

BEYOND RECYCLING

Earth Day 2020 - Plastic Straws

Plastic straws were designed as a single-use product that we use to consume drinks before throwing them away after just one use. It is estimated that within the United States alone, 500 million plastic straws are used every day. A study conducted in 2010 revealed that 8 million tons of plastic enters the ocean every year, equivalent to emptying a garbage truckload into the ocean every minute. A report from the World Economic Forum suggests that if the pollution rate continues to follow the current trend, by the year 2050, our oceans will be home to more plastic than fish, and plastic will be entering the ocean at a rate of four garbage truckloads per minute (<https://spoonuniversity.com>).

But there is good news!! There are several eco-friendly alternatives to help combat and reduce plastic pollution to our environment. Some examples that each of us can do include:

- ✓ *Instead of choosing plastic straws, consider investing in reusable, recyclable, or biodegradable straws made from glass, stainless steel, paper, bamboo, silicone, seaweed, agave, or dry noodles.*
- ✓ *When dining out in restaurants, opt for no straw. Simply ask the wait staff to not include a straw with your drink.*
- ✓ *Purchase a reusable water bottle or purchase cups with reusable straws and lids.*
- ✓ *Use reusable shopping bags at the grocery store instead of plastic bags.*
- ✓ *Buy foods in bulk to reduce the quantity of plastic packaging/containers.*
- ✓ *Pack lunches or snacks in reusable Tupperware rather than plastic bags.*

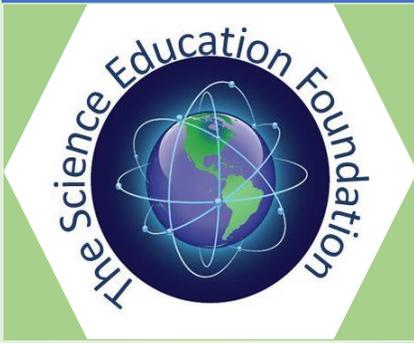
Plastic Straws CANNOT be easily recycled and are NEVER fully biodegradable

Plastic is designed to be extremely durable and is commonly made from type 5 plastic or polypropylene. Plastic straws are not biodegradable and are not easily recycled. Although type 5 plastic can be recycled it is not accepted by curbside recycling programs, resulting in millions of plastic straws ending up in landfills, waterways, and polluting the oceans.

Plastic straws take nearly 200 years to decompose.

“Plastic straws are not biodegradable – instead, they slowly fragment into smaller and smaller pieces of plastic (a.k.a. microplastics), which fish and marine animals mistake for food, ingesting the plastic. It is estimated that up to 71 percent of seabirds and 30 percent of turtles end up ingesting plastic to their stomachs.”

- Rubicon Global (<https://www.rubiconglobal.com/blog/paper-straws-better-environment/>)



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Harmful Effects to Wildlife

Plastic trash and particles are now found in most marine and terrestrial habitats, including the deep sea (i.e., Pacific Garbage Patch), the Great Lakes, coral reefs, beaches, rivers, and estuaries. Marine debris affects the marine ecosystem directly, through ingestion, entanglement, and alteration of the ecosystem; and indirectly, by contributing to the movement of invasive species. As of January 2020, data from Ocean Conservancy's TIDES system showed that straws/stirrers are the 4th most found ocean trash item recovered in cleanups, making up 7.84% of total trash recovered.

Plastic marine debris is of grave concern, due to its longevity in the marine environment, the physical and chemical hazards it presents to marine and bird wildlife, and that it's frequently mistaken as food by seabirds and fish.

Plastic straws are especially dangerous to seabirds as they are easily picked up and swallowed, suffocating and choking the bird. Over 1 million seabirds die each year from ingesting plastic. Once plastic is swallowed, it cannot be digested and gets stuck in the stomach of the animal. Plastic can fill the stomach of a marine animal preventing it from eating nutritious food, which ultimately results in death by starvation.

PHYSICAL THREATS	CHEMICAL THREATS
ENTANGLEMENT	Bioaccumulation of the chemical ingredients of plastic or toxic chemicals sorbed to plastic. Release of harmful toxins like bisphenol-A (BPA) during decomposition.
GASTROINTESTINAL BLOCKAGE	
REEF DESTRUCTION	

References:

<https://www.coastalcleanupdata.org>, accessed on January 10, 2020.

<https://get-green-now.com/environmental-impact-plastic-straws/>, accessed on January 10, 2020.

<https://epa.gov/trash-free-waters/toxicological-threats-plastic>, accessed on January 13, 2020.

<https://nationswell.com>, accessed on January 13, 2020.

<https://spoonuniversity.com>, accessed on January 12, 2020.