

Climate Collaborative and partners offer experiential learning climate program on Pleasant Bay

Cape Cod Climate Change Collaborative, Pleasant Bay Community Boating and AmeriCorps Cape Cod partner on innovative pilot program

By Hannah Crosby, AmeriCorps Cape Cod Service Member,
Cape Cod Climate Change Collaborative, December 2021



The Cape Cod Climate Change Collaborative (Climate Collaborative) and partners Pleasant Bay Community Boating (PBCB) and AmeriCorps Cape Cod welcomed fourteen students and two teachers from Derby Academy in Hingham to the shores of Pleasant Bay in early December for an interactive field trip about climate change impacts on the Cape.

The half-day experiential learning program was piloted for Derby Academy eighth graders participating in “Unstoppable Youth” — a two-week class focused on youth action relating to climate change. The 3-part program was designed by Sarah Griscom, PhD, Climate Collaborative board member and PBCB science advisor and held on PBCB’s Pleasant Bay campus. The program focused not only on climate impacts but climate *solutions* as well.



Climate Collaborative and PBCB board member Janet Williams welcomed the group and Mon Cochran, Collaborative board member and PCBC volunteer, offered an overview of climate change impacts in the region and on Pleasant Bay. The group later split into three smaller groups, each rotating around three stations.

Station 1 - AmeriCorps Cape Cod member Jami Baker led the discussion of sea-level rise. Both Pleasant Bay and Hingham Bay have similar tidal zones, so lessons learned on Cape Cod were easily applicable to the students’ hometowns.



Baker discussed the possibility of a four-foot sea-level rise by 2050, potential impacts on the nearby, low-lying cranberry bog, and the effects of king tides and storm surges on fragile coastal areas. Baker also explained how local communities across the Cape are working to address these issues and all brainstormed ways to lessen their carbon footprints.

Station 2 - The second station, led by Williams, focused on revetments. She explained the history of Pleasant Bay and described the natural fortifications nature provides to protect shorelines. Students learned how eel grass beds and salt marshes dissipate wave energy away from the coastline and how stone revetments installed to “protect” the shoreline have the opposite effect by scouring areas of coastline without revetments. Pleasant Bay is an excellent example of shoreline change and student were able to identify revetments along this stretch of shoreline.

Station 3 - Led by Cochran, this last station focused on PBCB’s Floating Classroom, a fully solar-powered boat that brings students and scientists out into the bay for water collection and testing. Students were shown the batteries and solar panels on the roof of the pontoon boat as well as the engine of a fully electric car.



The field trip ended on a high note as students were asked to brainstorm ways in which they could make actionable change in their communities. Climate Collaborative’s Youth Climate Action Network representative Ella Sampou had prepared a “Checklist for Climate Organizing,” which provided motivation and a launching pad for students to tackle climate issues when they return to their own towns.



Youth climate action is critical to developing innovative and sustainable solutions to the climate crisis. The Climate Collaborative was honored to be a part of this pilot program with PBCB and AmeriCorps service members and hopes to continue similar programming for schools across the Cape and Commonwealth in 2022.
