less costly permitting process. At the time of this report’s publication (July 2020), two new oyster farms have begun operation this year.

The Grand Bay Oyster Park (in Grand Bay on the western side of Point of Pines) has 50 acres for off-bottom oyster farming and is managed by Alma Bryant High School (see map below).

The Bayou Sullivan Oyster Park has 22 acres available for commercial off-bottom aquaculture with some additional area being used for research by the Auburn University Shellfish Laboratory (see map below).

There appears to be strong regional demand for seed and eyed larvae. In addition to Alabama, growth continues in Florida and Louisiana, and new farms began operation in Mississippi in early 2019. In addition, Texas recently passed legislation to allow off-bottom oyster farming.
In this year's survey, respondents were asked to identify both top opportunities for the commercial oyster industry and needs for their farms. For each of these, there was a wide range of responses. Commonly identified opportunities included:

- Shipping directly to consumers.
- Educating consumers about the unique qualities of farm-raised half-shell oysters.
- Improving and refining the permitting process.

Top needs included:

- More water quality testing to prevent rain event driven harvest closures.
- Crop insurance programs.
- Shortening the 4-month requirement for relaying from prohibited areas.
- Establishing public areas for oyster harvests during closures.

Respondents were also asked about what research and outreach the Auburn University Shellfish Laboratory should do for the industry. Again, there was a wide range of responses to the questions, and here are some of the common research priorities:

- Post desiccation time needed to lower vibrio levels for floating gear.
- Increase the industry's understanding of larval setting.
- Develop year-round spawning system.

The complete unedited list of responses is in Appendix A.

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