SHELLFISH ADVISORY PANEL Virtual public meeting Zoom webinar

May 27, 2020



AGENDA



- 1. Aquaculture application 2019-12-079 (Seakist Aquaculture).
- 2. Aquaculture application 2019-12-055 (Walrus and Carpenter Oysters LLC).
- 3. Division proposal to re-establish areas closed to shellfish harvest in Ninigret Pond Shellfish Mgmt. Area (Foster Cove).
- 4. Division proposal to extend oyster harvest moratorium in Bissel Cove/Fox Is. Shellfish Mgmt. Area.
- 5. Proposed change to whelk minimum size currently out to public notice.
- 6. Proposed changes to area descriptions of Shellfish Mgmt. Areas currently out to public notice.
- 7. Proposed change of word "bycatch" to "incidental catch" for Sakonnet River bay quahaug possession limit currently out to public notice.
- 8. Any Other Matters.

Virtual Meeting Participation



- 1. All participants will be muted throughout the meeting.
- 2. To make a comment or ask a question you must use the **Raise Hand** feature in the zoom webinar.
- 3. The meeting facilitator will un-mute one participant at a time to make their comment or ask their question, the participant will then be re-muted.

Please minimize background noise while unmuted! – Thank you

Council/SAP Aquaculture Application Review (R.I. Gen Laws § 20-10-5(d))



§ 20-10-5. Procedures for approval.

(a) Upon submission of a completed application to the CRMC, the CRMC shall notify the director, the MFC and any other parties that the CRMC may by regulation designate.

(b) No application shall be approved by the CRMC or a permit granted prior to the consideration of recommendations by both the director and the MFC.

(c) The director shall review the application to determine whether the aquaculture activities proposed in the application are:

- (1) Not likely to cause an adverse effect on the marine life adjacent to the area to be subject to the permit and the waters of the state;
- (2) Not likely to have an adverse effect on the continued vitality of indigenous fisheries of the state.

(d) The MFC shall review the application to determine whether the aquaculture activities proposed in the application are consistent with competing uses engaged in the exploitation of the marine fisheries.

(e) The approval by the CRMC shall be subject to any public hearings, consistent with chapter 35 of title 42, that it may require.

1. <u>2019-12-079</u> <u>Seakist Aquaculture</u> <u>LLC (Papa), West</u> <u>Passage – Dutch</u> <u>Harbor</u>

- 4.8 acre lease expansion of current
 3.8 acre lease (total of 8.58 acres)
- Cultivating oysters using floating baskets

• CRMC site assessment 0.42 quahogs/m²



- 2. <u>2019-12-055</u> <u>Walrus & Carpenter</u> <u>Oysters LLC</u> (<u>Opton-Himmel</u>), <u>West Passage –</u> <u>Dutch Harbor</u>
- 7.8 acre proposed lease
- 2 acre current lease relinquished (if application is approved)
- Cultivating oysters using floating racks and sugar kelp on submerged long lines
- CRMC site assessment
 0.4 quahogs/m²





Oyster harvest moratoriums in Oyster Restoration Reserves in the Ninigret Pond and the Bissel Cove/Fox Island Shellfish Management Areas

Shellfish Advisory Panel May 27, 2020

Prepared by: Eric Schneider and Pat Barrett, RI DMF

Current Rules



Bissel Cove/Fox Island Shellfish Mgmt. Area:

<u>Oyster harvest moratorium</u>: The harvest and possession of oysters in the Bissel Cove/Fox Island Shellfish Management Area is prohibited until November 15, 2020.

Ninigret Pond Shellfish Mgmt. Area:

<u>Foster Cove Northern Closed Area:</u> This area shall remain closed until January 1, 2020, unless extended by the Director after RIMFC review.

<u>Foster Cove Eastern Closed Area:</u> This area shall remain closed until January 1, 2020, unless extended by the Director after RIMFC review.

Presentation Overview



- 1. Update of Oyster and Restoration status in:
 - Foster Cove Oyster Reserves
 - Bissel Cove/Fox Island Shellfish Management Area
- 2. Summary of DMF Recommendations



Foster Cove Oyster Reserves

Background on Oyster Reserves:

- <u>Status</u>: Closure expired Dec. 2019
- <u>Restoration work</u>:
 - Substrate Improvement (no seeding)
 - <u>Foster Cove Eastern Closed Area:</u> 2010, 2011.
 - <u>Foster Cove Northern Area:</u> 2015, 2016.
 - Additional work being scoped for 2020.
- <u>Questions</u>:
 - Oyster status in open and closed areas?
 - Are closed areas effective?
 - Should the oyster prohibition in Oyster Reserves be reestablished and extended?







Foster Cove Oyster Reserves

Oyster status:

- Data collected in 2015 showed:
 - Evidence of size structure truncation due to harvest
 - Low proportion of oysters reaching legal size (3in, 76 mm)

Figure shows:

- Number of oysters (y-axis) at height (x-axis) collected from areas where harvest is allowed (yellow) and harvest is prohibited (grey) in 2015.
- Areas, except for Foster Cove are restoration reefs built from 2008-2011.
- Foster Cove is wild stock, open to harvest.



Foster Cove Oyster Reserves

Oyster status:

- Data collected in 2020 show height distribution:
 - Restored within Oyster Reserves (harvest prohibited)
 - Largely truncated in areas open to harvest



Figure shows:

- Number of oysters (y-axis) at height (x-axis) collected from areas where harvest is allowed (yellow) and harvest is prohibited (grey) in 2020.
- Dotted lines represent mean oyster height for each harvest type, standard error is shown as the shaded rectangle.

Foster Cove Oyster Reserves

Oyster status:

- A comparison of 2015 to 2020 oyster abundance showed:
 - Mean densities of oysters have reduced throughout Foster Cove
 - 2016 mean >60 m²
 - 2020 mean <5 m²

Top Figure shows:

• 2016 mean oyster densities (top of bar) in areas closed to harvest (red) and in Foster Cove, which was open to harvest (green).

Bottom Figure shows:

- 2020 mean oyster densities (dot) in Foster Cove open to harvest (green) and in Oyster Reserves (red/orange) that are closed to harvest.
- Median is thick horizontal lines and inter quartile range is shown by box.



Foster Cove Oyster Reserves

Oyster status:

- 2020 survey showed:
 - Proportion of legal sized oysters is >2 times higher in Oyster Reserves compared to areas open to harvest.

Figure shows:

- 2020 mean (dot) proportion of oyster greater than the legal minimum size in areas open to harvest (green) and in Oyster Reserves (red), which are closed to harvest, in Foster Cove.
- Median is thick horizontal lines and inter quartile range is shown by box.



Foster Cove Oyster Reserves - Summary

Status: Although further assessment is needed:

- Throughout Foster Cove, oyster densities have reduced from >60 m² (2016) to <5 m² (2020), on average
- Areas open to harvest show truncated size structure and a low proportion of oysters reach legal size.

Are Oyster Reserves Functioning?

• Yes - Oyster Reserves contain a broad size distribution and the proportion of legal sized oysters is > 2 times greater than areas open to harvest.

Recommendation:

- Reestablish closure, with no sunset date.
- Further assess wild population status and continue research and restoration practices in Oyster Reserves.
- Happy to take questions?





Bissel Cove & Fox Island Shellfish Management Areas

Background:

- <u>Status</u>: Oyster Closure Expires Nov 15, 2020.
- <u>Restoration work</u>:
 - Cultch and Seed on Shell deployed
 - 2008 2011
 - 2015 present
 - Continuing through at least 2025
 - Monitoring Conducted
 - In 2015-2016 (see Helt and Schneider 2016).
 - Work conducted after 2015 monitored annually.

<u>Questions</u>:

- How does oyster restoration results in Bissel compare to other areas?
- Should the oyster prohibition be extended?





Bissel Cove & Fox Island Shellfish Management Areas

Oyster status:

- Data collected in 2015 showed:
 - 2.7 oyster m² on former restoration reefs, and
 - No wild oysters off reefs.

Top Figure shows:

- 2016 mean oyster densities (top of bar) in areas closed to harvest (red) and in Foster Cove, which was open to harvest (green).
- Bissel Cove marked with red arrow.



Bissel Cove & Fox Island Shellfish Management Areas

Oyster status:

- Data from 2016 2019 showed:
 - Adult oyster density in management area has increased to > 250 m² in 2019
 - Performing well compared to other areas

Figure shows:

- mean oyster densities (dot) and standard error (bars) averaged across restoration reefs in areas with oyster restoration from 2015-2019.
- Bissel is shown with red arrow.





Bissel Cove & Fox Island Shellfish Management Areas

Oyster status:

- Data from 2016 2019 showed:
 - Restoration reefs may be sustainable providing brood stock is allowed to spawn.
 - Mean recruitment is higher than most other areas.

Figure shows:

- mean oyster recruitment (dot) and standard error (bars) averaged across restoration reefs in areas with oyster restoration from 2015-2019.
- Bissel is shown with red arrow.

Mean Oyster Recruitment on Restoration Reefs by Areas (2016-2019 data)



Bissel Cove & Fox Island Shellfish Management Areas - Summary



Status: Although further assessment is needed,

- Adult oyster density and biomass in the management area has increased.
- Recruitment on restoration reefs is greater than other areas, providing brood stock is allowed to spawn.

Are Oyster Reserves Functioning?

- Yes oyster density on restoration reefs has increased from $< 5 \ m^2$ to $> 250 \ m^2$
- Mean recruitment is high relative to other shellfish management areas

Recommendation:

- Maintain closure, with no sunset date.
- Continue and expand restoration practices. Happy to take questions?



RI DEM DMF Recommendations

Foster Cove Northern Oyster Reserve:

<u>Status</u>: Expired Dec. 2019 <u>DMF Recommendation</u>: Reestablish closure, with no sunset date.

Foster Cove Eastern Oyster Reserve: <u>Status</u>: Expired Dec 2019 <u>DMF Recommendation</u>: Reestablish closure, with no sunset date.

Bissel/Fox Island Shellfish Management Areas: <u>Status</u>: Expires Nov 15, 2020 <u>DMF Recommendation</u>: Maintain current closure with no sunset date.







5. Proposed change to whelk minimum size currently out to public notice



Option 1: Remove length as a minimum size measurement metric and add language and diagram to clarify how to measure width:

G. Whelk: Three inches (3") shell width or five and three eighths inches (5 3/8") shell length. Shell width shall be the distance between opposing shell margins with the shell resting flat on a horizontal surface with the operculum opening facing down and the whelk retracted inside the shell. The shell shall be oriented with one (1) shell edge abutted against a vertical surface that is perpendicular to the horizontal surface, and the columella axis parallel to the vertical surface. The measurement shall be a line extending perpendicular from the vertical surface to the farthest point on the opposing shell edge.

5. Proposed change to whelk minimum size currently out to public notice



Option 2: Remove both length and width as minimum size measurement metrics and replace with shell height; add language and diagram to clarify how to measure height:

G. Whelk: Three inches (3") shell width or five and three eighths inches (5 3/8") shell length. Two and nine-thirty-seconds inches (2 9/32") shell height. Shell height shall be the distance along a straight perpendicular line from the opercular side of the shell to the farthest point of the top of the shell. This distance is measured with the whelk retracted, and shell placed with the operculum stably positioned <u>against a flat surface. To properly measure shell height using a gauge:</u> Minimum legal shell height shall be the two and nine-thirty-seconds inches (2 9/32") distance between opposing parallel surfaces, measured with the whelk retracted and shell placed with the operculum stably positioned against one (1) of the parallel surfaces. The whelk is legal-sized if it does not fit between the opposing parallel surfaces.

6. Proposed changes to area descriptions of Shellfish Mgmt. Areas currently out to public notice



- Proposed addition of coordinates (latitude and longitude decimal degrees) to area boundary descriptions;
- No actual changes to boundaries proposed, minor changes in instances when landmarks used in the descriptions have changed (e.g., landmark is no longer present).
- See proposed rule for proposed language

7. Proposed change of word "bycatch" to "incidental catch" for Sakonnet River bay quahaug possession limit currently out to public notice



Proposed rule:

- The possession limit for surf clams is two hundred (200) bushels/vessel/day.
- 2. A bycatch <u>An incidental catch limit</u> of one (1) bushel of bay quahaugs for each ten (10) bushels of surf clams, not to exceed twelve (12) bushels of bay quahaugs, is allowed per vessel.



8. Any Other Matters?