

MARINE RESOURCES COMMITTEE
Town of Bar Harbor

Agenda
Regular Meeting
Wednesday, Feb 16, 2022

ITEM 1

CALL TO ORDER – 4:00 p.m. Remote -

Join Zoom Meeting

<https://us02web.zoom.us/j/85286005753?pwd=MS95aUR4QTAxUjNYWWVOeUI0bGJEQT09>

Meeting ID: 852 8600 5753
Passcode: 038821

Dial by your location +1 929 205 6099 US (New York)

ITEM 2

APPROVAL OF MINUTES - January 2022 minutes

ITEM 3

OLD BUSINESS:

A. Updates –

- i. Maine Shellfish Restoration and Resilience Grant
- ii. Aquaculture in Frenchman Bay

ITEM 4

NEW BUSINESS

- A. Review of Annual Report
- B. Outlining work for 2022. Possible projects include Year 4 of the Recruitment and Predation Study, Work in Western Bay, Printed and online information.

ITEM 5

PUBLIC COMMENT PERIOD & FUTURE AGENDA ITEMS

ITEM 6

ADJOURNMENT

IN ORDER TO INSURE YOUR COMPLETE PARTICIPATION IN THIS MEETING, WE WOULD APPRECIATE YOU INFORMING US OF ANY SPECIAL REQUIREMENTS YOU MIGHT HAVE DUE TO A DISABILITY. PLEASE CALL 288-4098.

MARINE RESOURCES COMMITTEE

Town of Bar Harbor

Draft minutes

Regular Meeting

Wednesday, January 19, 2022

The meeting was called to order at 4:02 pm.

Zoom Meeting – link provided

Attendees: Chris Petersen-Chair, Joanna Fogg, John Avila, Matt Gerald, Natalie Springuel, Fiona de Koning

Heidi Leighton, Maine State DMR,

Chris Wharff, Harbor Master.

Guests: Rusty Taylor, Victor Doyle, Guilia Cardoso, Brian Silverman, Richard??

Approval of minutes from November 2021 meeting voted approved 6:0

OLD BUSINESS

1. Update on the American Aquafarms proposal. The DMR application from American Aquafarms appears to still be incomplete, with no approved source of fish. The letter from the committee was sent to the town council and is being held with the letters from the conservation and harbor committees until the proposal moves further along the process.

NEW BUSINESS

1. Review of work completed 2021. Chris reviewed the 2021 clam recruitment study results. Recruitment in the upper bay was slightly higher than in 2020 but lower than the other years. There was not great seed recruitment at any of the five study sites. There was a huge mortality in the upper bay and neither quahogs nor soft shell clams set substantial seed in the two Blue Hill Bay sites. The seed that we had overwintered on two aquaculture sites in Frenchman Bay and placed under nets had no discernable impact on fall clam densities – it was as if we had not put down the nets or done the additions. This lack of any discernable impact led us to not repeat that experiment this year as it was a lot of work. We don't have an answer to why this happened. The two most likely causes are that predators were able to get under the nets (or were there when we put the nets down) or that the nets biofouled over the summer, suffocating the clams underneath. We left the nets unattended for four months.

These results were included in the grant summary that we are sending to the Broadreach fund. That report was reviewed by the committee and is attached (*msrrf bar harbor grant 1.22.pdf*).

This year we also realized that Western Bay has a small harvestable crop of Eastern oysters, this population increase is new. This adds to the harvestable number of quahogs in the same area – and we have voted previously to add both species to the ordinance but have yet to set any regulations for harvest. The

Developing a multi-town strategy for clam management for the quahog fishery in Bar Harbor

A proposal to the Maine Restoration and Resilience Project

Project Coordinator : Chris Petersen, Chair, Bar Harbor Marine Resource Committee
cpetersen@coa.edu 207-266-8248

Fiscal agent for the grant: Town of Bar Harbor.

Town clerk: Liz Graves clerk@barharbormaine.gov

Address: Town of Bar Harbor, Municipal Building, 93 Cottage Street, Bar Harbor, ME 04609

Amount requested: \$10,322.00

Additional key personnel and project partners:

Bar Harbor Marine Resources Committee members:

Bar Harbor Marine Resources Committee members (all residents of Bar Harbor)

Scott Swann, Member; College of the Atlantic

Fiona de Koning – Member; Acadia Aqua Farms

Joanna Fogg – Member; Bar Harbor Oyster

Matt Gerald – Member; Sweet Pea Farm

Natalie Springuel – Member; Maine Sea Grant

John Avila – Member; Red Ladder Painting Co.

Jim Coloquin – Chair Southwest Harbor Shellfish Committee

Rusty Taylor – Chair Mount Desert Shellfish Committee

Joe Porada – Chair Frenchman Bay Regional Shellfish Committee

Heidi Leighton – Maine Department of Marine Resources

David Miller and Hannah Horecka – Lamoine DMR (for MST work)

Problem statement:

Despite substantial conservation efforts, the harvestable levels of *Mya arenaria* in Bar Harbor are extremely low on most of our easily accessible mudflats. We suspect that this is also the case in nearby towns. Bar Harbor is on the far northern (eastern) range of harvestable quahogs (*Mercenaria mercenaria*) populations, and we have recently seen an increase in American Oyster (*Crassostrea virginica*) populations, and the town has decided to add both species to our ordinance so that we manage this fishery and can potentially regulate harvest. We are concerned that harvesters may be switching to these other species, and that this increased harvest intensity could lead to the resource being quickly depleted.

For quahogs, we believe that there is a long history of harvesting this species along our shoreline, both from residents and non-residents, mostly for recreational harvest but also some for commercial harvest. Although we would be within our rights to require town licenses for this resource, we are concerned that we would be either complicating or excluding long-time non-resident harvesters at these sites, without any knowledge of either the intensity or consequences of the current level of harvesting. So, while we are adding the species to our ordinance, we are not currently setting any regulations on harvest. We think it is imperative to first understand both the harvester and resource landscape, and we are asking for funds to help us with this work, along with some auxiliary projects all based around this new resource for our committee. Just in the communication for this grant we learned that commercial harvest of

wild oysters in our town has begun, which will lead us to pause adding regulations on this species until we can understand how we might be able to blend conservation with ongoing harvest of this species.

Solutions:

We have four separate tasks that we believe will all work towards our goal of providing stronger and equitable management of our bivalve resource in Blue Hill Bay. The main part of the project is to interview current harvesters (both commercial and recreational) to determine the current resource harvesting levels, and to gain information on past harvesting and population levels of harvestable species in this area. A second part will be to conduct shellfish surveys with the Bar Harbor Marine Resources committee to determine current population levels of shellfish species. Third, we are concerned that if we require licenses for species like quahogs, that recreational harvesters will fail to obtain them due to the problems of entering Bar Harbor in the summer, so we are exploring establishing online alternatives for obtaining licenses. Finally, there are seasonal summer closures along this shore, and we are interested in identifying the potential cause of this by doing DNA tests of water samples using the DMR and UNH labs. All of the proposed survey and census work would occur between April 15, 2022 and November 15, 2022, although microbial source tracking may continue into some part of 2023.

The second part of our proposal is to produce collaborative work with the other town clam committees in our area. We are proposing to add surveys of the quahog and oyster resource in the area managed by the Frenchman Bay Regional Shellfish Committee in Western Bay, including Goose Cove and the bar at Alley Island. In addition, Mount Desert harvesters suggested that we add the seasonal closure at Pretty Marsh to our Microbial source tracking work. For only a moderate additional cost, this allows us to bring the capacity from this grant not just to our town, but to create a fuller ecological picture of the area and assist in the management with other towns. It also increases our communication with adjacent co-management groups, and some believe will be a step towards recreating an island-wide co-management process.

1. Surveys of local clammers

We propose to hire a summer intern that would conduct surveys of active harvesters on the mudflat and from lists supplied by local harvesters and shellfish committees. For this work, we are collaborating with the local shellfish committees of Mount Desert, Southwest Harbor, and the Frenchman Bay Regional Shellfish Committee (FBRSC). Interviews will focus on their frequency of harvest, the amount of harvest and the time it takes them to harvest, their knowledge of laws surrounding harvest, and their past history of harvesting shellfish resources. We would like to hire a young local individual, possibly a college student, to do the work as part of a college internship.

A secondary goal of the mudflat surveys is to do some education around harvesting regulations. The PI (Petersen) has talked to several harvesters at the site, and they had consistently not had a good understanding of state law surrounding harvest. They typically believed all species were legally harvestable at 2" in length despite the fact that non-*Mya* species at this location have other requirements (*Mercenaria* – one-inch hinge width, *Ensis* – 4" length, American Oyster – *Crassostrea virginica* – 2.5" length, *Spisula*- no size limit). They also

were not aware of the bag limits for these species, and that many of these species combined for a common bag limit (one peck per day for recreational harvesters). There was also concern at the committee level that harvesting of oysters, especially in the summer, requires more care than other clam species – they are typically eaten raw and are more likely to develop problems when kept at higher temperatures for prolonged periods. The potential for illness from oysters not properly handled could lead to press that would hurt not just the wild but also local oyster aquaculturists.

2. Shellfish censuses of Blue Hill Bay intertidal areas

In addition to historical information, we would like to do surveys that cover a larger geographic area along this shoreline. We have records of four censuses in Clarks Cove (2001, 2016, 2019, 2021), one in Northwest Cove (2013) and two north of Clarks cove (2013,2014) over the last 20 years. These new surveys, combined with the interview results, should give us a good picture of the history and current status of the shellfish resource in this area. In the past we have used both high school and college students to help us conduct these surveys, both might be possible, but this of course will depend on the safety of such surveys which we have no way of currently knowing.

In addition to doing censuses in the Bar Harbor portion of Blue Hill Bay, we will make ourselves available to work with adjacent towns on censuses to determine the broader landscape of shellfish abundance in Western Bay. The chairs of both Mount Desert Clam committee and the FBRSC have expressed interest in this work. The extent of this work will depend on ability of those shellfish committees to help with some contributions of manpower to conduct those surveys.

3. Developing methods to make licensing easier

When we were discussing potential licensing for quahogs at a committee meeting, our harbormaster and shellfish warden told us that in his discussions with individuals on the flats, they were concerned that they would be asked to come into Bar Harbor in the summer and get a license, a time when all parking is paid, and parking is not easily available. Members of the committee asked if it were possible to make the licensing online. We have talked to both the DMR and our town about this possibility, and believe it is a worthwhile project. We have included funding to move this project forward with either in-house staff with the town of Bar Harbor or an outside consultant.

4. Microbial source tracking (MST) to try to isolate source of fecal contamination in NW Cove and Pretty Marsh.

There are three main non-trespass access points to the Bar Harbor Shoreline in Blue Hill Bay, at Clarks Cove Road, and Town Hill Landing Road, and to a lesser extent at the KOA campground on the northern tip of the island just west of the causeway. The access point at Town Landing Road gives access to Northwest Cove, which is currently closed to harvest during the summer due to fecal contamination (Figure 1, 11.6 acres). There are three houses at the head of the bay that are seasonally inhabited, there are dogs that are sometimes on the beaches there, and there are waterfowl that use the bay. These are the three most likely sources of fecal contamination, along with the input from Prays Brook, which was not seen as a

significant source by DMR. This access is important, particularly for individuals from the west side of the island. We have talked with the DMR personnel in Lamoine (Miller, Horecka) and have estimated the costs for collecting samples, having them processed at the Lamoine lab, and then sending a subset to be categorized for their bacterial type and probably host bird/mammal at the UNH molecular genetics lab run by Steve Jones.

We are also proposing to add a second site to our MST work. Pretty Marsh, in the town of Mount Desert, has a similar seasonal closure (Figure 1, 14 acres, Town of Mount Desert). This site was suggested by Mount Desert residents and has the support of the chair of the Mt. Desert Clam Committee and the DMR Lamoine staff. We believe we can add this site without any additional personnel costs, and have added the costs of sending additional samples to the Jones lab.

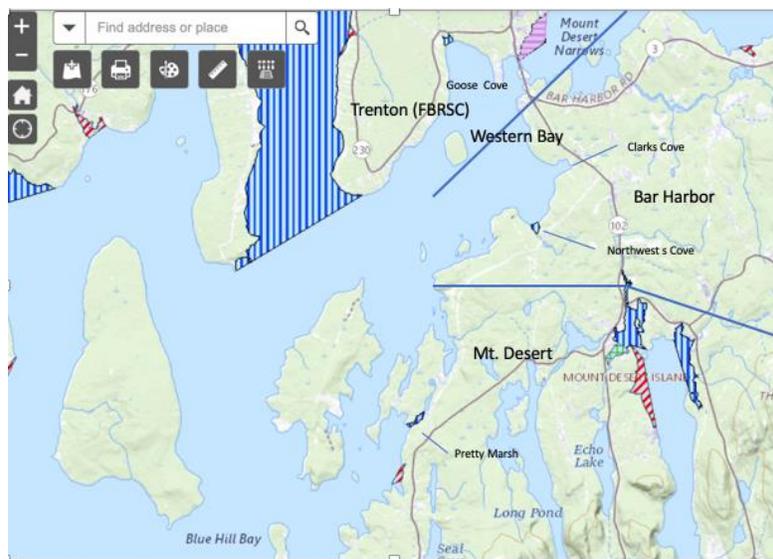


Figure 1. Map of Study area. Western Bay is bordered on the north by Trenton (part of FBRSC), Bar Harbor on the south and east, and Mt. Desert to the south. The two proposed sites for MST testing are noted on the map (Pretty Marsh and NW Cove). Approximate town boundaries are in blue.

Capacity:

The intern would report directly to the chair of the committee. The intern is responsible for the data collection and entry, help to organize the MST sampling, and will work together with the chair and members of the committee in analysis, interpretation, and dissemination of the results. We hope to involve the public in some of our census work, certainly with students at College of the Atlantic or at MDI High School.

Limiting factors:

Our main concern is that we are collecting data that clearly might influence future harvesting ability of the people that we are interviewing. This could lead to the perception that we are going to use their information 'against them', that once we see the harvesting landscape and history of the area, we will feel that the best path forward is to limit harvest through

licensing and bag limits. And this is possible. We would want to make it clear that any new regulations that affected them would be done in an open process that tried to take into account their realities, such as the number of clams they would need to make a trip worthwhile, and differences between recreational and commercial harvesters.

Sharing project data and learning:

Our most important audience are local harvesters, commercial and recreational, both within and outside of our town. We will be presenting the work publicly at our own committee meetings and with the BH town council, and with the adjacent clam committees, who contain the individuals outside of Bar Harbor most impacted by our work. For our work on licensing, we will share any outcomes with other towns interested in moving licensing online. We also plan to use the local newspaper, the MDI Islander, to publicize our work and our results. Our work will also be shared with Frenchman Bay Partners, and we plan to put our work on that website, and finally there is always the hopefully resurgent Fisherman’s Forum where we can share our work more broadly with individuals throughout the state.

Other work outside of this proposed grant:

For 2022, we are continuing our shellfish recruitment monitoring at five sites, including two sites in Blue Hill Bay (see our MSRRF report for 2019-2021). These data will help us understand both the species present and the level of recruitment of shellfish species. These results will complement our work on shellfish surveys and harvester surveys in the area.

Finally, reaching out to other committees has led to a renewal of a discussion for the potential merging of MDI island shellfish committees. This is not one of the objective of this grant, but we recognize that this might become one of the possible solutions to the current quahog harvesting practice.

Budget

Surveys:

| | |
|---|------------------|
| Intern to do surveys | |
| \$15/hr for 320 hours + 14% fringe | \$5472.00 |
| Mileage -150 miles/week x 8 weeks @.50/mile | \$ 600.00 |
| Subtotal | \$6072.00 |

Censuses:

| | |
|--|----------|
| Committee members and other harvesters | |
| Intern costs (included above in survey) | 0 |
| (in-kind contribution) – committee members | 0 |
| Subtotal | 0 |

Making licenses more accessible:

| | |
|---|------------------|
| Establishing an online licensing process | \$1000.00 |
| (to be done by town employee or outside consultant) | |
| Subtotal | \$1000.00 |

DNA analysis of water samples from Northwest Cove

| | |
|--|-----------|
| DMR flat fee for processing up to 30 samples | \$1000.00 |
| Microbial Source tracking @\$150/sample | |

(would include differentiation of mammal, then human, dog, bird)

15 samples

\$2250.00

Subtotal

\$3250.00

Total requested

\$10,322.00

aspect that makes any regulations complex is that we do not want to exclude or make access more difficult for those who are currently harvesting clams or oysters there. We decided that we would like to better understand both the current use of the area by harvesters and how the population has changed in density and size frequency over the years before regulating harvest. We believe we can get a better understanding of this from interviewing harvesters (both commercial and recreational) and pulling together our past census data from this area.

At the same time, we discussed easier access to information on harvesting regulations and licenses. One idea was point-of-sale licenses in places such as the campgrounds and hotels adjacent to the mudflats, along with the possibility of having the Town of Bar Harbor sell licenses online. We also talked about possibly putting up signs with QR codes that could help people understand harvesting regulations.

2. Maine Shellfish Restoration and Resilience Fund Grant Proposal. Chris introduced the working draft of the grant, which included the ideas about interviewing harvesters and examining censuses, along with the accessibility of licenses ideas. After discussing the ideas with harvesters from the Frenchman Bay Regional Shellfish Committee and the Mount Desert Shellfish Committee, two new component were added to the grant. First, Microbial Source Tracking to try to determine the source of fecal contamination (measured through *E. coli* concentrations) was proposed for Northwest Cove, which currently is seasonally closed. Harvesters from Mt. Desert suggested that we add a closure from Pretty Marsh to this study, as it was nearby and had a similar seasonal closure. Second, we will add censuses for clams beyond the Bar Harbor town boundary, and in particular census along the south shore of Trenton from Goose Cove and to the west. The committee was in favor of these additions and approved the grant, which needs to be turned in later today.

We should hear about the grant by the next meeting. If we get complete funding, we will advertise for an intern to lead on the work. If we get partial funding, we will have to consider as a committee our next steps, we may not be able to do the project with only partial funding.

3. Oysters in Western Bay. There had been a question of whether or not the oysters we are seeing in Bar Harbor are eastern or European oysters. Heidi told us she has seen only the Eastern (or American) oysters in that location. She and Hannah surveyed Goose Cove and found a lot of quahog shell and thinks that the live big quahog resource is probably subtidal. NOTE: Heidi later wrote and corrected herself, saying that along with the hundreds of eastern oysters, she and Hannah Annis had seen one European oyster in their 2021 survey.

4. 2022 Priorities for committte work. We discussed some of our work for 2022.

a. Recruitment study. We now have three years of data at five sites. We would like to continue this study for five years, so through fall of 2023. At that point we should have an idea of any clear trends in abundance and distribution of

clams. The committee should be able to do this work with help from COA students, faculty, and committee members. Boxes will go in May 2022 and be removed October/November 2022.

b. MSRRF activities. If we do receive the grant, we will have to hire either one eight-week or two four-week full-time equivalent interns for the summer (and possibly into the fall) to help with the work. This includes surveys, interviews, and water sampling at the two proposed sites. We also talked about the potential need for a boat, it is preferred to take water samples from a boat to minimize sediment disturbance while sampling.

c. Pamphlet and educational materials. The revised town shellfish pamphlet needs to be complete by summer and include QR code of the relevant DMR webpages.

Fiona is leading on this with help from John and Natalie. We discussed potential places to post this information, and will set up timelines for completion in February. One visitor mentioned that a sign might have the effect of focusing harvest interest in mudflats, which might work against some of the conservation goals.

5. Public comment period. We thanked the two members of the Mount Desert Clam Committee, Rusty Taylor and Brian Silverman, as well as harvester Victor Doyle, for coming to the meeting and sharing ideas about the grant. Both Rusty and Brian believe their committee would be happy to work with us moving forward.

Next meeting set for Wednesday Feb 16th.

Meeting adjourned at 5:15 pm. Respectfully submitted by , Fiona de Koning.

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