**Freeport Shellfish Conservation Commission**

**12/14/2023**

**Meeting Minutes**

Attendees: Sara Randall, Chad Coffin, Sarah Warren, Kap Wallingford, Michael Ashby

Quorum achieved. Meeting called to order at 6:33pm

**Agenda item:** Presentation by Brian Beal, Downeast Institute regarding the population survey discussed Sept 22 and Nov 14th . Survey is “across the river”. See slides.

Methodology: 10 acres was divided into 10, 66 foot wide strips. Divided intertidal into 3 sections. Each rectangle represents 1/3 of an acre. Methodology: cylindrical metal can, pushed into the mud, rubber stopped to create vacuum that creates a core with equal volume. These samples were bagged and labeled, then washed through a sieve 1/8th inch. Brian personally did a secondary sieve on his cores with a 1mm sieve.

Results: 4 clams above 2 inches (legal sized) were found and both were in a single upper intertidal rectangle. 17 additional clams found, not legal size. 97% of surveyed area does not contain clams. No difference found in density between upper mid or lower intertidal. No significant difference between subareas. Found 4 quahogs; one legal size. In Brian’s samples with the 1mm additional sieve, four times more of these small clams were samples from the upper intertidal compared with the other two heights. The average size of these was 3.66 mm. They don’t just happen to be there- these are the ones that survived; it is more difficult for predators to dig if there is no water over the flat.

Question of whether the distribution of quahogs found could be considered commercial. Finding the quahogs in this area does not mean they will survive. It is also not a statistically significant amount of clams per square foot.

Discussion of myth of “dead mud” across the river. Overview of 2014 seeding experiment with netting and crab traps adjacent- two sites (Collins Cove and Across-the-river.) Relative success of across-the-river experiment compared to Collins Cove–wild clams settled across the river at a high rate. In the 50s the oceans warmed more than it is today. Predator populations exploded then too; the predators thrive in warm conditions. Therefore, warming is the problem and the solution is to mitigate predation.

Question about commercial viability of large recruitment boxes that are being used currently by the Downeast Institute to study conservation efforts. Suggestion from Brian to put out smaller “sentinel” boxes to provide information about likely recruitment spots. Question about potential problems with bigger boxes. There can be individual issues with boxes if a predator gets in, but anecdotal experience says that they have correlated levels of recruitment if all goes well.

Question from the audience about the viability of these large boxes commercially. Per Brian it needs more study/experiments in the areas with sentinel boxes. Caveat that there are logistical hurdles with DMR and the Army Corps of Engineers, and there are no guarantees.

Examples of clam impoundments: put clams in pounds in spring and go back and harvest them in August when the price is higher. Milky river clams got in during one experiment. Second experiment where the pounds were encased in screens with zip closure was more successful.

**Agenda item**: Ordinance changes

Discussion of what is considered conservation and who decides. Recommendation not to make a list of activities because it can become dated quickly and ordinance changes are difficult. Suggestion to put the detail in the application mentioned. What will you do? How?

Who is the decision making body? Suggestion of a rubric with predetermined criteria. Suggestion that a good design might be a lot of variety. Recommendation to make sure that no design will be disadvantageous to the neighbor conservation area. Downeast Institute would be willing to consult with applicants about the design.

Sara made a motion to approve changes in the ordinance, seconded by Mike. All in favor. Changes approved.

Discussion of the need to build the application, rubric, and conflict of interest documentation.

Town of Freeport’s climate action plan- is shellfish considered? Should we go to their meeting? Chad and Sara to follow up.

Mike motion to adjourn. Sara seconded. All in favor. Meeting adjourned at 8:03pm