

How Are Citizen Scientists Helping Solve Our Balloon Problem?

(1) Plastic pollution is one of today's biggest environmental challenges. Minuscule plastic particles called microplastics occasionally appear in our drinking water, food, and even the air we breathe. Environmental engineers and some other environmentalists are trying to decrease their use of single-use plastic bags, bottles, and straws. Nevertheless, one source of plastic pollution is often **overlooked**: balloons.



More than 100 balloons were collected at the Edwin B. Forsythe National Wildlife Refuge in New Jersey. Source: Flickr/US Fish and Wildlife Service

(2) To begin, it is a common display at graduations, sporting events, and other celebrations to release balloons because these "feel-good" acts insert excitement to an event; however, they inflict **long-lasting** and potentially deadly consequences on the environment and wildlife.

(3) Balloons filled with helium can travel hundreds or even thousands of miles. Eventually, they land as **litter**, often in natural areas. Balloon debris remain on beaches, rivers, lakes, oceans, forests, and mountains. In addition, balloons are significant dangers to wildlife, livestock, and pets. Animals can be injured or killed from eating balloon fragments, or they can get tangled in long balloon ribbons or strings. Besides, since latex balloons are soft and malleable, they can easily enter an animal's digestive tract. This can cause obstruction, **starvation**, and death. Latex balloons are the deadliest form of marine debris for seabirds.

A Clever Solution to a Tough Problem

(4) **In view of the fact that** plastic pollution has been considerably growing in our planet, Scientists like Lara O'Brien are researching how widespread balloon pollution is. It is not easy to track balloon debris. In 2019, an event called *the International Coastal Cleanup* found more than 104,150 balloons around the world. Almost half of them were in Central America.

(5) **Considering that** there are uncountable balloons released every year, O'Brien knew she needed a lot of help to collect data. In 2019, she created a tool called "**a citizen science survey**" to let everyday people track and map balloon debris. The anonymous online survey allows people report balloons that they find while they are doing everyday things like walking the dog. Questions in the survey ask for information like the location, date, and type of balloon found.

(6) Consequently, volunteers can submit the exact GPS coordinates of balloon debris in real time. This geospatial data is immediately uploaded onto an interactive map. The map shows where released balloons are and how common and **widespread** balloon waste is.

Citizen Scientists Are Helping to End Balloon Pollution

(7) This tool allows O'Brien to complete two important tasks. First, it helps raise awareness about the dangers of balloons. Secondly, the data **gathered** will help influence policies regulating celebratory balloon releases. Since the survey began, citizen scientists have submitted surveys and photos from all over the America Continent. In 2019 people reported balloon released in Florida State in the USA, and they landed far away in Guajira, Colombia. Some reports even came from Iceland, Australia, and the United Kingdom.

(8) Thanks to research like this, **awareness** of balloon pollution is growing. Nowadays, more people are choosing to use balloon alternatives; besides, a growing movement is urging schools, businesses, and other organizations to stop balloon releases. In the USA, California, Connecticut, Florida, Tennessee, and Virginia have all passed laws prohibiting the deliberate release of balloons. Others, including Maryland, Kentucky, Arizona, Illinois, and Hawaii, are considering similar **bans**. Some cities from Scotland, England and Netherlands have totally **banned** plastic balloons, same thing in some Africa States.

(9) To report balloon litter, visit balloondebris.org. You can also help make a difference by talking with your friends and family about the dangers of balloon releases. Don't forget to use environmentally friendly alternatives and properly dispose of any balloons you use or find.

EXERCISE 1

Check the words in blue within the text. Match them with their corresponding synonym(s).

- | | |
|-----------------|-----------------------|
| 1. overlooked | garbage / waste |
| 2. long-lasting | prohibitions |
| 3. litter | consciousness |
| 4. starvation | unnoticed / unnoted |
| 5. widespread | collected |
| 6. gathered | long period of hunger |
| 7. awareness | very durable |
| 8. bans | extensive / broad |

EXERCISE 2

Answer the following questions

- Mention if the following statements are **TRUE (T)**, **FALSE (F)** or **NOT GIVEN (NG)** in the text:
 - People are not so conscious of the dangers of balloons. ()
 - People are really trying to prevent the consumptions of bottled water. ()
 - Balloons can float long distances thanks to the latex that composes them. ()
 - Animals can die even if the balloons were released thousands of miles away. ()
- From paragraphs 4, 5 & 6 we can understand that... (Choose two answers)**
 - Lara O'Brien found more than 104,000 balloons around the world.
 - Part of America continent negatively contributes with around 50% of balloon debris found in the world.
 - Lara's survey helps to identify balloon debris more quickly.
 - With Lara's tool people can report animals injured by balloons.
- Which of the following statements is NOT mentioned in paragraphs 7, 8 & 9**
 - Lara's research has inspired some states in USA to create regulations regarding balloon releases.
 - Any person in the world can report balloons debris in balloondebris.org.
 - All countries are planning to establish laws in relation to balloon releases.
 - More and more people are choosing alternatives to use balloons properly.

ANSWER TO THE QUESTIONS BY USING COMPLETE ANSWERS. Use phrases of minimum 4 sentences that need to be properly connected

4. Who is Lara O'Brien and what is it that she is doing?

5. Where did they find the most amount of balloons debris in 2019?

6. Who created a tool to track balloon debris?

7. What is *citizen science survey*?

8. What type of questions do we find in the "*citizen science survey*"?
