

SUSTAINABILITY CHALLENGE

PLASTIC PLEDGE
JUNE 2020 - WEEK 3



DISCOVER>

HOW PLASTIC AFFECTS THE NATURAL ENVIRONMENT

For the next 2 weeks, we'll focus on the health impacts of plastic. Specifically this week, we're highlighting some of the environmental impacts and how plastic affects wildlife. As we learned in week 1, only 9% of plastic gets recycled while 12% gets incinerated, and 79% of it accumulates in landfills and natural environment ([Gettyer et al. 2017](#)). The plastic that enters our natural environment through **illegal dumping and litter** creates many problems for wildlife. Particularly creatures in the ocean are in danger since most of that trash eventually makes its way to the ocean ([see a quick video here](#)). Some of the plastic accumulates in large **garbage patches in the ocean** and other plastic is simply not accounted for (NOAA 2020). Since plastic is made to last and does not degrade easily, it breaks down into smaller and smaller particles called microplastics ([learn more here](#)). Microplastics are easier to ingest because of their small size, and they hard to clean up. Here are two main ways plastics adversely affect wildlife:



Ingestion - Wildlife can eat plastic either by mistaking it for food or if microplastics are already in their food. It's been estimated that 90% of seabirds ingest plastic ([Wilcox et al. 2015](#))

Entanglement - Marine creatures can be trapped or injured by fishing nets and gear and other plastic floating in the ocean. A video that gained a lot of attention showed a [plastic straw in a sea turtle's nose](#).

Besides its impact on the ocean, plastic has other negative environmental impacts such as [damage to our soil](#) and water through landfill leaching as well as contribution to air pollution and greenhouse gases from incineration and manufacturing ([Our World Data 2020](#)).

ADJUST >

TIPS TO HELP THE NATURAL ENVIRONMENT

The issue of plastics in the natural environment can be overwhelming. However, there are personal steps we can take to minimize our impact and perhaps inspire and educate those around us. A few of these steps include:

Don't Mess with Texas - Do what you can to minimize litter. This includes making sure things do not blow out of your trash bin or vehicle. In addition, make a commitment to pick up at least 10 pieces of litter a week. This [video explains the impact North Texans can make](#) picking up litter we see around our neighborhoods, work, etc.

Use a Trash Station - Instead of having multiple trash collection areas around your house, collect trash in a few stations. This will minimize the amount of plastic bags you use to collect the trash. Here at HSC, try to use the main collection areas such as in a break room instead of a desk or personal trash can. Again this minimizes plastic bags and gets you up and moving!

Only Use Bottled Water in Emergencies - Americans consume over 70 million bottles of water a day ([source](#)), and as mentioned, many of these bottles do not get recycled. Be prepared and carry a reusable water bottle. On campus, we have over 45 stations to refill quickly and safely.

Spread the Word - As you are choosing to use less plastic, help others make similar decisions. Get your kids, roommates, or friends involved. When getting takeout or eating at restaurants, bring your own cutlery with you, and share with the restaurant why you are doing so.



GO BEYOND >

GO DEEPER

This topic is vast, so we encourage you to learn more on your own. Here are a few resources, articles, and videos:

- [The Great Garbage Patch is Not What you Think It Is](#) - A very informative video for understanding ocean plastic
- [Reverse Litter](#) - Informative website specific to our area. You can take a pledge and learn some facts.
- [Data on Plastic in the Ocean](#) - If you like looking at data to make sense of issues, this website really goes in depth about where plastic is in the ocean, how it got there, and issues.
- [The Ocean Cleanup](#) - A project that is working on cleaning up plastic in the ocean
- [Plastic Pollution Coalition](#)