



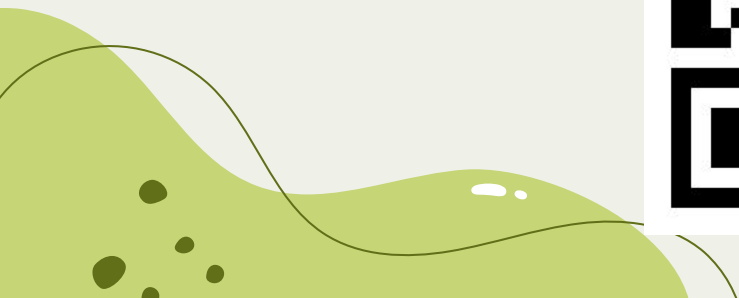
From Streams to Seas: Combating Litter for a Cleaner Environment

A Gold Award project

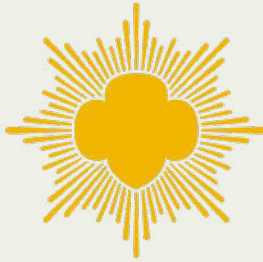
Maya Shamiyeh - Troop 60193




Pre-Presentation Survey



My Gold Award



- Linking local littering  Marine pollution
- Working with the Watershed Institute & Montgomery Environmental Commission to educate and spread awareness
- Collecting trash at the annual Montgomery stream cleanup
- Using that trash to create a sculpture

What is Littering/Litter?

What is your definition of littering?

What types of litter have you seen?

Litter is defined as waste products that have not been discarded properly.



The Turtle Hospital in Marathon, Florida

Sea turtles can't digest these synthetic materials. They have little to no chance of survival once it's in their bodies, without the help of organizations like The Turtle Hospital.





Link from Land Littering to Marine Pollution

COMMONLY FOUND PLASTICS

- Cigarette Butts
- Bottle Caps
- Straws
- Cups & Plates
- Single Use Bags
- Food Wrappers
- Beverage Bottles

PLASTICS IN THE OCEAN

MICROPLASTICS

ENTANGLEMENT

BOATS/NETS

INGESTION

LITTERING

RAIN & WINDS

STREAMS & STORM DRAINS

<https://marinedebris.noaa.gov/>

The infographic illustrates the path of plastic waste from land to the ocean. On the right, a green land area shows buildings, cars, and a person littering. A winding road and stream lead to the ocean. Labels include 'RAIN & WINDS', 'LITTERING', and 'STREAMS & STORM DRAINS'. In the ocean, a boat is labeled 'BOATS/NETS', a whale is labeled 'ENTANGLEMENT', and a turtle is labeled 'INGESTION'. A large cloud of 'MICROPLASTICS' is shown in the center. The title 'PLASTICS IN THE OCEAN' is prominently displayed. A NOAA logo and the website 'https://marinedebris.noaa.gov/' are at the bottom.



3 WAYS
PLASTIC
GETS INTO
THE SEA

Marine Pollution: Impact on Animals



100% of turtles have eaten plastic in their lifetimes

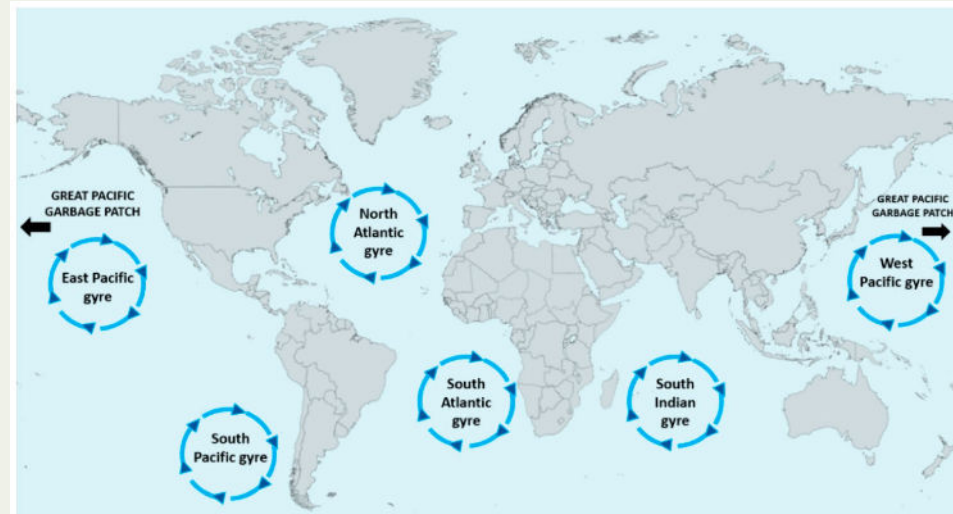


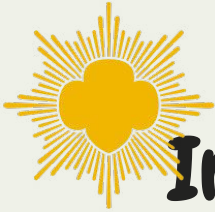
98% of albatross are believed to have ingested plastic at some point in their lives

The leading cause of marine animal death, alongside fishing, is strangulation and starvation

Garbage Patches

- Large areas of the ocean where marine debris collects.
- Formed by rotating ocean currents called “gyres.”
- Five gyres, each one has multiple garbage patches of varying sizes
- Largest garbage patch, Great Pacific Garbage Patch, is 2x the size of Texas
- No one knows its exact size, as larger trash sinks to the bottom and microplastics float on top



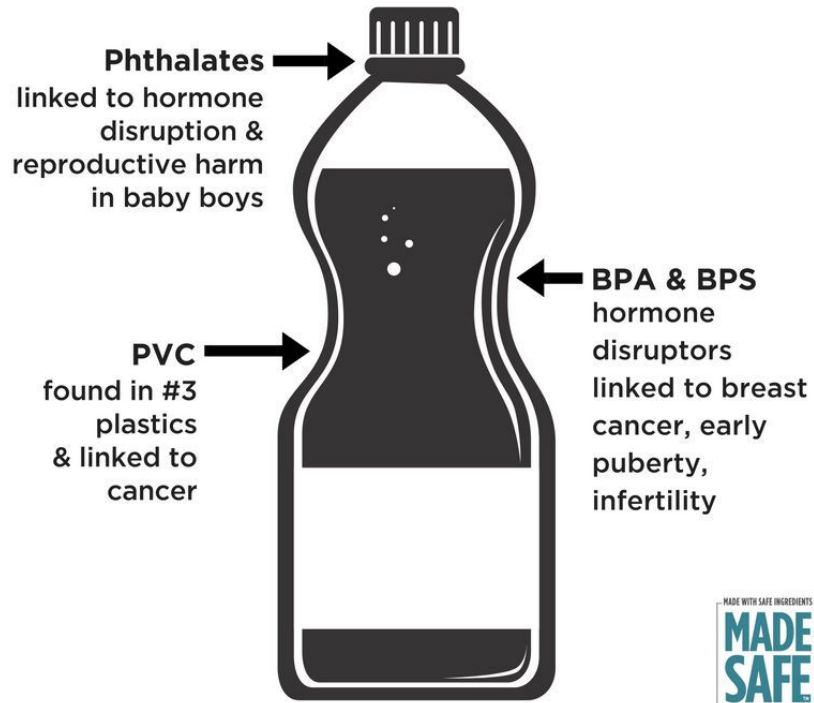


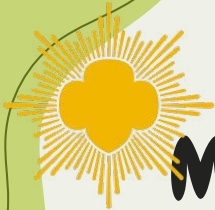
Impact on Humans



We ingest microplastics through seafood

Toxic Chemicals in Plastics



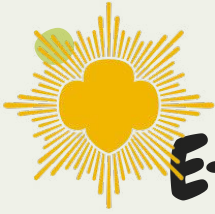


Microplastics



Where microplastics can be found:

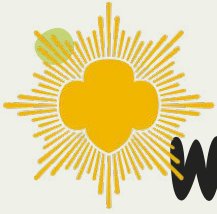
- In our bodies
- Dust
- Seafood
- Sea ice in Antarctica
- The bottom of the Mariana Trench, the deepest body of water in the world
- The peak of Mt. Everest
- In the air



Effects of Microplastics on Humans and Animals

- Can disrupt reproductive systems, stunt growth, diminish appetite, and cause tissue inflammation and liver damage in marine animals
- Can release hazardous chemicals into the bodies that consume it, and the bodies of water
- Reduces the ability to digest fats in humans



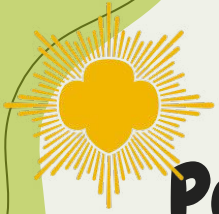


Ways You can Help

- Reduce Your Use of Single-Use Plastics
 - Refuse any single-use plastics that you do not need, like straws, plastic bags, plastic utensils
 - Don't buy plastic waterbottles unless you really need to, keep a reusable waterbottle with you everywhere
- Recycle properly
 - Make sure your house has proper recycling, and check on your single-use plastic items to see if you can recycle them
 - If someplace doesn't have a recycling bin, take your plastic home to recycle it
- **DON'T LITTER!**



<https://ny.pbslearningmedia.org/resource/ee18-sci-waterpol/kids-go-green-litter-and-our-oceans/>



Post Presentation Survey

