

## How Are Citizen Scientists Helping Solve Our Balloon Problem?

(1) Plastic pollution is one of today's more difficult environmental challenges. Minuscule plastic particles called microplastics sometimes appear in our drinking water, food, and even the air we breathe.

Environmental Engineers are trying to reduce their use of **single-use** plastic bags, bottles, and straws. But one cause 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/U.S. Fish and Wildlife Service

(2) To begin, **release** balloons is a common spectacle at events similar to: graduations, sporting events, and other celebrations. These **"feel-good"** acts insert enthusiasm of an event; however, they cause **long-lasting** and potentially fatal consequences on the environment and wildlife.

(3) **Secondly**, balloons full of helium can travel hundreds or even thousands of kilometers. Eventually, they land as **litter**, often in natural areas. Balloon debris are usually located 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 flexible, they can easily enter an animal's digestive area. This can cause obstruction, **starvation**, and death. Latex balloons are the deadliest form of marine debris for seabirds.

### A Clever Solution to a Difficult Problem

(4) Since plastic pollution is constantly growing in our planet, some scientists like **Lara O'Brien** are researching how widespread balloon pollution is. It is not easy to have the trajectory of 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) Thousands of balloons released every year, for this reason O'Brien knew she needed a lot of help to collect data. In 2019, she created an online instrument called **"a citizen science survey"** to permit everyday people revise and map balloon debris. The anonymous online survey permits 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 discovered

(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 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 received surveys and photos from all over American Continent. Last year people reported balloon released in Washington State and far away as Florida and they landed in Guajira, Colombia. Some reports even came from Iceland, Australia, and the United Kingdom.

(8) Thanks to investigation like this, **awareness** of balloon pollution is growing. More people are choosing to use balloon alternatives. **Besides**, a growing movement is influencing schools, businesses, and other organizations to stop balloon releases. California, Connecticut, Florida, Tennessee, and Virginia have prohibited the deliberate release of balloons. Others, including Maryland, Kentucky, Arizona, Illinois, and Hawaii, are considering similar **bans**.

(9) Finally, to report balloon litter, google [balloon debris survey](#). 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 classify any balloons you use or find.

#### EXERCISE 1

Check the words **in blue** in 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

**I. 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 are released thousands of miles away. ( )

**II. 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 American 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.

**III. 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 about balloon releases.
- Any person in the world can report balloons debris in [balloon debris survey](#)
- All countries are planning to create laws in relation to balloon releases.
- More and more people are choosing alternatives to use balloons properly.

### EXERCISE 3

Answer the questions by using complete answers. Use phrases of minimum 3 sentences that are properly connected.

Who is Lara O'Brien?

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What is “citizen science survey”?

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What type of questions do we find in the “citizen science survey”?

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