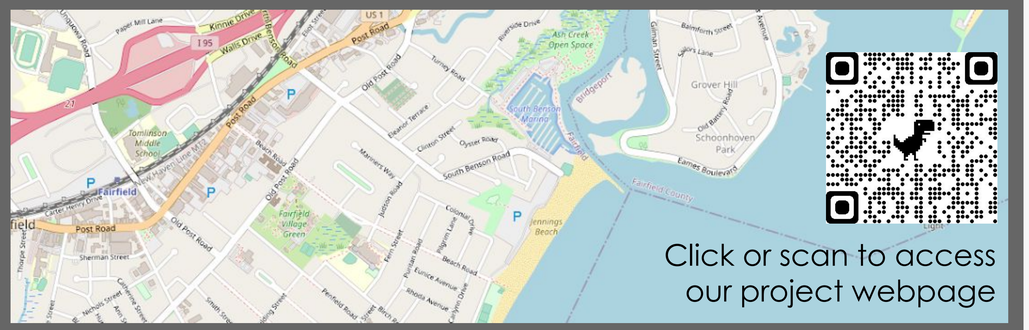
Surveying Asian Shore Crabs in Fairfield, Connecticut

Jackson McBean[1] & Jason McBean
[1]Fairfield Ludlowe High School



Introduction

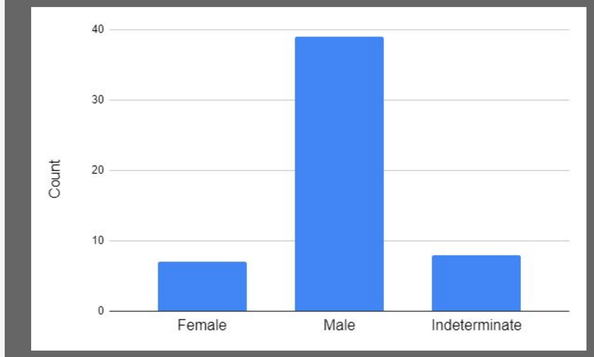
- The purpose of our project was to learn and share data about the characteristics and density of the Asian Shore Crab population within Fairfield, Connecticut
- We chose this project because we like to learn about marine animals and wanted to use electronic devices as well as mobile apps
- Because non-native Asian Shore Crabs have a very broad diet, they have the potential to affect populations of native species such as crabs, fish, and shellfish by disrupting the food web

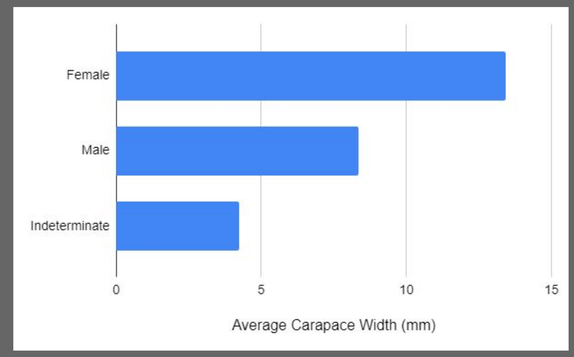
Methods

- We used the AllTrails app to map our study location and create a crab monitoring site
- We placed a 1m^2 quadrat in three intertidal areas at Jennings Beach and near the Fairfield Marina
- In each quadrat we counted the size and amount of pebbles, cobbles, and rocks and collected all the crabs we found
- We measured carapace length and width of each crab using calipers and determined the sex

The Take-Away

★ Through this project we learned how to measure the characteristics of a population of animals
★ We collected a total of 54 Asian Shore Crabs in our 3 plots, and estimate a population density along the Fairfield shoreline of 18 crabs/m^2
★ This abundance of crabs could lead to the local extirpation of other crab species living in this marina, as Asian Shore Crabs can outcompete other crab species for food and reduce native biodiversity
★ Although of the crabs collected were categorized as juveniles - those with a carapace width of less than 35mm - the females crabs were larger, on average, than the males
★ We hope that our project provides an additional resource for community members to study and learn about Asian Shore Crabs





UCONN NATURAL RESOURCES AND THE ENVIRONMENT
Natural Resources Conservation Academy University of Connecticut
CLEAR