



Innovation Challenge: Plastic Pollution

Student Guide

Welcome to the EarthWays Center Innovation Challenge! This activity is taking place in partnership with [Mississippi River Plastic Pollution Initiative](#). Learn how to collect data on plastic pollution in your community and develop your own innovative solution. Start collecting data April 1 and submit your project idea online by April 30. Contact Maggie at mmccoy@mobot.org with any questions.

Where is the Plastic Pollution?

Please track all data for this project between **April 1 and April 25** for it to be considered in the analysis done by University of Georgia. To collect the best data for this project, plan to clean up and log data for 30 minutes. Collect data any time of year to help inform scientists about the issue of plastic pollution.

1. Get started by downloading the free Debris Tracker app on Android or iOS.
2. Open the app and allow it to access your location, so we can collect geospatial data on where you're tracking and where you're finding litter. The app is a high-tech data card, designed for data collection in the field to generate the highest quality scientific data.
3. Select "Start Tracking" and search for MRCTI. Select the MRCTI list and continue.
4. Once you've selected the MRCTI list, you're ready to start tracking litter that you see. Scroll through the categories to see litter items. You can also search for specific litter items with the search bar at the top of the screen.
5. Record the number of items you find of each litter type by tapping the "Add" button. You can use the +/- buttons to change the number or click directly on the number to type in the amount. Once you tap "Add" you'll see the count increase on "Manage Items." This will display the total number of items logged in your session.
6. If you click Manage Items, you can see a map of what you've tracked so far. Here, you can also delete items if you've added something accidentally.
7. When you're done tracking, click "Continue."
8. You'll see a summary of what you've collected. You can also add photos to your log. When you're ready, click "Save Session." If you haven't already logged in, you'll be asked to log in or sign up for an account. You can register through email, Facebook, or SciStarter.
1. Wait for your data upload to go through. You'll see a checkmark when it's complete. Be sure to collect all trash and dispose of it responsibly.
2. You're all done! Thank you for tracking!

Once you've uploaded the data via the app, view and download it through the [Marine Debris Tracker](#) website.

Why Is It There?

View the data you collected online at the Marine Debris Tracker website or look at the map created within the app. Look for patterns in what you collected. Below are some questions to help get you started looking for patterns and to think critically about the data.

1. What category of trash did you collect the most? Why do you think that was the highest?
2. What patterns of waste did you find? For example, was there more trash in some areas rather than others? Were certain types of trash more common in some areas? Why do you think that is?
3. Where is the plastic pollution coming from? Why?
4. How have patterns of plastic pollution in the community changed over time? (This can be based on your observations or research.)
5. Why do people in our community use single-use plastics?
6. What are the alternatives to single-use plastic and what are the barriers to using them?
7. How do people in the community learn about the effects of plastic pollution?
8. What perspectives about plastic waste are held by community members and public servants?

What Can We Do About It?

Once you have identified patterns in the data, now it is time to think about what we can do about it. Brainstorm a list of actions that we can take to reduce plastic pollution in our environment based on your own observations. Is it best to add trash or recycling bins to certain areas? Should we be seeking more plastic alternatives in our packaging? What new policy or community action would help? At EarthWays Center, we want to hear what your innovative solutions and ideas are to this problem of plastic pollution in our water.

Tell us about your solution in one of the following ways.

1. Video that is 2 minutes or less
2. Picture of a solution you designed
3. 1 page written description
4. Letter to a local, state, or national official describing your idea

Submit your ideas by **April 30** and be entered into a drawing for a Zero Waste Prize Package!

Submission Guidelines

Submit your ideas online. Submission link will be on the [Innovation Challenge](#) webpage. Please include the following items in your submission.

1. A screenshot or written description of the trash you collected
2. A drawing or written description of the patterns you observed in the pollution
3. Your solution as a video, picture, written description, or letter

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