



# Oysters and Trees! Chesapeake Bay Service Learning

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Biology: Ecology and Evolution

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## Site Information:

Chesapeake Bay Foundation

Address: Philip Merrill Environmental Center - 6 Herndon Ave, Annapolis, MD 21403

Site Supervisors: Andrej Radoja and Chloe Cartwright

The site mission: To save the Chesapeake Bay so that it is healthy and resilient for both animals and people to thrive together(Chesapeake Bay Foundation, 2025).

## Issues Confronting Site:

Nutrient Runoff From Agriculture:

- Runoff from farms contains nutrients and sediment which make their way into the Chesapeake Bay. When levels of these nutrients, get too high, eutrophication events occur where algal blooms deplete the oxygen content of the Bay's waters, block sunlight for seagrasses, and release toxins into the water.

Low Oyster Population:

- Since the days of colonization, the oyster population in the bay has dropped to 3% of its previous population(NOAA Fisheries, 2025). Oyster are a keystone species that provide habitat, filter sediment and nutrients from water, and protect against storm surge and erosion.

## Impact:

- Made a meaningful contribution to oyster restoration and the fight against nutrient pollution in the Bay.
- Learned about the economic, cultural, and ecological aspects of the problems facing the Chesapeake Bay.

## Acknowledgments:

I would like to thank:

- My College Park Scholars professors, Dr. John Merck and Dr. Thomas Holtz
- My fellow alternative break students, Cheyanne, Sage, and Bria.
- My site supervisors/spring break leaders: Chloe Cartwright and Andrej Radoja
- My Alternate Breaks faculty member: Jennifer Gunnulfsen
- The Chesapeake Bay Foundation
- CBF Staff: Adele Thrush, Jared Planz, and Will Grinnell

## Activities:



Potting, loading, and planting Native trees with Clagett Farm



Preparing recycled oyster shells to grow baby oysters for the Bay

Future Work: My volunteer work gave CBD staff time to dedicate to new projects!



The “Light Tunnel” mechanically adjusts its panels to keep its interior at a constant temperature, using the sun’s energy to grow food year round



These solar powered buoys play recorded healthy reef sounds to attract organisms to live in newly established oyster reefs

## Bibliography



## Testimonial Video

