

# **MARINE RESOURCES COMMITTEE**

## **Town of Bar Harbor**

### Agenda

Regular meeting –Port Authority Building  
Wednesday, January 21, 2026

CALL TO ORDER – 4:00 p.m.

APPROVAL OF MINUTES - November 2025 minutes

#### OLD BUSINESS:

- A. Comprehensive Plan and the BHMRC

#### NEW BUSINESS

- A. Warden Report
- B. Summary of Jan. 20 report to Town Council
- C. Quahog seeding study from Colby/GMRI
- D. Seagrassnet site at Hadley Point
- E. Shellfish Management Plan work
  - a. Hadley Point Water Quality 2025
  - b. New Accessing the Maine Coast Website
  - c. Collaborative work with town staff and town committees
  - d. Possible new project, tentative title: Historical patterns of abundance and use of intertidal resources around Bar Harbor

#### PUBLIC COMMENT PERIOD & FUTURE AGENDA ITEMS

#### ADJOURNMENT

**Anyone with a disability wishing to attend this meeting and who may have questions about how to do so should contact Liz Graves at 207-288-4098**

# Marine Resources Committee

Town of Bar Harbor

Draft Minutes

Regular Meeting

Wednesday November 15, 2025

CALL TO ORDER 4:02 p.m. at Port Authority Building, Bar Harbor

Present members: Chris Petersen-chair, Joanna Fogg, Fiona De Koning, Natalie Springuel, Lydia Stiles, Matt Gerald vice chair, and John Avila-secretary

Guests: Chris Johansen- shellfish warden, Rachel Dragon – harvester, David Dunton – harvester, Gulia Cardoso – harvester, Addie Hutchins – harvester, Noah Goodman – shellfish farmer, Marina Schnell – student, Sarah Zuidema – BH Oyster Co. marine biologist and site manager

We started the meeting with introductions around the room.

## APPROVAL OF MINUTES

Matt G. moved to approve minutes, and Fiona De K. seconded motion. Passed 7-0

## Old Business

### A. License Allocation Fees 2026-2027

Chris P. elaborated on his proposal to reduce commercial license fees for harvesters as the Bar Harbor Marine Resources Committee (BH MRC). The committee has raised required conservation hours from 7 to 12 for the 2026-2027 licensing period. As it stands now, resident commercial licenses from the town cost \$120 and non-resident licenses are \$240. Chris P. suggested lowering them to \$70 and \$140 respectively. He said he had run the idea by both Liz Graves the BH Town Clerk and by Hannah Annis, the local Department of Marine Resources (DMR) Near Shore Biologist and neither had issues with the idea.

Joanna F. motioned that the MRC recommend the town lower the fee for residential commercial harvester licenses to \$70 and to \$140 per license for non-resident commercial shellfish harvesters. Matt G. seconded the motion and it passed unanimously.

### B. Bar Harbor Comprehensive Plan

Chris P. summarized his communication with town staff about how the committee might help with accomplishing goals set forth in the recently written comprehensive plan. James Smith, the town manager, responded to him and said he would talk to other staff and get back in touch. Since then,

James S. talked to Harbor Master Chris Wharff, who will be meeting with Chris P. to share some guidance.

## **New Business**

### **A. Warden's Report**

Shellfish Warden Chris Johansen shared that he had not seen many people on the flats besides marine worm harvesters.

### **B. Oyster Aquaculture Lease Site Biological Survey**

Gust Sarah Zuidema gave a slide show presentation which summarized the flora and fauna that the Bar Harbor Oyster Company has been cataloging at their upper Frenchman Bay site. She ran through everything from algae types to mollusks and tunicates to mega-fauna like seals, and even a sturgeon. The committee asked Sarah if we could publish the species list with our minutes and she agreed. The list of organisms found at their aquaculture site is attached as Appendix 1 to these minutes.

### **C. MRC Shellfish Recruitment Study**

Chris P. presented an overview of data collected on recruitment of soft-shell clams on Bar Harbor mudflats from 2008 to the present, and compared that with the clam recruitment and predation study done on mudflats from 2017-2023. A summary report is attached as Appendix 2 to these minutes.

Overall, fall surveys of young-of-the-year clams have shown dramatic decreases in upper Frenchman Bay over the nearly 20-year span of the data. There are many potential reasons for this potential decline: reduced larval production, reduced survivorship of larvae in the plankton, possibly due to ocean acidification, changes in current patterns that keep larvae from settling, mortality of young recruits due to physical factors such as temperature or mud pH, or predation of young clams on mudflats.

To understand the role of predation of young clams on mudflats, the committee, in collaboration with multiple COA classes and individual students, began a series of predator exclusion experiments in 2017, first with netting on mudflats and later with small boxes with fine-mesh screens. The results from these studies show that within predator exclusion areas young clam density is 10-100 times higher than on exposed mudflat, strongly implicating post-settlement predation as a major cause of the decreased number of small clams. These results suggest that green crabs, *Carcinus maenus*, an introduced species that has been increasing in abundance as Gulf of Maine temperatures increase, are a major cause of decreases in local populations of soft-shelled clams.

The committee thanked Chris P. for the presentation. Chris agreed to produce a narrative written report that will be attached to these minutes as an appendix (Appendix 2).

### **D. Shellfish Management Plan**

i. Collaboration with Committees and town staff - Fiona De K summarized the Parks and Recreation

Committee Hadley Point discussion she, Chris P. and Matt G. attended. The committee mulled over what is “commercial use” and how it fits within the committee’s ordinance. They seemed favorable to aquaculture and shellfish harvesting but not as much with kayak tours, and not at all amenable to heavy equipment (i.e. excavators and dump trucks) use of the boat landing.

MRC members present commented that kayak tour groups should be considered an acceptable use and suggested that the parking of trailers may be the aspect that the P&R Committee may want to regulate rather than the tour activity. The P&R Committee members stated they would be looking further into their ordinance to see how and what to regulate.

The MRC talked about whether or not it would be useful to invite Bethany Levitt, Public Works Department supervisor, to our next meeting to discuss the matter more. It was decided that demands on her time are many and that we should rather ask to see the draft of any P&R Committee regulations or ordinance changes for MRC comments.

### Next Meetings

The December 17<sup>th</sup> meeting is cancelled and January’s meeting will be held on the 21<sup>st</sup> at the Port Authority Building 4p.m. Chris P. mentioned he will be attending the January 20<sup>th</sup> meeting of the Town Council to fill them in on the MRC’s work of the last year. He encouraged other members to join him.

### **PUBLIC COMMENT –**

David D. pointed out how many blown down trees were now along the shore and potentially impeding passage at Hadley Point, and asked the MRC if he or we could cut some out of the way. MRC members felt like it was not in the committee’s purview and that may also violate state shoreland zoning laws.

Fiona DeK. motioned to adjourn the meeting. Joanna F. seconded the motion and it passed 7-0

Meeting ended at 5:58 p.m. (2 hours conservation time)

-Respectfully submitted by J.Avila

Attached:

Appendix 1. Species seen on the Bar Harbor Oyster Company Frenchman Bay Lease – 2025.  
*Information compiled by Sarah Zuidema*

Appendix 2.

**(not completed yet, will be completed by January meeting)**

**Appendix 1 to the BHMRC minutes of November 15, 2025**  
**Species seen on the Bar Harbor Oyster Company Frenchman Bay Lease – 2025**  
**Information compiled by Sarah Zuidema**

Algae

Sugar kelp - *Saccharina latissima*

Filamentous green algae – Probably in either the genus *Cladomorpha* or *Spongomorpha*

Birds

Bald eagle - *Haliaeetus leucocephalus*

Osprey - *Pandion haliaetus*

Common tern - *Sterna hirundo*

Common loon - *Gavia immer*

Various Gulls

Black backed Gull - *Larus marinus*

Herring Gull - *Larus argentatus*

Laughing Gull - *Leucophaeus atricilla*

Ring-billed Gull - *Larus delawarensis*

Bonaparte's Gull - *Chroicocephalus philadelphia*

Cormorants – probably Double Crested Cormorant - *Nannopterum auritum*

Sanderling - *Calidris alba*

Curlew - *Numenius* sp.

Megafauna

Harbor Seal - *Phoca vitulina*

Grey Seal- *Halichoerus grypus*

Harbor Porpoise - *Phocoena phocoena*

Echinoderms

Sea stars – *Asterias* spp.

Orange-footed sea cucumber - *Cucumaria frondosa*

Green sea urchin - *Strongylocentrotus droebachiensis*

Gastropods

Waved whelk - *Buccinum undatum*

Rough-mantled nudibranch - *Onchidoris bilamellata*

Bushy-backed nudibranch - *Dendronotus frondosus*

Red-gilled nudibranch - *Flabellina verrucosa*

Tortoiseshell Limpet - *Testudinalia testudinalis*

Bivalves

Blue mussel - *Mytilus edulis*

American oyster - *Crassostrea virginica*

Atlantic sea scallop - *Placopecten magellanicus*

Arctic rock borer - *Hiatella arctica*

Cnidarians

Frilled anemone - *Metridium* sp.

Lion's mane jellyfish - *Cyanea capillata*

Moon jellyfish - *Aurelia aurita*

#### Tunicates

Star tunicate - *Botryllus schlosseri* – introduced  
Orange sheath tunicate - *Botrylloides violaceus* – introduced  
Pancake batter tunicate - *Didemnum vexillum* – introduced  
Sea grape - *Molgula* sp. (probably *M. manhattensis*) – introduced  
Stalked sea squirt - *Styela clava* (yearround) – introduced

#### Polychaetes

Scale worms – Family Polynoidae  
Bloodworm - *Glycera* sp.  
Spaghetti worms – Family Terebellidae

#### Crustaceans

Barnacles - Probably *Balanus* sp.  
Green crab - *Carcinus maenas*- introduced  
Rock or Jonah crabs - *Cancer* spp.  
Skeleton shrimp - Caprellidae  
Amphipods - Amphipoda  
Isopods – Isopoda  
Spider crab - *Libinia emarginata*  
Greenland shrimp - *Lebbeus groenlandicus*

#### Fish

Rock gunnel - *Pholis gunnellus*  
Sculpins – Family Cottidae  
Atlantic sturgeon - *Acipenser oxyrinchus*  
Ocean sunfish - *Mola mola*  
Atlantic menhaden or Pogy - *Brevoortia tyrannus*  
Tomcod - *Microgadus tomcod*  
Three-spined stickleback - *Gasterosteus aculeatus*  
Atlantic snailfish - *Liparus atlanticus*  
Lumpfish - *Cyclopterus lumpus*

Sp. and spp. Refer to unclear species names for either a single species (sp.) or multiple related species (spp).

## **Appendix 2 to the BHMRC minutes of November 15, 2025**

### **Soft-shelled clam recruitment in Bar Harbor**

**Written version of report given to the Bar Harbor Marine Resources Committee November 15, 2005**

Chris Petersen\*

Starting in 2008, faculty and students at College of the Atlantic (COA), in collaboration with the Bar Harbor Marine Resources Committee, have been collecting data on recruitment of clams in the Bar Harbor intertidal. The results show a pattern of variable but decreased abundance of wild recruits in the fall of the year over time, and predator-exclusion experiments have verified that much of that loss is due to predation, most likely from green crabs (*Carcinus maenus*). However, recruitment into the predator-exclusion boxes has also declined over time, suggesting that recruitment from the plankton has also decreased over the last several years. There are also strong differences among sites in Bar Harbor, in both the species that successfully recruit to an area and their abundance at those sites.

#### **Initial work on clam recruitment**

In 2008 COA student Sarah Drerup and faculty member Chris Petersen designed a study to test how clam recruitment on mudflats might be enhanced. They tested three forms of potential enhancement, brushing (pushing tree boughs- typically evergreen branches – into the mud in rows to reduce surface flow and potentially increase settlement of clam larvae), increasing local clam density to determine if nearby conspecifics increase local settlement, and roughing up the substrate (by scraping a clam hoe over the area), and compared those results to control plots that were left alone. Their conclusion was that ‘nothing worked better than doing nothing’ (Figure 1). For the study they developed a technique for estimating small clam abundance, using a 4” tube (a pvc connector) to take a shallow core from the substrate, and then to sieve the sample using small trays with pet screening (approx. 1.5mm screening) to remove mud and sand from the sample and count and measure any small clams. These cores are 0.087 square feet in area, so the conversion to core numbers to square feet would be to multiply by 11.46. For example, the control plots had an average density of 39.3 clams per core, for an average successful fall recruitment of 450 soft-shelled clams per square foot.

\* Acknowledgements. This work was done by a wide range of College of the Atlantic students and members of the Bar Harbor Marine Resources Committee over the length of the study. In particular, Sarah Drerup, Emma Ober, and Aliza Leit were students that did extensive work on this project, and their work was included as part of their senior projects at College of the Atlantic. Some of the student work was supported by Maine Space Grants to the individual students, and the work was supported overall by a grant from the Maine Community Foundation

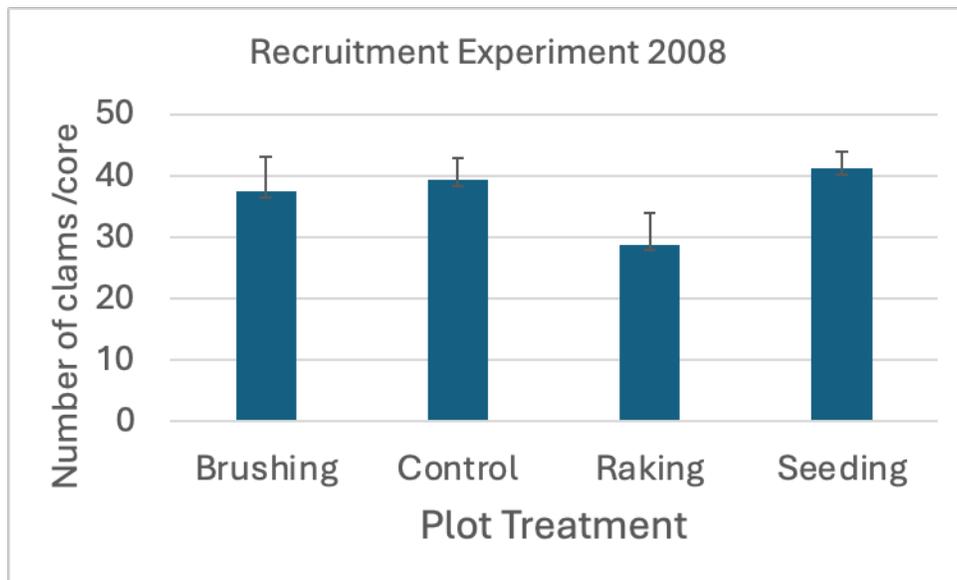


Figure 1. Average number of *Mya arenaria* in a 4” core in fall 2008. Combined data from all transects, Hadley Point West and East. Error Bar =  $\pm 1$  Standard Error. Data based on 4 samples taken from each 7- 8 replicate experimental plots per treatment (29 total plots, 116 cores).

### Studying natural shellfish recruitment 2008-2025

Since 2008, that same 4” core technique for estimating small clam abundance has been done at many sites in Bar Harbor, and has led to a data set of clam recruitment, with most sampling occurring in the fall (mid-September-early November) in conjunction with an annual College of the Atlantic Marine Biology Class clam survey. There has also been some spring and occasional summer sampling as well, but this report focuses on patterns in the fall surveys, which were done more regularly than other times of the year. These fall surveys should occur after annual summer recruitment of soft-shelled clams and gives some time for post-recruitment mortality on the mudflats. We call this density ‘successful recruitment’ to distinguish it from initial recruitment which does not include post-settlement mortality. Successful recruitment estimates were done in conjunction with two activities. The first were shellfish surveys done to estimate adult clam populations. These shellfish surveys collect data from 1 by 2-foot rectangles laid out in a grid on a mudflat, often 100 feet apart, but in the smaller mudflats in Bar Harbor we adjusted the grid to be 50 feet between samples. We would take a core adjacent to the plot, and depending on manpower and weather would either do all of the plots or a haphazard subsample of plot locations. Successful recruitment estimates using cores were also done in the fall from 2017-2023 in conjunction with predator-exclusion experiments. For the unmanipulated levels of successful recruitment, we use cores that were collected adjacent to our predator-exclusion netting or boxes. All core analysis was done either at the time of the survey (for the adult surveys) or within 2 days for samples collected in conjunction with the predator-exclusion experiment. Clams were then returned alive to their natal site. We also measured the individual size of the successful recruits with varying levels of precision, we classified clams using length size ranges, ranging from ¼” size categories at the beginning of the study to 2mm size classes by the end of the study. Those data are not presented here.

### Pattern of recruitment: 2008-2025

Between 2008 and 2025, we collected fall data at least once at 14 Bar Harbor locations, for a total of 53 sets of samples. Most of the collection was limited to six sites (47 of the 54 samples), ranging from 5-14 years of data for a site, with no other location being sampled more than twice. For the major sites, we sampled a site we called Hadley Point East 14 times, Hadley Point West 8 times, a site we called Windaway at Matt Gerald’s property in Blue Hill Bay 7 times, a site between Thomas Island and the Twinnies 6 times, Clark Cove in Blue Hill Bay 6 times, and Otter Creek 5 times.

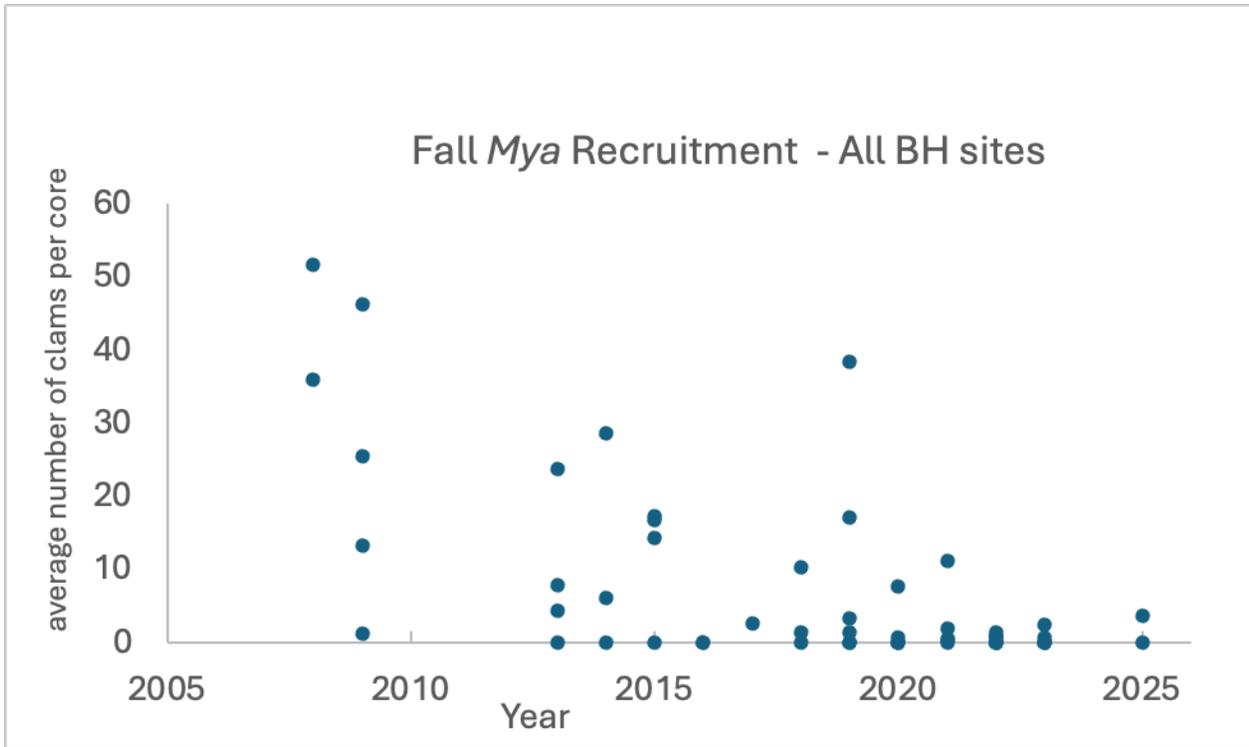


Figure 2. Average number of *Mya* in cores for each collection from 2008-2025.  $N = 53$ . Spearman rank correlation.  $r_s = -0.51$ .  $P = 0.0001$

The combined data show a declining pattern of abundance of small softshell clams in our fall cores, with high variance in the early years of data collection and lower overall abundance in the more recent years (Figure 2).

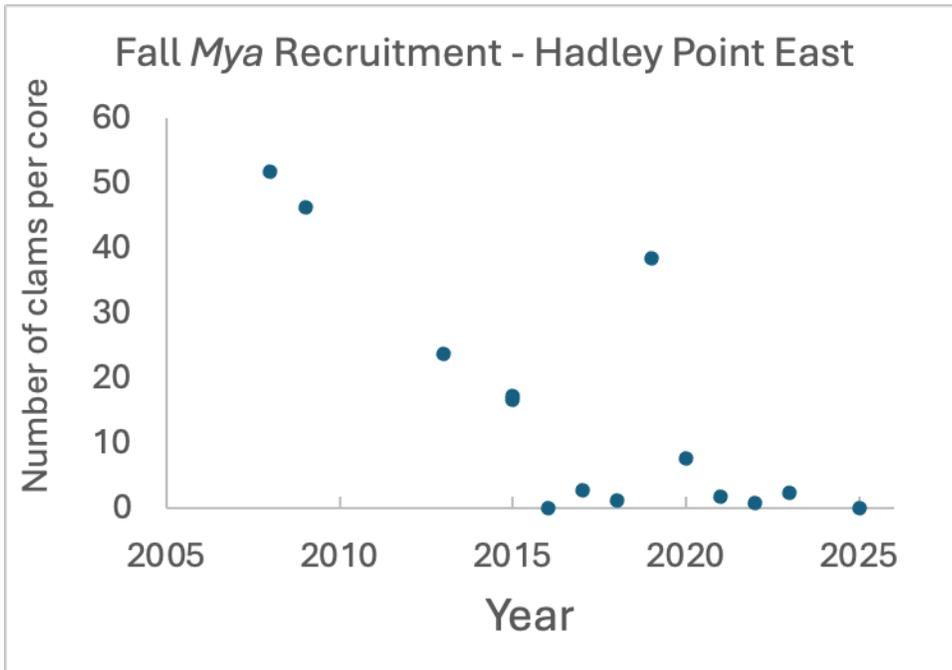
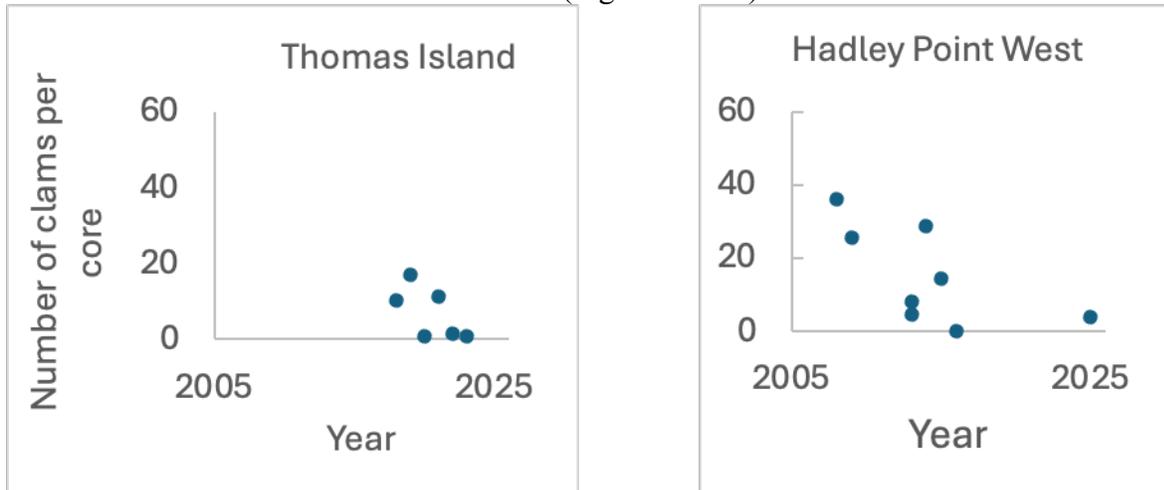


Figure 2. Average number of small (<1 inch) clams in 4" cores taken during the fall at the Hadley Point East Site.  $N = 14$  samples from 13 years.

East), showed variable recruitment with higher numbers in the early years and a declining trend with very low to no small clams found in the last several years (Figure 2, Spearman rank correlation,  $-0.71$ ,  $p=0.004$ ). Each average was based on a variable number of core samples, the sample size ranged from 3-24 cores per collection.

There are two other sites in upper Frenchman Bay, one on the west side of Hadley Point, and one between Thomas Island and the Twinnies (here called Thomas Island). These two locations show similar patterns of abundance through time, although the Thomas Island site only has data starting in 2018 when abundances were low at most sites (Figures 3 & 4).



Figures 3 & 4. Fall recruitment for 2 locations in upper Frenchman Bay. Together they show a decreasing pattern of successful recruitment.

Samples in Western Bay in the Blue Hill Bay portion of Bar Harbor’s intertidal had very low recruitment compared to upper Frenchman Bay (Figure 5). No soft-shelled clams were found in Otter Creek in any of the open core samples from 2019 – 2023. The very low contemporary levels of successful recruitment at sites like Otter Creek and Northwest Cove in Blue Hill Bay are surprising, since both sites have historically had harvestable populations of soft-shelled clams. This suggests that the current low numbers is a relatively recent outcome at these sites.

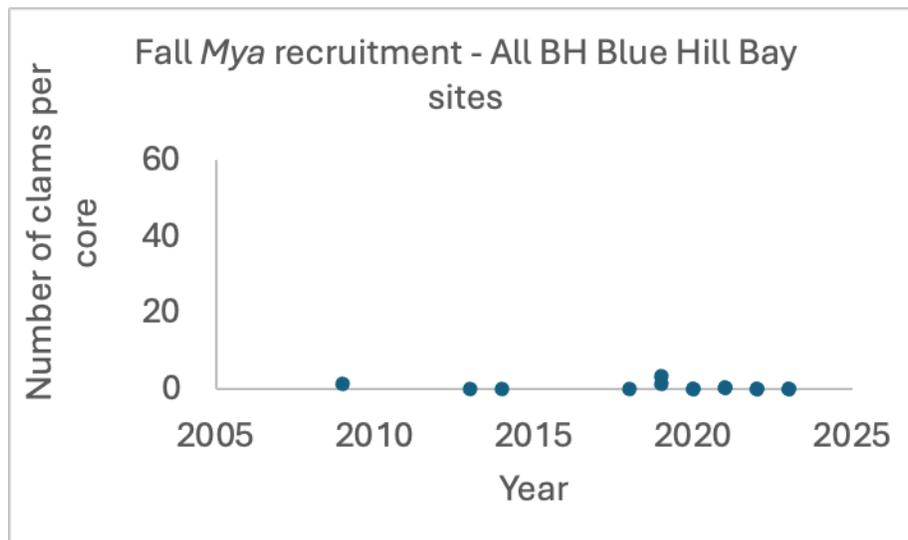


Figure 5. Results from core samples from three sites in Western Bay (Windaway, Clark Cove and Northwest Cove). Very few soft-shelled clams were found during any of the samples.

There are several possible explanations for the reduction in recruitment at sites over time. The two that seem most likely are decreased initial recruitment to the bottom and low survivorship of newly settled clams, either due to physical processes like higher acidity on the mudflats or higher rates of predation of small clams. Reduced successful clam recruitment could be due to a combination of any of these factors.

### **Predator exclusion experiments 2017-2023**

#### *Initial work in 2017*

In 2017, with the help of DMR biologist Heidi Leighton, we deployed a 10'x10' net at Hadley Point East to look at differences in recruitment between the netted and unnetted mudflat. The net had 4.2mm square mesh with floats to keep to net off the bottom when the tide was in, and was secured by burying the sides of the netting into the mud. The net was deployed for the summer, and in the fall three cores were taken from under the net and three cores were taken for nearby exposed mudflat. The results were dramatic, with cores from the netted area averaging 159 clams/core (range 133-186) and cores from open areas adjacent to the net averaging 2.67 clams per core (1-4). Cores in the open represented 1.7% of the density of cores under the net, suggesting that approximately 98% of clams that recruited to the area were preyed up in the time from recruitment to the fall sampling.

To put the 2017 netting study in context, the highest densities we obtained in cores were just over 50 clams per core in 2008, the first year we collected data. Density under the net in 2017, a year with greatly reduced successful recruitment (under 3 clams per core) averaged over three times that high 2008 level, at 159 clams per core. This is an incredibly high density that we have never observed in natural mudflats, and suggests to us that predation has been a constant source of mortality for clams, but that the intensity of this predation has increased over time.

#### *Expanded work from 2018 - 2023*

This initial result led to an expanded predator-exclusion experiment in 2018, where we expanded our work to three sites, the same Hadley Point site with an additional site in upper Frenchman Bay adjacent to Thomas Island, and a third site in Western Bay at a site at the end of County Road at Fire Road 522 (Windaway Lane) that we call Windaway. At each site we deployed at least three predator exclusion boxes. Each box was a 1x2 foot box with pet screening with small mesh (1-1.4mm square or rectangles) on the top and bottom ranging in depth from 2-3 inches secured in the intertidal with stakes. These boxes have been used extensively by the Downeast Institute in their predator exclusion experiments and are often referred to as “Beal boxes” after the lead investigator at DEI (their extensive research is available online at <https://downeastinstitute.org/research/soft-shell-clams/>).

In addition to the predator-exclusion boxes, in some years we deployed either nets (2018) or plant pots with screening covering a subset of containers with rubber bands, together with the boxes. We had problems consistently excluding predators from both the pots (netting came off) and nets (some ripped, one was lost), so we focused on the predator-exclusion box data for this study after 2017. We ultimately expanded box deployments to 8 sites over the period of the study, with good data for five sites for five years (2019-2023).

The data from this longer-term study reinforced our initial results from the netting study in 2017: successful recruitment was much higher in predator-exclusion treatments than in controls in open habitat. For this report, we focused generally on the absolute level of clam recruitment, as well as the variation in successful recruitment among sites and over time.

Variation in recruitment among sites

There were strong differences among sites, with the sites in upper Frenchman Bay (Hadley Point, Thomas Island) having dramatically higher recruitment rates than the sites at Otter Cove or in Blue Hill Bay (Windaway, Clark Cove) (Table 1).

*Table 1. Average density of soft-shelled clams in predator exclusion treatments (2017-net, 2018-2023 screen boxes) in Bar Harbor. Average density is color coded. Purple: >500/sq. ft.; Green: 100-500/ sq. ft.; Yellow 50-100/ sq. ft.; Orange 10-50/ sq. ft.; Red <10/sq. ft.*

		Year						
Location	Site	2017	2018	2019	2020	2021	2022	2023
Upper F. Bay	Thomas Is.		1633	1606	168	455	127	122
	Hadley Pt.	1822	387	1320	43	185	73	222
	Hull's Cove						29.5	x
Western Bay	Windaway		34	36	9	4	8.5	5.8
	Clark's Cove			99	22	0	5.5	0.9
Otter Cove	Upper			78	4	0.15	0.4	0
	Lower			50				
	Below Causeway						57	x

The densities of soft-shelled clams were typically much lower in the exposed mudflat compared with the predator-exclusion treatments. The most dramatic effects were in Frenchman Bay, and are illustrated for the Thomas Bay site (Table 2). The estimated effect of predation (control density/ predator box density) averaged 88.3% of the recruitment population, ranging from 72-96% over the six years where boxes were used at the site.

*Table 2. Average number of clams per square foot in the predator-exclusion treatment (box) and on exposed mudflat (open) for the Thomas island site. Percent survivorship assumes the open area had the same initial recruitment of the box, and the reduction is due to predation. Percent survivorship is the estimated survivorship for recruited clams through the fall survey.*

year	box	open	% surv.
2018	1632.65	116.89	7.16
2019	1606.03	194.82	12.13
2020	167.55	6.88	4.10
2021	454.81	128.35	28.22
2022	126.90	16.04	12.64
2023	121.90	6.88	5.64

### Variation in recruitment over time

There was also a strong trend in recruitment over time during the study period, with recruitment decreasing, especially starting in 2020. Within a site, all densities starting in 2020 were lower than any of those before 2020. We do not have any explanation for this trend, but it suggests that there are fewer larvae reaching recruitment age in the water column in these habitats, with either decreased reproductive output in the population or decreased survivorship in the plankton. The fact that all sites suffer the same decline, it seems unlikely that local current patterns are responsible for this decrease.

### **Summary**

Overall, these results show that successful soft-shelled clam recruitment has been higher in the recent past compared to the present. Some sites have been consistently better for recruitment, but all sites currently have very little successful recruitment of soft-shelled clams. Recruitment appears to be declining, and predation on the flats is very high, making it very difficult to support a successful fishery for this species at these locations.



New Business Item B. Jan 20 report to town council. What the town council received in their packet:

From: Chris Petersen, Chair Bar Harbor Marine Resources Committee

To: Bar Harbor Town Council

Re: January 20, 2026 Town Council meeting report from the committee

The BHMRC would like to give the town an update on a couple of issues.

1. License fees and requirements. We have changed both the number of conservation hours needed to obtain a commercial license from 7 to 12 and reduced the costs of those licenses. We will go over the license structure and give our rationale.
2. Summary of clam recruitment data and predation research. We will review a summary of data we have been collecting, some for nearly 20 years.
3. Our Shellfish Management Plan and the Comprehensive Plan. In collaboration with our Maine Department of Marine Resources co-managers, we have a Shellfish Management Plan that we update periodically.  
<https://www.maine.gov/dmr/sites/maine.gov.dmr/files/inline-files/Bar%20Harbor%20Shellfish%20Management%20Plan.pdf>
  - a. We will go over some ideas of how this could intersect with the new Comprehensive Plan.
4. Continuing collaboration with other committees and departments.
  - a. Working waterfront assessment with Harbor Committee
  - b. Hadley Point Park regulations with Parks and Recreation Committee
    - i. Limited access and parking
  - c. Combined Sewer Overflow Events with the wastewater division of the Public Works Department
  - d. Water quality work with the Town Planning Office (NE Creek in particular) and with the Maine Department of Marine Resources

Adding Hadley Point as a Seagrassnet site.

Email from Kara Gadeken January 12, 2026 to Chris Petersen

Last year I was contacted by Agnes Mittermayr at the Center for Coastal Studies about maybe starting a [SeagrassNet](#) monitoring site in the area. I'm thinking this summer I'll give it a go and see if we can't do a run at Hadley Point. I talked to Jane Disney about it, since she did the restoration work there, and she gave her blessing and shared all their data and materials. I should have some funding from a fund for mentored student research at COA.

This would be a few days of field work, taking some grass samples, deploying HOBOS, etc, at the seagrass bed at Hadley Point. I thought before I moved too far on it, I'd send it to BHMRC for their consideration. I don't know what kind of permitting I need, either from the town or the state, to do this...I was going to ask Jen at DMR when I submit the 2026 collections permit if she could advise. – Kara

**About Seagrassnet:** SeagrassNet is the largest and longest-running monitoring program to document the status of seagrass resources and how they are changing over time in response to a changing environment. Our ultimate aim is to preserve valuable seagrass ecosystems by increasing scientific knowledge and public awareness of this threatened coastal resource. (<https://www.seagrassnet.org/>)

1.15.26 BHMRC New Business E. Hadley Point Water Quality 2025.

All 2025 scores are 2 or below, so no. bacterial problems for 2025.

GrowArea	Station	Date	Cat	Sal	Wind	Method	Score	RawColScore
EI	EI034.00	21-Jun-21	A	34		MFCOL	1.9	<2
EI	EI034.00	27-Jul-21	A	33		MFCOL	2	2
EI	EI034.00	27-Sep-21	A	33		MFCOL	12	12
EI	EI034.00	11-Jan-22	A	35		MFCOL	2	2
EI	EI034.00	16-Feb-22	A	35		MFCOL	1.9	<2
EI	EI034.00	23-Mar-22	A	34		MFCOL	1.9	<2
EI	EI034.00	25-Apr-22	A	35		MFCOL	1.9	<2
EI	EI034.00	22-Jun-22	A	35		MFCOL	1.9	<2
EI	EI034.00	18-Jul-22	A	35		MFCOL	12	12
EI	EI034.00	23-Aug-22	A	34		MFCOL	1.9	<2
EI	EI034.00	25-Jan-23	A	35		MFCOL	1.9	<2
EI	EI034.00	22-Feb-23	A	35		MFCOL	15	15
EI	EI034.00	28-Mar-23	A	32		MFCOL	1.9	<2
EI	EI034.00	10-May-23	A	35		MFCOL	18	18
EI	EI034.00	21-Jun-23	A	36		MFCOL	1.9	<2
EI	EI034.00	08-Aug-23	A	35		MFCOL	840	840
EI	EI034.00	31-Jan-24	A	34		MFCOL	14	14
EI	EI034.00	18-Mar-24	A	32		MFCOL	1.9	<2
EI	EI034.00	09-Apr-24	A	35		MFCOL	1.9	<2
EI	EI034.00	22-May-24	A	30		MFCOL	2	2
EI	EI034.00	23-Jul-24	A	35		MFCOL	38	38
EI	EI034.00	28-Aug-24	A	34		MFCOL	2	2
EI	EI034.00	08-Oct-24	A	34		MFCOL	130	130
EI	EI034.00	24-Feb-25	A	36		MFCOL	1.9	<2
EI	EI034.00	26-Mar-25	A	31		MFCOL	2	2
EI	EI034.00	09-Jun-25	A	32		MFCOL	1.9	<2
EI	EI034.00	15-Jul-25	A	33		MFCOL	1.9	<2
EI	EI034.00	12-Aug-25	A	34		MFCOL	2	2
EI	EI034.00	15-Sep-25	A	36		MFCOL	1.9	<2
EI	EI034.00	22-Oct-25	A	35		MFCOL	1.9	<2

## 1.21.26 BHMRC New Business C. Quahog Seeding study from Colby/ GMRI

Below is the email from the principal investigators. I have filled out the survey. – Chris

On Wed, Dec 17, 2025 at 7:00 AM Kanae Tokunaga <noreply@qemailserver.com> wrote:

Dear Chris,

GMRI, Manomet, and Colby College are working on a collaborative project to understand the potential to grow hatchery quahog seed to a size that municipal shellfish programs could use as well as documenting the existing market for quahogs and the potential for Maine quahogs in the future. Part of this project is to survey aquaculture producers and shellfish committee members to gauge interest in this approach and determine the potential supply and demand as well as the costs associated with two different nursery stage production techniques.

We are hoping that you will participate in a brief survey that we anticipate will take 5-10 minutes to complete. We have been approved to conduct this research through the Colby Institutional Review Board which requires that we ensure you're aware of the project objectives and the possible benefits and risks of participating. If you proceed with the survey, please see the informed consent text for project information. Your responses to the survey are an indication to us that you agree to participate. Please let us know if you have any questions. You can reach Kanae Tokunaga (email: [ktokunaga@gmri.org](mailto:ktokunaga@gmri.org); phone/text: 207-228-1696) or Caitlin Cleaver (email: [ccleaver@colby.edu](mailto:ccleaver@colby.edu); phone/text: 207-706-9466).

Thank you in advance for your time and consideration.

**Follow this link to the Survey:**

[Take the survey](#)

Or copy and paste the URL below into your internet browser:

[https://colby.co1.qualtrics.com/jfe/form/SV\\_3wRBxvjKL66qMho?Q\\_DL=jfvUMnOFsxY2UN8\\_3wRBxvjKL66qMho\\_CGC\\_IMr6R7LYpDBEeB0&Q\\_CHL=email](https://colby.co1.qualtrics.com/jfe/form/SV_3wRBxvjKL66qMho?Q_DL=jfvUMnOFsxY2UN8_3wRBxvjKL66qMho_CGC_IMr6R7LYpDBEeB0&Q_CHL=email)