

Green Crabs Will Be Maine's Newest fishery

By:

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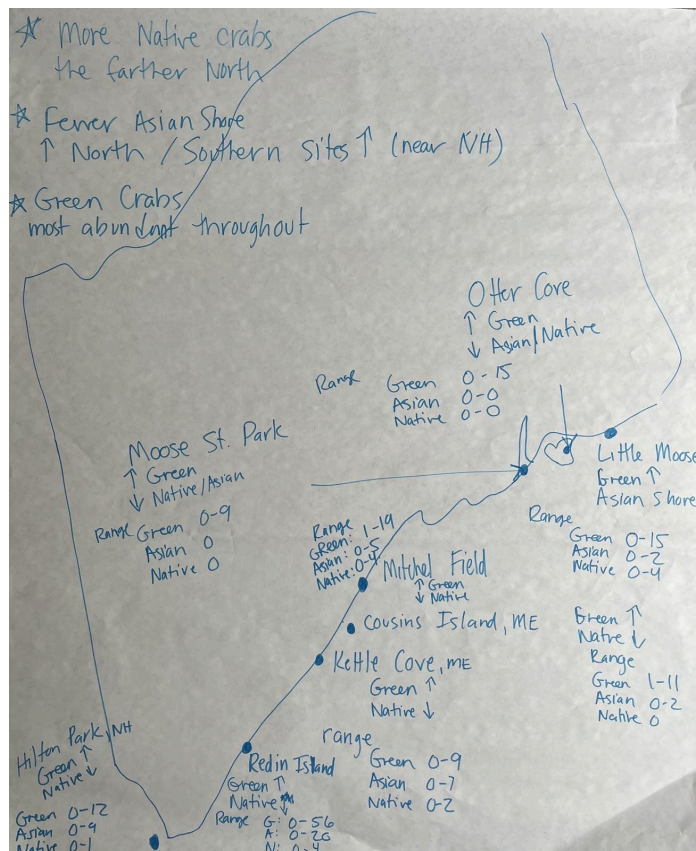
How do the populations of Native, Green, and Asian Shore crabs compete along the coast?

Green Crabs will be Maine's newest fishery.

The Intertidal Zone is a place of great diversity. A lot of the organisms who live in the zones higher up face the challenge of not drying out. The different intertidal zone names are the spray zone, high tide, mid tide and low tide. This zone is critical for supporting ecosystems, culturally important to the Wabanaki people of Maine, and economically important to thousands of people who work on the coast. In addition, it is severely affected by climate change, specifically by rising sea levels and warming temperatures.

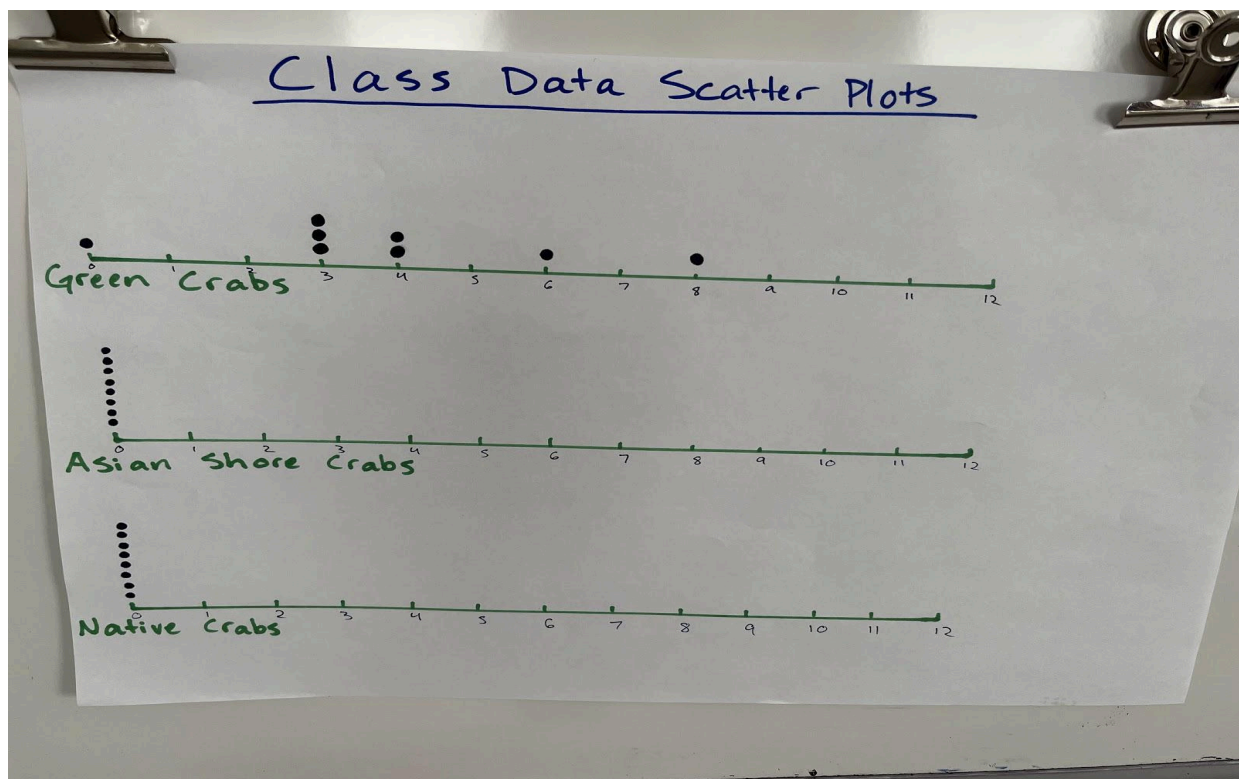
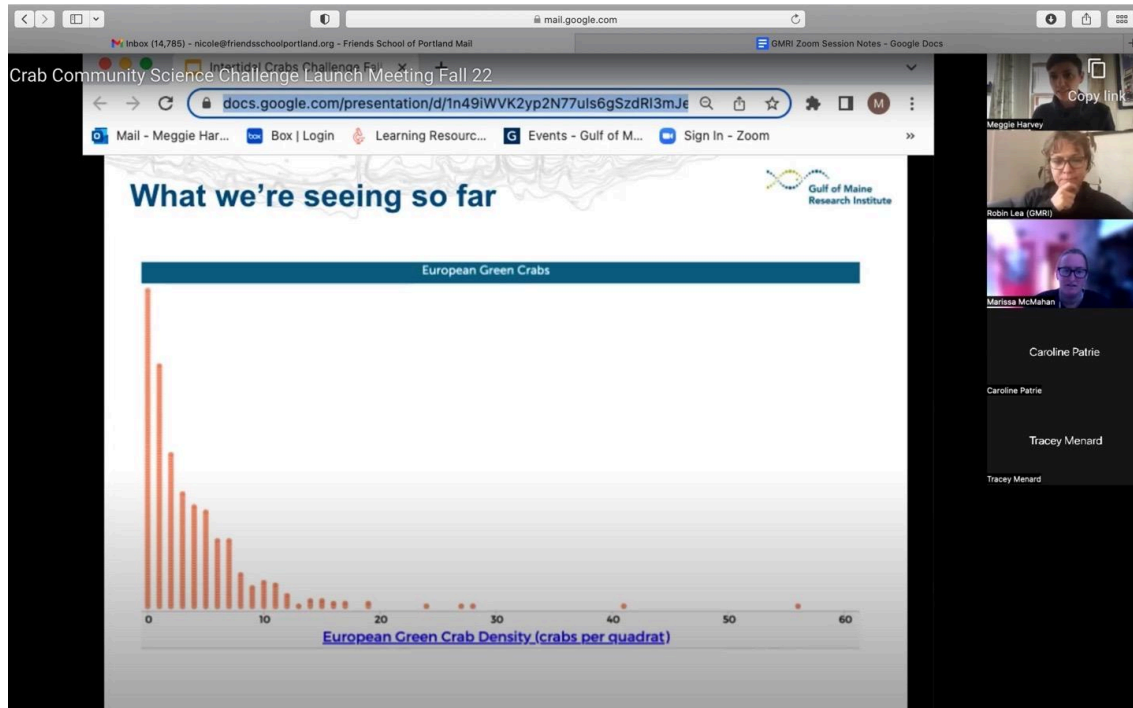
There are four main species of crabs on the main coast: Jonah crab (native), Rock crab (native), Green crab and Asian shore crab which you can identify green crabs by looking at their spines on the side of their shell. Green crabs have 5 spines and Native crabs have 8-10 spines. Green crabs will support Maines fishery because they are found everywhere and are wiping out the native crab population which makes it difficult to catch native species. My evidence below elaborates upon this.

This image shows data from different sites along the coast of Maine. The fact that green crabs



are at each site on the picture above tells us that green crabs can thrive in cold water better than Asian Shore crabs in Maine. There are also more green crabs being found than native crabs along the coast in the GMRI Intertidal Crab Protocol.

This image below shows information on the Green crab population from GMRI data in CODAP. It shows some sites have been getting 40-60 Green crabs in a quadrat.



This graph above shows that the green crabs were much more abundant than native and Asian shore crabs at all of our classes sites.

This matters because if green crabs become Maine's newest fishery it could bring a lot of money to the Maine economy. This could mean many more jobs on the Maine coast and bring revenue to tourist markets. If green crabs become Maine's newest fishery it could help native species thrive again. Which would allow native species who compete for limited resources to get more of what they need to thrive. It's unclear what will happen at this point if we remove a large number of invasive species.

I do have enough evidence to make a strong conclusion because of the 1500 people that have followed a strict protocol and have recorded data through the GMRI project it all supported the conclusion. Some people might ask why haven't people been doing it yet and it's because this is a fairly new thing to try to make money off of and to do so that would take efforts from market researchers, fishermen, chiefs and restaurant owners the data is now there to convince them to take the risks.

Works Cited

"Intertidal Crab Community Science Challenge Launch Meeting Fall 22." *YouTube*, 4 Oct. 2022,

youtu.be/NYwweZ4JHlk.

GMRI Crab ID Cards