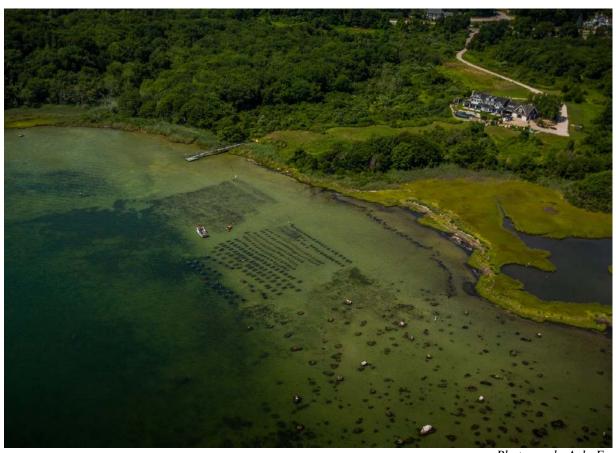


Aquaculture in Rhode Island 2017



Photograph: Ayla Fox

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Rhode Island Aquaculture Industry - 2017 *At a Glance*

- The number of farms in Rhode Island increased from 70 to 73
- The total area now under cultivation increased 21.4 acres for a total of 295.93 acres
- Oysters remained the number one aquaculture product with 8,434,541 sold for consumption, an increase of 616,347 oysters from last year
- The farm gate value of aquaculture products for consumption was \$5,771,346
- Oyster seed sales from RI aquaculturists was valued at \$260,175
- Combined value of aquaculture products for consumption and seed sales was \$6.03 million
- The number of aquaculture farm workers increased 9.6% from 177 to 194

(From cover page: East Beach Farm, LLC site in Quonochontaug Pond showing three methods of oyster aquaculture: floating cages, racks, and direct bottom plant.)

Introduction

The year 2017 saw a rise in aquaculture oyster production and value from the previous year. The growth in total acreage was 21.4 acres, a modest 7.8 percent increase for the year. Farmers have worked on raising new crops: sugar kelp, soft shell clams, surf clams, and bay scallops. RI aquaculturists are inventive, efficient, and working to diversify their crops.

How the figures were derived

Harvest figures came from the yearly CRMC aquaculture questionnaire distributed to all leaseholders. All reports are taken as an accurate value. Monetary figures for this report were calculated by averaging an estimated yearly average wholesale price from multiple sources. This figure was then multiplied by the numbers reported by growers in the yearly CRMC report to arrive at the figures used in this report. Figures from the aquaculture-associated industries came from the principals involved in these privately held companies. Nine operations sold oyster seed in 2017 including the newest shellfish hatchery first permitted this year. The figures cited are for gross sales of aquaculture-related products including seed sales. A number of shellfish growers are also shellfish dealers. The sales that are direct to end users are at a higher value than wholesale price used in the averaging. Using a wholesale price results in a lower value determined for the aquaculture products but also results in a consistency of format over the years of reporting.

Farm Production

The 2017 farm gate value of Rhode Island grown shellfish was \$5,771,436 which is an increase of 4.7 percent from the 2016 farm gate value. Seed sales for 2017 increased by a substantial 42.2 percent to \$260,175. February and March 2017 had a shellfish harvest closure because of *Pseudo nitzschia* which is not harmful to shellfish but is harmful to people. The closure did not affect the aquaculture crop but did limit ability to harvest.

The shellfish figures presented in this report are comprehensive representations. The dominant species in the RI aquaculture industry continues to be the Eastern oyster, with 8,434,541 pieces sold this year, a 7.5 percent increase from 2016. Hard clam production increased to 71,000 pieces sold. Blue mussel production declined with a harvest of 11,876 pounds. The number of farms active in Rhode Island aquaculture at the end of 2017 was 73, with cultivation of 295.93 acres.

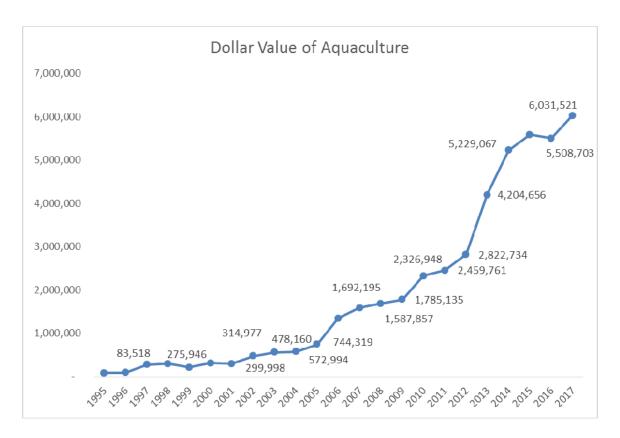


Figure 1. Total dollar value of aquaculture

Aquaculture Employment

Year	Full Time Year	Full Time Season	Part Time Year	Part Time Season	Total
2006	17	8	17	15	57
2007	14	2	28	17	61
2008	12	1	25	24	62
2009	14	3	25	20	62
2010	17	4	30	28	79
2011	23	3	26	32	84
2012	32	9	32	32	105
2013	35	13	37	42	127
2014	47	17	35	43	142
2015	47	26	39	59	171
2016	49	30	49	49	177
2017	62	27	41	64	194

Figure 2. Farm-related employment numbers show a 9.6 percent increase for 2017

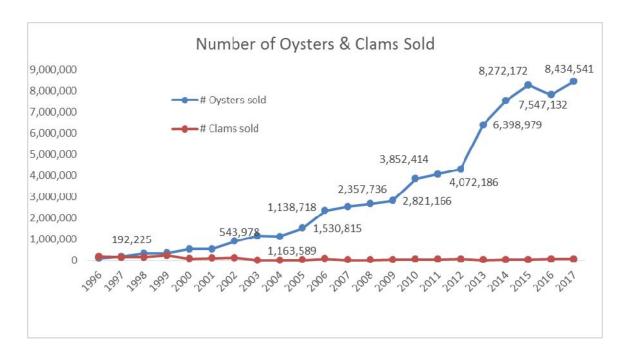


Figure 3. American oyster remains Rhode Island's dominant aquaculture product

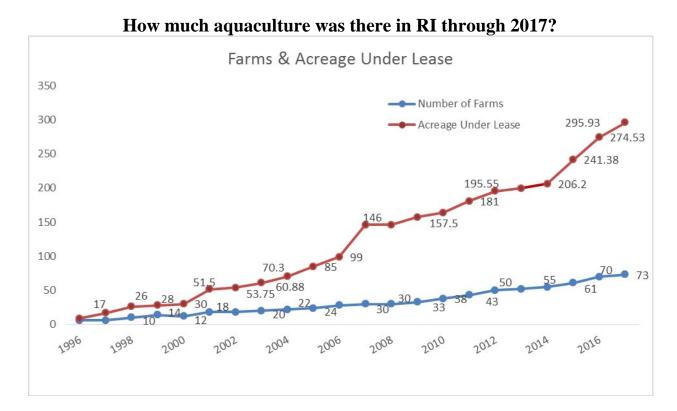


Figure 4. Acreage for the 73 farms is 295.93



Aquaculture industry members, industry experts, and members of the public attend a Coastal Pond Aquaculture Learning Session. (Photo: RI Sea Grant)

Universities, Environmental Organizations, and State Agencies

Two educational institutions conduct aquaculture research activities, extension programs, and academic programs in Rhode Island. Both Roger Williams University (RWU) and the University of Rhode Island (URI) are centers of excellence in the field of aquaculture. Both universities have pathology testing capabilities and are assets to the shellfish aquaculture and wild harvest industries. They each have projects concerning the nascent kelp industry in RI. URI has a research project growing yellowfin tuna. Extension projects at RWU include oyster restoration, the practical shellfish farming course, and a public enhancement project for quahogs and oysters partnering with the RI Shellfishermen's Association. Rhode Island Sea Grant conducted three well attended aquaculture education workshops and two successful walking tours of aquaculture sites. CRMC conducted six on-the-water tours of aquaculture in Ninigret Pond. The RI Department of Environmental Management (DEM) partners with The Nature Conservancy, the USDA Natural Resources Conservation Service, and the aquaculture industry on oyster reefs restoration projects. The RIDEM and the RI Department of Health managed two harmful algal bloom shellfish closings in October smoothly and without incident. The monitoring program in place worked as planned and protected human health. RIDEM Division of Fish and Wildlife, and Office of Water Resources contribute to the review of all aquaculture applications.



Point Judith Pond kelp harvest (Photo: Cindy West)

Outlook for 2018

Aquaculture will continue as a growth opportunity for providing jobs and seafood for Rhode Island. It is clear that each new aquaculture farm makes the approval of the next one more difficult. Increased education and awareness for the public will be important to maintain the growth of aquaculture.

Seafood is an important component of the economy and the foundation for many communities in Rhode Island. According to recent a United Nations Food and Agriculture Report, aquaculture will fill the increasing world demand for seafood. The Rhode Island Seafood Marketing Collaborative has developed and implemented a plan that facilitates the marketing of local seafood products and has increased the demand for local seafood. RI aquaculture is a major part of the local seafood movement and is fulfilling the increasing demand for all seafood. The steady growth of aquaculture and the diversification of species and methods illustrate the industry's response to consumer demands. Aquaculture in RI uses public trust submerged lands to supply seafood to the consumer and businesses to the state. Please enjoy all fresh Rhode Island seafood.