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COASTAL RESOURCES MANAGEMENT COUNCIL

Aquaculture in Rhode Island 2018



Photograph: Ayla Fox

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CRMC

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Figure 1. Winnapaug Pond oysters

Photograph: Jeff Gardner

2018-2019 CRMC Council Members:

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Raymond C. Coia, Vice Chair
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Michelle Collie
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Figure 2. Oyster Tumbler

Photograph: Cindy West

Rhode Island Aquaculture Industry - 2018

At a Glance

- The number of farms in Rhode Island increased from 73 to 76
- The total area now under cultivation increased 23.2 acres for a total of 319.3 acres
- Oysters remained the number one aquaculture product with 8,515,950 sold for consumption
- The farm gate value of aquaculture products for consumption was \$5,850,749
- Oyster seed sales from RI aquaculturists was valued at \$243,250
- Combined value of aquaculture products for consumption and seed sales was \$6.09 million
- The number of aquaculture farm workers increased to 200



Figure 3. New shell growth.

Photograph: Ayla Fox

Introduction

The year 2018 saw a modest rise in aquaculture oyster production and value from the previous year. The growth in total acreage was 23.2 acres, a modest 7.9 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 2018 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 2018 farm gate value of Rhode Island grown products was \$6,094,199 which is an increase of 4.7 percent from the 2017 farm gate value. Seed sales for 2018 dropped to \$243,250 while kelp sales climbed by 230% to \$17,008.

The number of farms active in Rhode Island aquaculture at the end of 2018 was 76, with cultivation of 319.3 acres. Eastern oysters, *Crassostrea virginica*, continue as the most valuable cultivated species in Rhode Island.

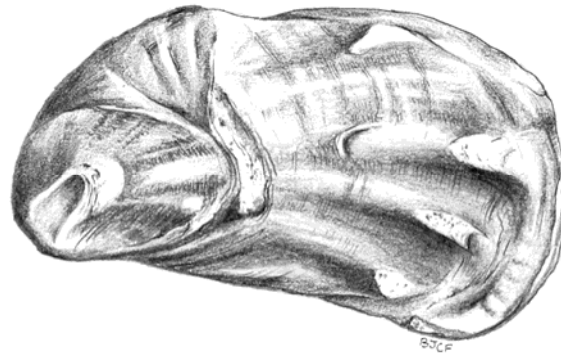


Figure 4.

Sketch: Brandon Fuller

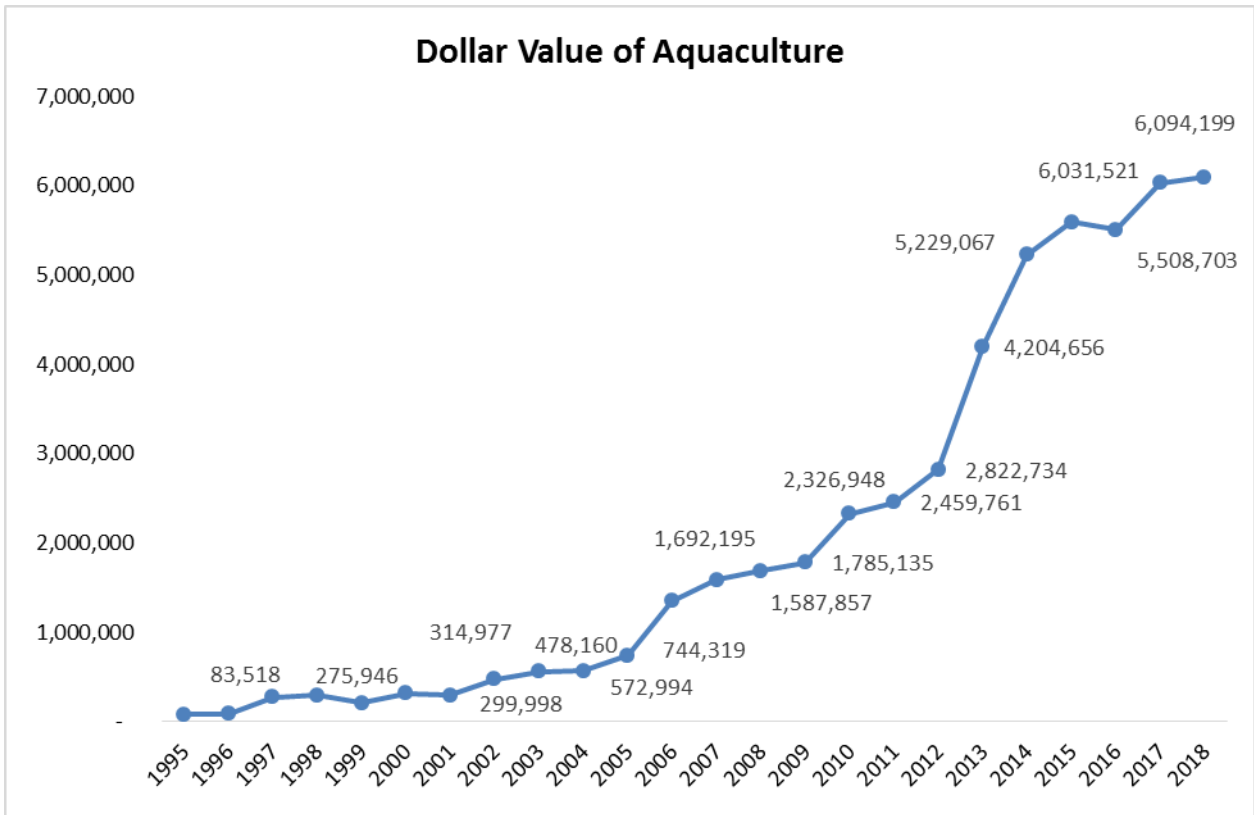


Figure 5. Total dollar value of aquaculture

Year	Aquaculture Employment				Total
	Full Time Year	Full Time Season	Part Time Year	Part Time Season	
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
2018	62	31	38	69	200

Figure 6.

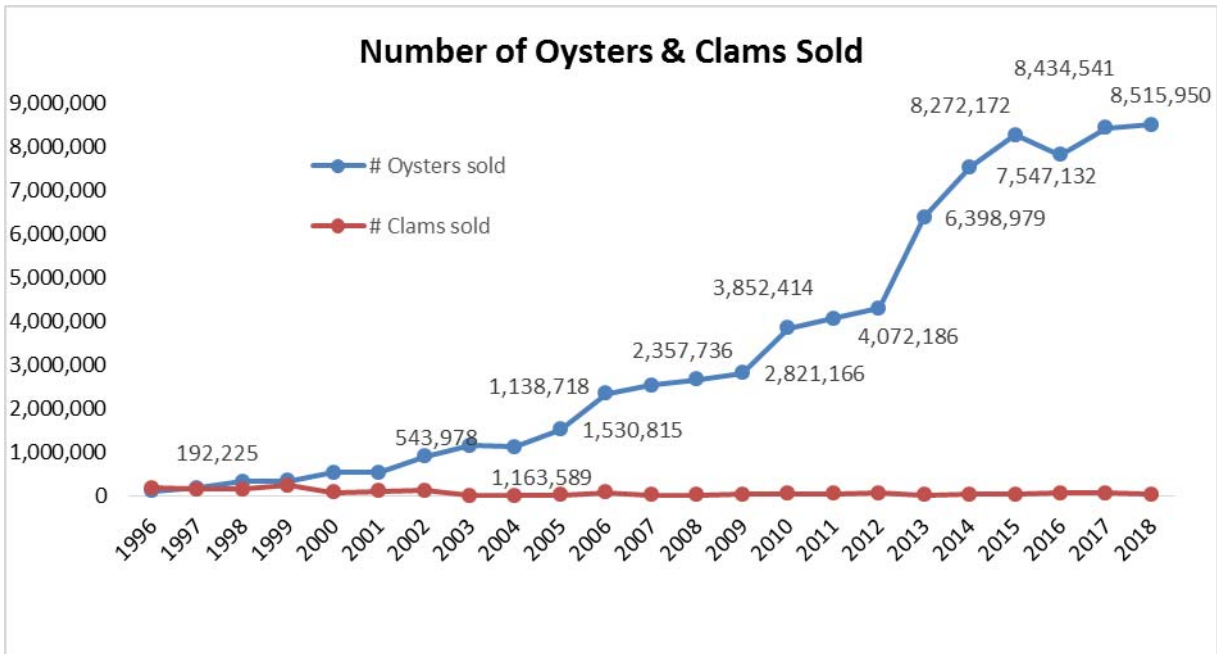


Figure 7. The American oyster remains Rhode Island’s dominant aquaculture product.

How much aquaculture was there in 2018?

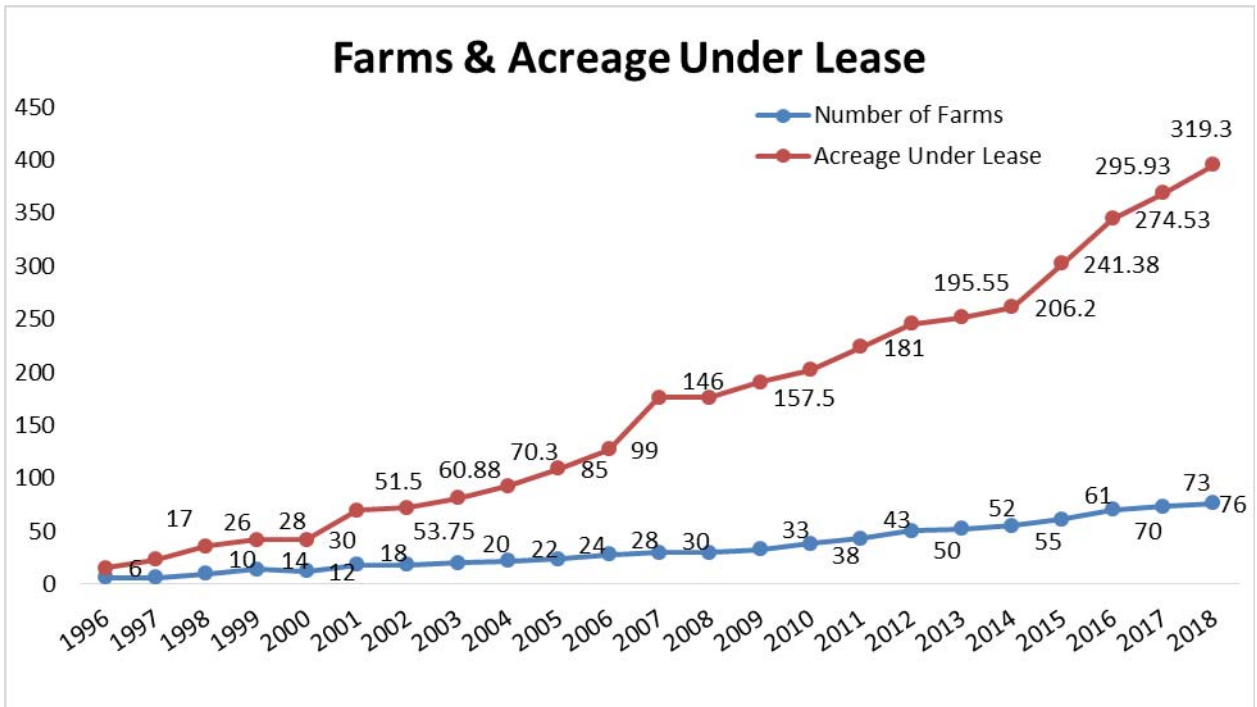


Figure 8. Acreage for the 76 farms is 319.3



Photograph: Rob Hudson

Figure 9. Oysters ready to spawn at Roger Williams University hatchery

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 continues to provide aquaculture education opportunities for interested constituents. 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 monitor harmful algal concentrations and the program has successfully protected human health.



Figure 10. Kelp harvest Great Salt Pond *Photograph: Catherine Puckett*

Outlook for 2019

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 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 for the state. Please enjoy all fresh Rhode Island seafood.