

Plastic Awareness

Initiating Awareness in Your Community

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Introduction

We are a group of 8th grade students from Newtown Middle School in Pennsylvania. We participated in the [UNLESS Project](#), hosted by the Philadelphia Zoo. This project focuses on helping the environment by conserving electricity and water, and managing waste. We focused on waste management, specifically plastic bags and straws. After some thought and research, we held multiple bag drives and a straw refusal successfully. This guide will provide you with inspiration to replicate our project in your school and local community. It includes resources and information about the global plastic problem and an activity guide to help your students brainstorm about how to address the issue and become a part of the solution.

Research

Discovering the Problems of Plastic Pollution

Interesting Facts

- The Great Pacific Garbage Patch (GPGP) currently covers an estimated surface area of 1.6 million square kilometers, an area twice the size of Texas or three times the size of France.
- Researchers estimate that more than 8.3 billion tons of plastic has been produced since the early 1950s. About 60% of that plastic has ended up in either a landfill or the natural environment.
- Over 90% of seabirds worldwide have been found to have plastic in their bodies and the percentage is still growing.
- Researchers fear that such ubiquitous bags may never fully decompose; instead they gradually just turn into smaller and smaller pieces of plastic.
- Chemicals used to make plastic flexible can be toxic to wildlife and humans.
- The chemicals in plastic attracts other toxins in the environment.

Sources: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

Visuals

**U.S. CONSUMPTION = ENOUGH STRAWS
TO WRAP AROUND THE
EARTH'S CIRCUMFERENCE
2.5 TIMES A DAY!**



[The Last Plastic Straw](#)



[Plastic Awareness on Social Media](#)



THE PROBLEM WITH PLASTIC AND OUR OCEANS



80% of all marine debris found in the ocean is land based, and 80-90% of marine debris is made from plastic.

8 MILLION METRIC TONNES

OF PLASTIC IS DUMPED INTO THE OCEAN EVERY YEAR.

ENOUGH TO COVER EVERY FOOT OF COASTLINE ON THE PLANET



BY THE YEAR

2050

THERE WILL BE MORE PLASTIC THAN FISH IN OUR OCEANS.

THIS INFO IS POWERED BY



THE TOP 3 ITEMS FOUND IN THE WORLD'S OCEANS



1,140,222

PIECES

FOOD WRAPPERS & CONTAINERS



1,065,171

PIECES

PLASTIC BEVERAGE BOTTLES



1,019,902

PIECES

PLASTIC BAGS



Many marine species including turtles, fish, whales and seabirds consume or get trapped in plastic, which often results in death. They have been found with plastic bits in their stomachs, as well as plastic chemicals which have migrated into their bodies.

CHANCES ARE THAT IF YOU ARE EATING SEAFOOD, YOU ARE EATING PLASTIC TOO.

Informational Websites/Articles

Starbucks says: "One of the major issues with plastic straws is that they are too small and lightweight to be captured in modern recycling equipment." This article has a video that became popular in 2015, showing that plastic straws suck because of what Starbucks said in the above statement, and also other statements from McDonalds, Marriott Hotels, and others.

<https://www.businessinsider.com/why-plastic-straws-suck-ocean-pollution-sea-turtle-starbucks-2018-7>

"The movement to ban plastic straws is growing, but phasing them out can be more complicated than it seems" as said by Sarah Gibbens—The Article Editor—also major corporations including Bacardi Rum, Bon Appétit Management, Alaska and American Airlines have said they are going to phase out plastic straws in the next decade. <https://www.nationalgeographic.com/environment/2018/07/news-how-plastic-straw-bans-work/>

Videos about Plastic Pollution

- [Drowning In Plastic](#)
- [Plastic Bags Into Sleeping Mats](#)
- [Kurzgesagt Video](#)
- [Plastic Straw Makers Brace for Bans](#)

Kurzgesagt on Plastic Pollution



Video About The Plastic Problems

Plastic production has increased by 620%

Courtesy: iStock.com/viktoria



Alternatives and Ways to Reuse Plastic Bags

- [Canvas Bags](#)
- [Juco Bag \(Basket Bags\)](#)
- [Paper Bag](#)
- [Biodegradable Bags by Envigreen](#)
- [DIY Tote Bag](#)
- [Sleeping Mats for the Homeless](#)



Alternatives to Plastic Straws

- No straw
- Straw straws and bamboo straws
- Paper straws
- Metal straws
- Glass straws
- Lolistraws
- Ice straws
- Silicone straw



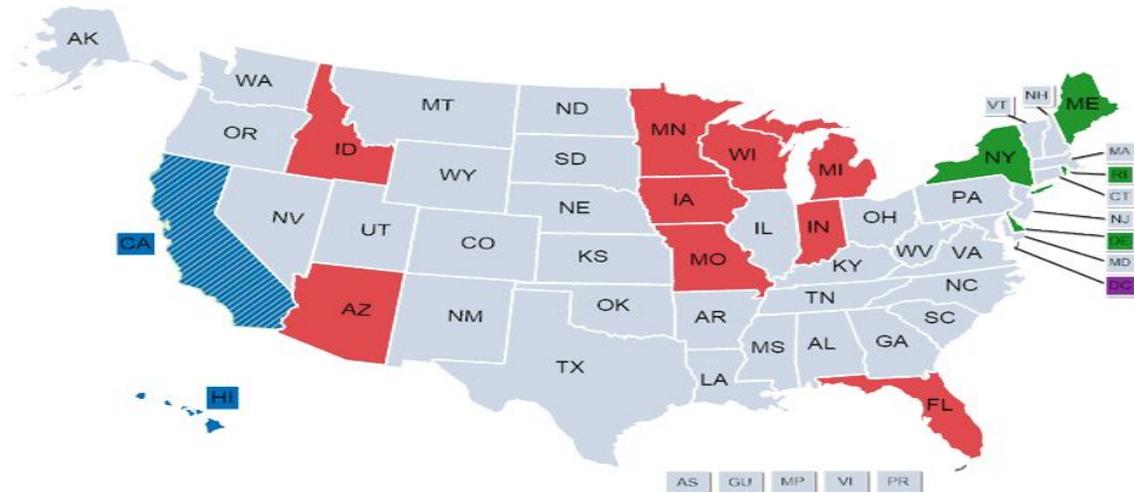
Community Awareness

How to spark change in your community

Plastic Bans

<https://www.fastcompany.com/40580132/here-are-the-u-s-cities-that-have-banned-plastic-straws-so-far>

States with Enacted Plastic Bag Legislation



(June 1st, 2018)

LEGEND	
	Bans
	Fees or Taxes
	Labeling, Recycling or Reuse Programs
	CA has both a ban and labeling, recycling or reuse programs
	Preemption

Email Legislators

We have tried to reach out to some of our legislators in the Newtown area. This includes Charles F. Schwartz, the mayor of Newtown, and Perry S. Warren, another legislator in the Newtown area. In the future, we may email other experts around where we live.

[Find Legislators Near You](#)

[Legislator Letter Template](#)

Contact Restaurants About Plastic Straws

- Contact local restaurants and ask if they would be willing to do a straw refusal for a specified amount of time or only give out straws at customer request
- Have them compare their straw usage before and after the refusal
- Through this you can encourage others to use fewer plastic straws

Restaurant Letter Template

Below is a sample of a letter to distribute to local businesses and restaurants. This way, change is sparked and spread.

Dear Sir or Madam,

Hello! We are a group of _____ grade students from _____ working on a project focused on reducing waste in the environment. We're encouraging helpful alternatives to plastic straws, bags, and more, aimed at local restaurants. We'd like your business to partake in a challenge in order to help spread awareness on the problem of plastic waste. The challenge is about avoiding the widespread use of plastic straws in beverages, unless a customer requests one. While it is not part of the challenge, we would appreciate it if you would give us statistics on the number of plastic straws consumed daily by customers and send us the results afterwards. We would like to hear back from you soon. Thank you!

Sincerely,

Activities

How you can help

Bag Drive Guide

- Send emails to local businesses or recyclers that can recycle plastic bags properly.
- Send emails to classrooms, teachers, parents and students.
- Make posters, raise awareness, and start a club.
- Buy candy and other prizes to give out at the end of the drive.
- Give out hall passes (if needed) and slips for recording the bag number.
- Prepare an area for bag storage.
- Start a bag drive (2 weeks recommended).
- Collect bags to store in a safe and secure place.
- Collect data and announce the leading homeroom.
- Hold a party for the winner and give out prizes at the end.
- Hand bags off to the predestined recycler.
- Celebrate your team's effort and accomplishments!

Bag Drive Guide

1. Invite a group of people in your local community or school to be a part of your bag drive.
2. Research all about plastic pollution with others to brainstorm ideas about your drive, facts you may want to know, and to gain knowledge of what your group will be covering.
3. Create a plan revolving around your future bag drive. Find storage for bags, announce dates and times, ask for permission from school or community officials, assign group members roles in your bag drive, and create flyers and posters to advertise your bag drive and group.
4. Announce any last changes or plans to increase awareness and set the bag drive in place concretely. Host the bag drive and start all drive assignments and work.
5. During the bag drive, collect as many bags as your group can, check in with all drive personnel and resolve any adjustments. Solidify the drive for proper use and count bags carefully.
6. Conclude your bag drive and inform the community of closing dates, optional rewards and prizes, or any other alterations to the original plan for the bag drive conclusion. Count any extra bags, and store all collected bags in the same relative proper area.
7. Recycle/reuse/upcycle any remaining bags, clean up any bag drive operations, optionally reward those who earned prizes, announce optional winners or honorable mentions, celebrate your group's accomplishments and effort, and plan any optional future events.

Recycling Club Guide

- Get a small group of 5-13 people together to discuss recycling.
- Do research, and contact teachers & students for more support or a larger group.
- Prepare for the bag drive by making plans, ideas, and goals.
- Prepare physically for the drive by assigning jobs and areas.
- Hold the bag drive. Make sure members cooperate and work efficiently.
- Candy and prizes will be distributed by club members.
- Contact others to recycle bags properly and make a deal.
- Celebrate!! Dismantle club if there are no future events.
- Hold future events in the same way if able to.

Plastic Straw Refusal

- Ask your principal for permission to have a school wide straw refusal for a specified amount of time or to use alternate straws.
- Promote the straw refusal by making announcements, hanging up posters, and if you have TVs in the cafeteria, have them broadcast a screen with content advertising the refusal.
- https://docs.google.com/document/d/1FxDwfOHSAvv-E0PWuwUXQIvTT8xLxVkYiaNz_6LTwYc/edit

Thank You

We hope this guide helps you to become an active solution to the great plastic problem. If you are seeking any advice while conducting your projects, feel free to reach out to our teacher Melissa Metzler (MMetzler@crsd.org). We would also love for you to email us any pictures of projects you conduct or plans you put into action.

Harrison.George.Jude.Jack.Jordana.Christian.Austin.Charles. David. Dylan

Thank you for watching!!

