

Project Citizen Blue Team E-block 25

Seashell Swap





The Problem



Plastic pollution

Plastic pollution is becoming worse and worse without people even knowing.

On Cape Cod especially, there is a lot of pollution happening on beaches. Every summer there is a lot of tourists that come and trash beaches, parks, and just really everywhere. This causes harm to animals and the environment they live in. Plastic waste, including single-use items and fishing gear, can ruin sensitive habitats such as seagrass beds and dunes, and animals like birds, fish, crabs, and sea turtles can become entangled in fishing gear or mistaken single-use plastics for food

Tommy



Stats (Danny)

Our world is in danger

The images below show our world in the future if we don't clean up the pollution.

Globally, air pollution causes millions of deaths annually and water pollution causes:

- environmental damage
- bad waters
- waterborne diseases.

before



after

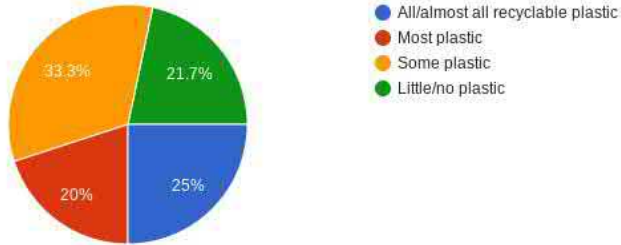


Stats (Danny)

Images of polls:

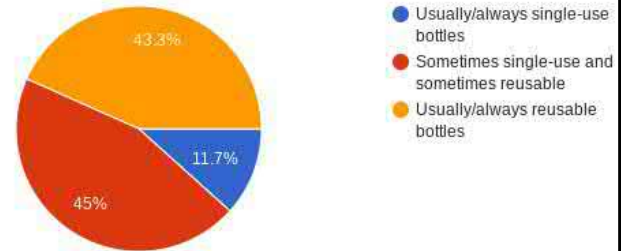
How much plastic do you recycle at home?

60 responses



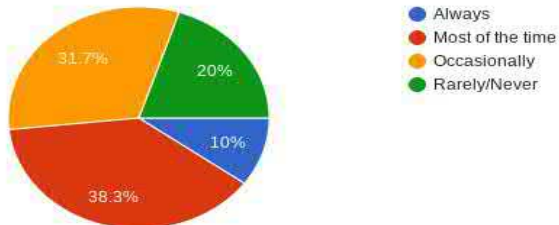
How often do you use single-use plastic water bottles v. reusable water bottles?

60 responses



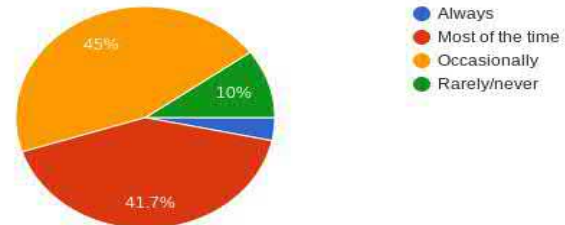
When you see trash on the beach, how often do you pick it up?

60 responses



When you go to the beach, how often do you see plastic trash?

60 responses



Lillian

What Has the Government Already Done for this issue?

Towns across the Cape have made plastic bans such as...

In Chatham: Balloons, plastic straws, plastic bags, polystyrene.

In Harwich: Balloons, single-use plastic bags, plastic water bottles, plastic restaurant containers and utensils, and polystyrene.

There are similar bans in Brewster, Truro, P-Town, Wellfleet, and Orleans.

Environmental issues can only be improved if we all work together. People will rarely do so by choice, so the government has a responsibility to our land to create valuable policies that positively aid the environment.

Preferably, we would have made more effective policies, but many people tend to focus on the financial effects of environmental policies, as opposed to the benefits it may have for our struggling ecosystem.



Cape cod issues ~Lizz~



Marine Debris is an extreme issue in Cape Cod. People are leaving behind plastic in the areas where unfortunately, marine life are left to be harmed.

Microplastics are in the ocean, killing the marine life, leaving some to be almost extinct, like the Pacific Loggerhead Sea Turtle. They are facing extinction by we, the people, leaving behind Plastic and Microplastic, creating a trash land almost 3x the size of Texas.



<https://www.nps.gov/caco/learn/nature/marine-debris.htm>

Plastic Pollution in Our World- Ella



“Bali produces roughly 1.6 million tons of waste each year, and of that, 330,000 tonnes is plastic waste. Sadly, due to a failure in waste management, much of that goes uncollected and some of it ends up in Bali’s rivers.” -[Finnsbeachclub.com](https://finnsbeachclub.com)



- Plastic pollution is a global issue impacting many regions around the world.
- One area that is particularly affected is the island of Bali in Indonesia, where the problem has become increasingly severe.
- Plastic had been in high demand ever since the pandemic which has caused plastic pollution to sky rocket.

Environmental Effects (Simona)

Plastic Pollution also affects the soil and crops because all the toxic chemicals get reassessed into the soil which kills all the crops and that causes people to be left with no food.



It also affects the climate because the toxic chemicals are released into the atmosphere which causes global warming.



Plastic Pollution also causes destruction to the environment the animals live in.

How plastic effects environment is that many animals are mistaking plastic for food and they consume it and they get sick after.



How You Can Help

Limit your plastic use at home by...

- Using reusable water bottles
- Avoiding plastic packaging,
 - Using reusable tableware such as cloth napkins, ceramic plates, and silverware
- Trying to use cloth/reusable bags for shopping and/or lunches

Lillian



Other...

- Volunteer for group beach cleanups, or organise your own
- Throw out your trash when you are out
- Advocate for limiting plastic use

The three "R's":

Reduce:

Avoid plastic products.

Reuse:

Reuse plastic water bottles/bags, or repurpose them in an art project, etc.

Recycle:

Bring the appropriate items to a recycling center near you, or get a service to pick it up for you.



Alternative Policies for Plastic Pollution.



**By: Logan Artair Finlay, Aaron Rofsky, Cameron
Mendes, Olivia Sanford, Hazel Lagg**



Plastic Pickup Community Service Penalties/Enforcements for Littering.

Cameron Mendes

Rules/Details

The policy, “Plastic Pickup Community Service Penalty for Littering” is about if your caught littering you will have to do community service for it, and pick up trash on the streets/beaches.

- You have to clean for at least 1 hour, but varies depending on how much were caught littering
- Once done with your community service you will be checked to make sure you were actually cleaning, if not you have to serve another hour
- If you refuse to clean anything you will be fined \$20-\$200



[National park services](#)



Plastic Pickup Community Service Penalty for Littering. - Hazel Lagg

The penalty if you are caught littering you will be doing community service for the town that you have littered in. This is a great punishment for people who would litter.

\$20 to \$200 fine.

Depends on how much you littered.



Community Service



Advantages:

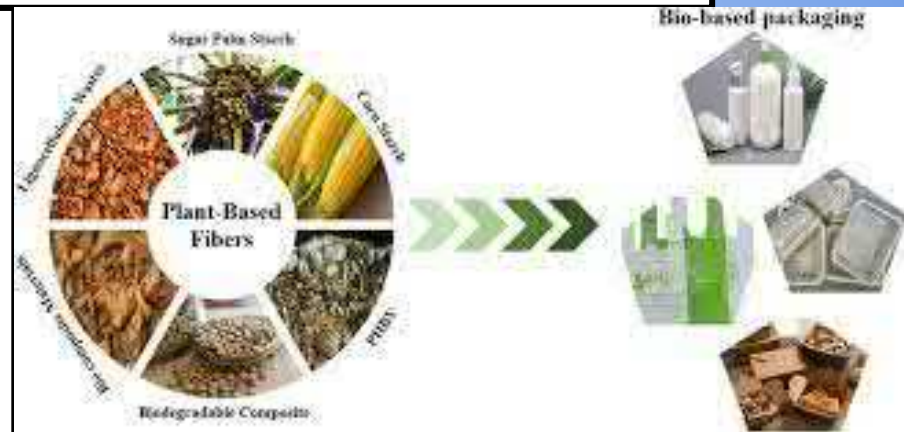
- People will learn their lesson not to litter again.
- People pick up trash with no pay.
- People become more aware of the effects of littering

Disadvantages:

- Somewhat harsh punishment for littering.
- May not affect people's attitude about littering.
- Doesn't address the issue of major companies or factories littering

Replace Single Use Plastics in School with Bioplastics, Paper.----Aaron Rofsky

- Anything that is plastic in schools will be Bioplastic instead.
- When you are done with the thing you have you have to throw it into a recycling can.



- Bioplastics that you use are made from a plant product.
- You can also help by growing more plants so that a species of plants won't die out.

Replace Single Use Plastics in School with Bioplastics, Paper.

Advantages and Disadvantages of Bioplastics - *Logan Finlay*

Information Source

Advantages -

- **Very recyclable and compostable**
- **Made from non-finite sources (renewable)**
- **Non-toxic**

Disadvantages -

- **Expensive to make (2-3 times more than plastics)**
- **Not much infrastructure to recycle it**
- **Takes up a lot of land to grow what it needs**



How it Works-Sabrina

Litter/Shell Exchange Station

- At each beach, next to the trash bin, we will set up a shell/stone/beach glass station and a sign
- The station could be:
 - A small covered container like a library box
 - An open basket attached to the trash bin
- The sign could say:

“Pick up any litter you see, drop it in the proper bin (trash or recycle), and take a seashell as a thank-you for helping keep our shores clean. Found a unique shell? We 'd love for you to add it to our collection to keep the station going for others to enjoy. Every little bit helps! ”



Location-Olivia

- The Seashell Swap Station will be set up at popular beaches, including Hardings Beach in Chatham and Bank Street Beach in Harwich. Initially, the focus will be on these two locations.
- The swap stations will be placed near trash cans, just before you enter the beach, encouraging visitors to pick up trash while enjoying their time by the water.



Hardings



Bank Street

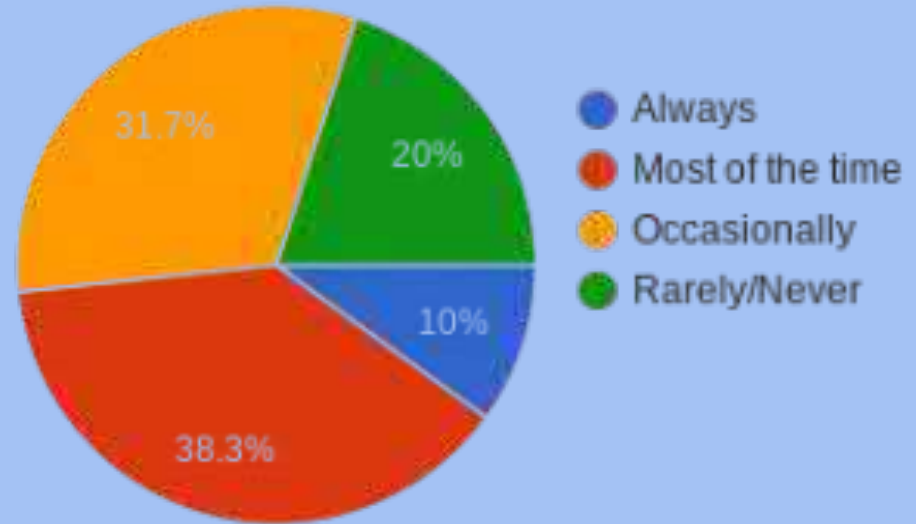


Purpose- Eloise

- To motivate people to pick up trash by rewarding them with a prize. For example, children will feel motivated to help the environment because they will be excited to get a shell.
- This chart shows that people don't usually pick up trash, so this project will help encourage more people.

When you see trash on the beach, how often do you pick it up?

60 responses



Maintenance Plan- Kaleb Meyer

This plan can be simple if each and every person treats it the right way to maintain its purpose and to not take advantage of it. In order to reach the goal of keeping our beaches clean we will need an involved community and the following supplies.

Supplies Needed:

- Shells
- A donated box (if not we will build the station)
- Poster Boards
- Wood
- Trash Bags
- Paint (for the station)

And a positive, strong, and Hard Working



Scenario- Lily Cutillo

- When you pick up trash, you walk to our invention and get a pretty shell for your work
- When helping the economy and placing the trash and plastic into the recycling bin provided next to the post where the shells sit.
- From there, once you've placed the trash in the recycling bin, you can pick up one or more shells, depending on how much trash you placed into the bin, and continue with your day.



Action Plan

By Bailey, Lee, Angel, Hadley and Lily H

How to get donations for the stand?

How to collect donations...

1. We can set up donation stands or information flyers in public places (e.g) grocery stores, coffee shops, parks, and beaches.
2. We can set up social media accounts promoting people to donate to cleaner beaches.
3. Creating a venmo or gofundme account to receive profits for the swap stand materials.



Bailey Forrest



CLEAN OCEAN

Harwich - People to Contact

Don Yannuzzi Jr. -
Director of Natural
Resources - could ask
about what we can do on
the beaches of Harwich



Lincoln Hooper -
Director of Public
Works - could ask
him if he is related to
the beaches. If he is,
ask what beaches
and where we could
put this seashell
library.

-Lee Stockwell

Eric Beebe - Director of
Harwich Recreation -
could ask for options for
Harwich beaches to set
the shells up



Who are people in chatham to contact?

1. Aimee Howell- Aimee Howell is the **Deputy Director of Community Services- Recreation & Beaches**. We could ask what kind of trash bins the beaches have, and we can also ask if they can come talk to us about whos in charge of the beaches.
2. GoldSmith Jill R- Jill GoldSmith is the Town manager of chatham we could ask her if we could put more money into trash cans or for community to get supplies to clean or beaches
3. LaCross, Leah- Leah Lacross is the director of the community services we could ask to have people to more focus on the beaches.

Angel



Town Meetings: How Will They Be Executed? - Lily Holmes

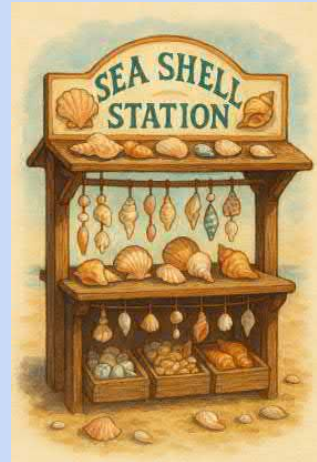
Town meetings will be executed by...

1. Firstly, raising awareness about plastic pollution (see 2nd slide) and also our solution (the swap stand.)
2. Then, we contact people (in either Harwich or Chatham) about the crisis.
3. Start a petition to be able to present the idea to a town meeting in hopes of getting a town to approve it.



Making an exchange station

The steps we're taking to create the exchange station start with gathering all the necessary supplies, as shown on the previous slide. Next, we'll choose the locations for the stations, begin building them, and collect all the seashells. Once everything is set up, the exchange station will be good to go!



MATERIALS

Wood

planks

Nails

Hammers

Paint

pens

Shells

Saw





Thank You!