Marine Resources Committee
Town of Bar Harbor
Minutes from Wednesday, February 24, 2016

CALL TO ORDER – 4:00 p.m. Port Authority Building, Bar Harbor Municipal Pier

Committee Members Present: Chris Petersen, Ron Landis, Matt Gerald, Scott Swann, Natalie Springuel. Harbor Master: Charlie Phippen.
Guests: David Dunton, Josh Kane, Heidi Leighton (DMR),
Apologies: Megan McOsker (chair), Mike McKernan

Vice-Chair Ron Landis asked Secretary Chris Petersen if he would chair this meeting, chair Megan McOsker called in ill.

APPROVAL OF MINUTES – January 2016 minutes were approved after spelling corrections 5-0.

OLD BUSINESS.

A. Hadley Point Signboard- Natalie did final edits with the committee and guests. After making some small edits, the committee enthusiastically approved the material. The committee has a chance to give any additional comments in the next couple of days, but by the end of the week the material should be off to the printer.

B. Report on clam growth rate study at Hadley Point. Chris gave an overview of data from a 2015 study of clam growth (summary document is attached to minutes [2016 2 24 BHMRC attachment clam growth study.pdf]). Reviewing the document on clam growth at Hadley Point, COA students found that clams grew slightly faster in the lower intertidal, but overall rates were low (about 6 mm or ¼ inch for the 2015 growing season) and showed no effect of initial size on growth rate. The seemingly low growth rate might be due at least in part to the very high density of clams at the site. Heidi Leighton discussed similar studies, and suggested that the town might adopt a less labor intensive method for monitoring clam growth. In towns like Milbridge, they put out 6" flower puts flush with the surface that contained a set of clams that were then covered with netting. At one site, they observed about ¾ of an inch growth this year. Heidi said that clam growth rates vary enormously and are very site dependent in downeast Maine. Our impressions from Hadley point is that recruits typically take 3-4 years to reach harvestable size, Heidi reported that in Coobscook Bay it takes 6-7 years, while clams in some spots in southern Maine reach harvestable size in 2 years.

This led to a general conversation about recruitment, it was mentioned that Berry Cove in Lamoine had huge recruitment event this year. We also discussed recent publicized events of poachers being caught in Mount Desert, and the overlap with poachers recently caught in Bar Harbor.

NEW BUSINESS:

A. Spring and summer survey plan. – The only new business discussed were possible conservation measures that the committee might take part in over 2016. We specifically asked our commercial clammers that were present for input. Some of the ideas mentioned were:

i. A census at Otter Creek (Bar Harbor side) and possible transplantation of clams from the high density Hadley Point site to Otter Creek to determine suitability of the site for clam growth.

ii. Brushing. We talked about the possibility of brushing in late spring/early summer when clams are reproducing. This involves taking evergreen branches and putting them in the mudflats to affect current patterns and increase settlement of clams from the plankton to the bottom. Heidi knows individuals in other towns that brush, and could help with connecting the committee with people so that we brush in a traditional manner. We would also have to contact the Army Corps

of Engineers, but the thought was that this would probably be a relatively easy general permit since it would not be a hazard to navigation and would not involve putting toxic or permanent structures in the intertidal. Sites that were included for consideration included Clark's cove, Otter Creek, Beyond Northeast Creek outside of the closed area, and southwest of the causeway. One additional suggestion was contacting the Mount Desert clam committee and see if they were interested in some joint work in Otter Creek. We also talked about these sites as potential clam transplant sites.

B. Updates on other Clam regulatory work on the island. Heidi reported that Seal Cove and Goose Cove in Tremont were about to be closed for emerging pollution problems. Tremont does not have a town program, and one commercial clammer in the town is reportedly interested in combining with other towns to produce a multi-town committee on the island. Southwest Harbor just has recreational licenses in their town management.

4:55 – Meeting adjourned.

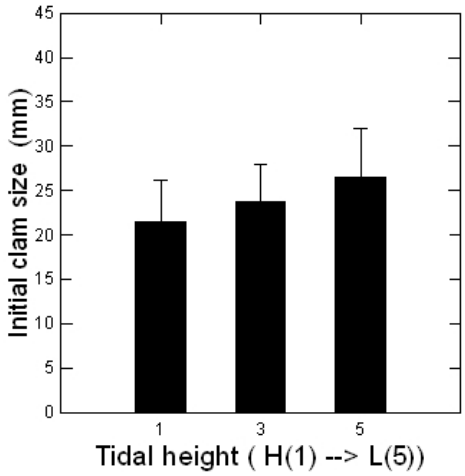
Josh Kane and David Dunton each received 1 hour of conservation time for attending the meeting.

Juvenile soft-shell clam growth study – Hadley Point Far East

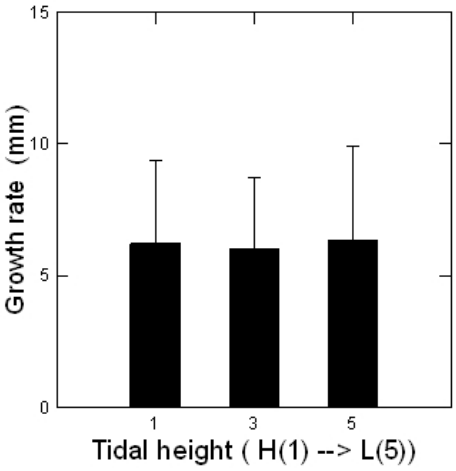
During the summer of 2014, several mudflats in upper Frenchman Bay had extremely large recruitment of soft-shelled clams, *Mya arenaria*. During the late spring of 2015, we marked the growing edge of several hundred clams at multiple tidal heights to study growth over the majority of the 2015 season. These clams were taken from and returned to plots where in some cases crushed shell had been added to study changes in pH. Clams were marked with black permanent markers along their growing edge. Clams were not restricted or protected in any way, but the general areas of the outplanted clams was marked with short sections of pvc pipe.

Initial sizes of clams varied among tidal heights, with juveniles in the low intertidal slightly larger than in the higher intertidal (Figure 1.).
In the fall of 2015, we attempted to retrieve these clams from the mudflat, with varying success. We were able to retrieve and measure and total of 117 of the 450 clams that we had initially tagged. It is quite possible that many clams lost their marking, and it was also difficult at times to distinguish between the permanent marker and black marks left by reduced black muds on the clamshell (students suggested that in the future we consider using colored permanent markers). Clams showed some growth over the season, but on average clams grew only about ¼ inch (6.2mm, range 0-15mm). There was no effect of tidal height on the growth rate of clams, clams in the lower intertidal did not grow any differently than clams in the upper intertidal, despite their different initial size (Figure 2).

1.



2.



Figures 1 and 2. 1: Initial sizes of clams versus intertidal height. 2: Growth rate (difference in length of clams) over the approximately six-months of outplanting in the field. Error bars are 1 S.E.

Retrieval of marked clams was highest in the mid-intertidal, with an average of 21 clams per plot retrieved, compared with 13 in the upper intertidal and 4.3 in the