



Marine Debris Tracker

Citizen Science Field Guide

UGA Global Community Cleanup



UGA Global Community Cleanup

In celebration of Earth Day, Bulldogs everywhere are encouraged to clean up your community, wherever that may be.

Our goal is to remove **100,000 pieces of litter** to help beautify and unify communities across the state of Georgia and around the globe. Throughout the pandemic we've been reminded that the wellbeing of our communities is paramount, and this includes the health of our environment. We're calling all Dawgs who are able to serve your community by safely picking up litter for at least 30 minutes during Earth Day Thursday April 22 through Sunday April 25, 2021.

Your citizen science efforts will help on both Earth Day and long into the future as the data you gather is applied to shape long-term solutions. Let's demonstrate anew that the UGA community is a global force for good.

In this guide, you will find:

- Why citizen science data collection is important
- How to collect data with Debris Tracker
- Where to collect data



TO CELEBRATE
EARTH DAY 2021,
BULLDOGS EVERYWHERE
ARE ENCOURAGED TO
CLEAN UP YOUR COMMUNITY,
WHEREVER THAT MAY BE.



Litter in our Communities

To effectively fight litter, we need information about where and what it is in our community. Where is it accumulating? Where did it originate? This can be difficult for city workers to quantify, especially when they are overburdened with keeping it picked up. The Debris Tracker app can provide valuable information to those in charge of fighting litter and can help local governments effectively manage resources and create policies to keep litter off our streets and out of our waterways.

Keep Athens-Clarke County Beautiful is the lead agency working on litter abatement in Athens, Georgia, and is looking forward to getting the entire community involved in more thoroughly mapping and quantifying litter in Athens-Clarke County. Having many eyes on all areas of Athens will be essential for understanding the issue and creating solutions for a cleaner and more beautiful community.

Power in Numbers: How Community Science Can Help

Whether you're at the beach, at a city park, or even just on a walk, plastic pollution is usually not hard to find when you're looking. The amount of plastic pollution far exceeds the capacity of researchers to collect data on what is ending up in the environment, which is critical for informing both science and solutions. That's where community science comes in. Involving local communities in gathering data on what kinds of litter in their communities helps us create a bigger picture of the global plastic pollution problem - one piece of plastic at a time.

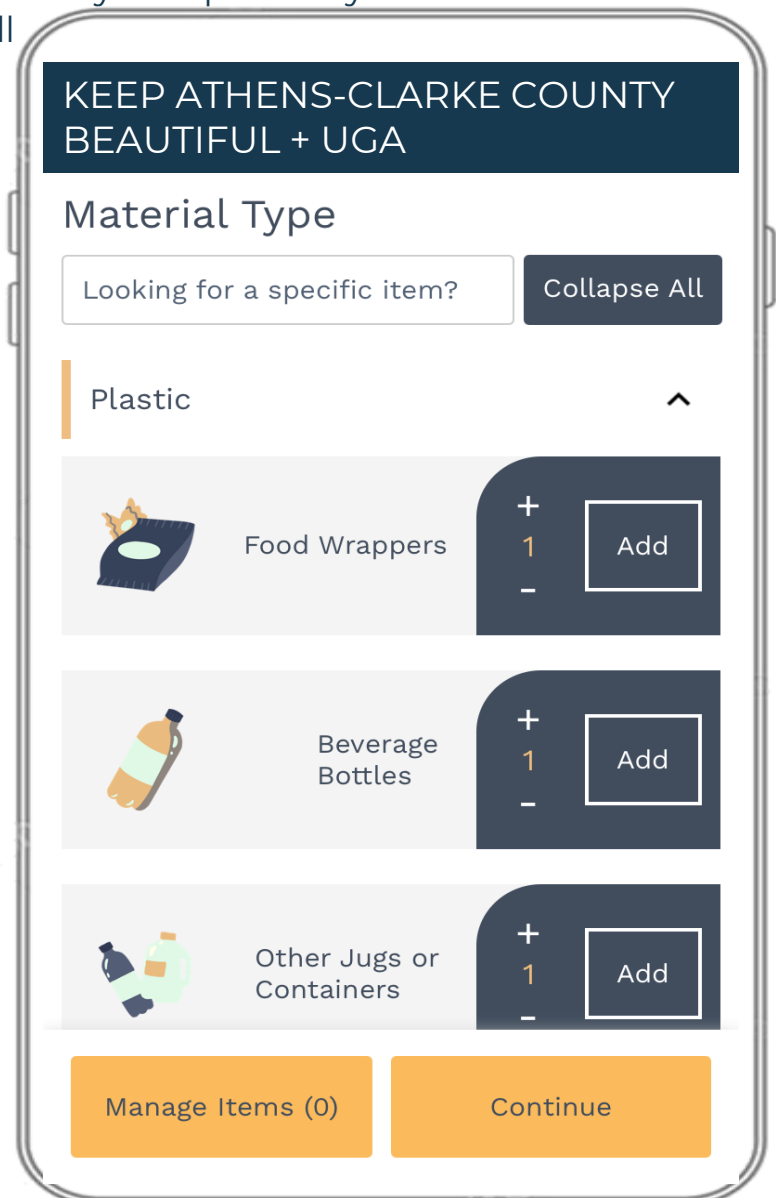
Debris Tracker is a free app used by citizen scientists around the world to record geospatial data on litter. To date, Debris Tracker volunteers have submitted data on over 3 million items around the globe to an open access database, which can be used by community scientists, researchers, policymakers, and other decision makers to explore global or local data on plastic pollution. While we know the plastic pollution problem doesn't start in the ocean, we don't know what, why, or how litter enters the environment from our communities. We need community scientists to help us find the missing piece of the puzzle.

The UGA Global Community Cleanup has a goal of collecting and recording 100,000 items with Debris Tracker on Thursday April 22 through Sunday April 25, 2021.



In the Field: Collecting Data with Debris Tracker

- 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 UGA. Select the "Keep Athens-Clarke County Beautiful + UGA" list and continue.
- 4 Once you've selected the UGA 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 "Upload 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 or SciStarter.
- 9 Wait for your data upload to go through. You'll see a checkmark when it's complete. You're all done! Thank you for tracking!



Guidelines for Tracking Litter

- Record items that are over 2.5 cm (or 1 in) in diameter.
- If the item is fragmented but you can tell what it originally was, log it as the original item. This will help us identify what products are sources of litter. For example, log a piece of a chip wrapper as a plastic food wrapper rather than a fragment.
- If the brand of the item is identifiable, tap on the icon to open the description box. Use the description box to add in the brand name.
- If you come across an item you're not familiar with, use the "Other" item and add a description of the item.
- When you're done tracking, continue to the mobile survey to answer a few short questions about the type of sampling event, time spent collecting, and the number of volunteers. You can also add photos to your log and share on social media to encourage others to get involved. Don't forget to tag @DebrisTracker!



Stay safe while tracking litter!

- 1 Wear utility gloves whenever you are touching trash.
- 2 Avoid dangerous pieces of trash like needles, broken glass, and syringes unless you have been properly trained on how to safely pick them up.
- 3 During your tracking session, do not touch your face. After your tracking session, wash your hands with soap and water for 20 seconds or use hand sanitizer.
- 4 Disinfect your phone after each tracking session. Just type "how to clean your mobile phone" into your browser for proper instructions.
- 5 Recommendation: Have an up to date tetanus shot. Remember, you are working with trash.
- 6 Follow all local health department guidelines for preventing the spread of COVID-19. Wear masks where appropriate and maintain a distance of 6 feet between volunteers.

Litter Transects

Find a safe place where you can collect data along a roadside, sidewalk, or other walkable area where litter often accumulates. For example, this might be a pathway on the side of a road, between a roadway and sidewalk, or along a walkway in the park. Follow the pathway generally - you don't have to travel in a straight line. If the path turns, you turn.

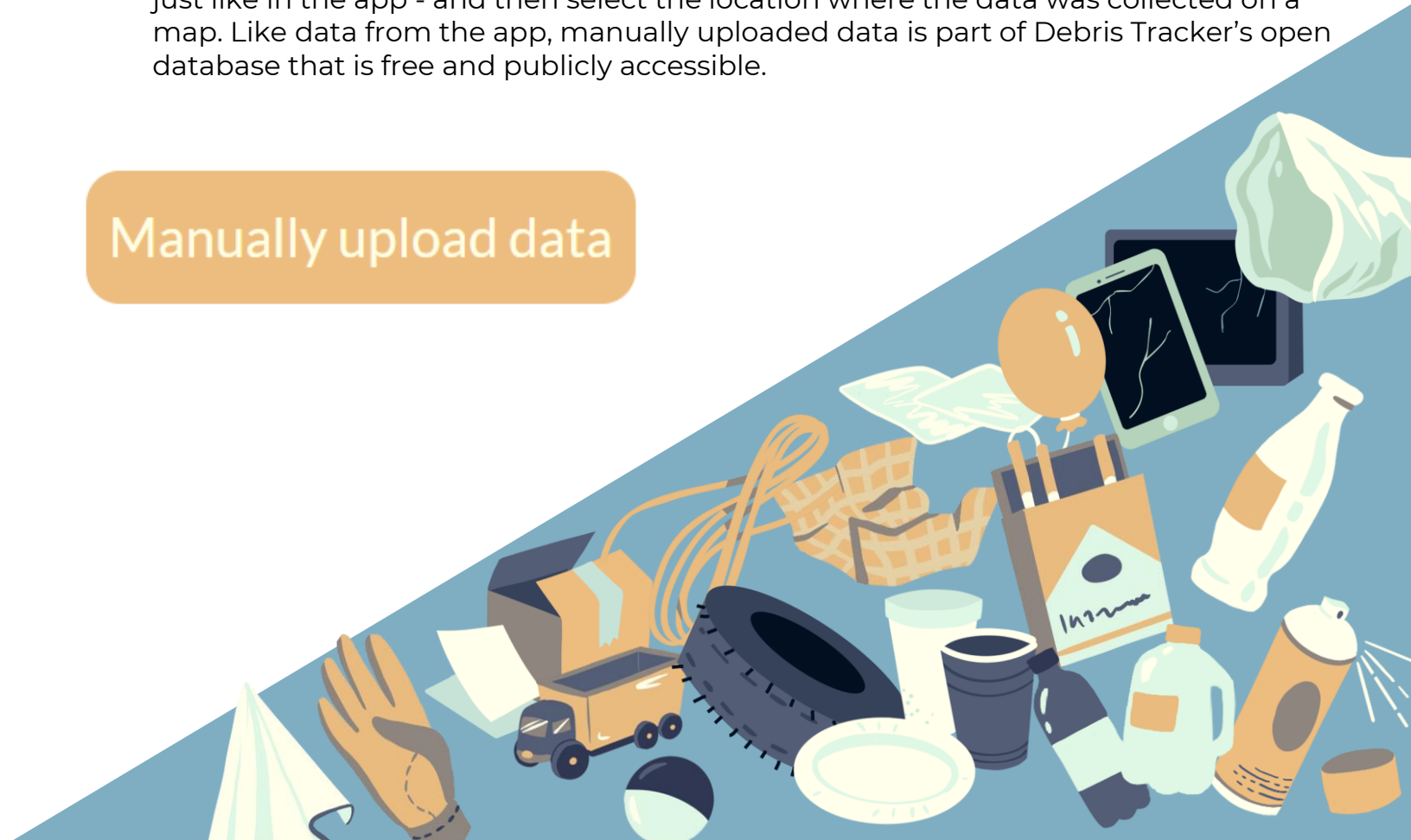
From the edge of the pathway, visually estimate 1 m (about 3 ft) in width covering the area where litter accumulates. This is about the length from the center of your chest to the fingertips of your outstretched arm. Use Debris Tracker to record all litter items present in your 1 m wide transect. Track data for a minimum of 30 minutes in your selected location.

Accumulation Areas

If you're cleaning up an area with a lot of litter where you can't conduct a transect, here are options for getting organized:

- 1 *Clean As You Go:* Track in pairs and have one person log items in Debris Tracker while the other partner cleans up - this generates the most robust geospatial litter data!
- 2 *Clean First, Log Later:* Sometimes it may be easier to pick up all the litter and then sort and count what you found all at once. While this doesn't generate point-specific data on where litter is found, it can still be valuable in identifying broad patterns. If you're in the same location where you collected the litter, you can sort and log the data in the Debris Tracker app. If you're sorting in a different location than where you've collected litter, log in to your account on debristracker.org and select "Manually upload data." You can enter the quantity and type of items you've found - just like in the app - and then select the location where the data was collected on a map. Like data from the app, manually uploaded data is part of Debris Tracker's open database that is free and publicly accessible.

Manually upload data





1

Select a location to collect data in your community.



2

Find a 1 m-wide (about 3 ft) pathway where litter often accumulates.



3

Track for at least 30 minutes.

Next Steps

Download your data anytime by logging into your account on debristracker.org. On the data tab, you can view and download data from around the world; you can search by organization, category, and date. To view data from the UGA Global Community Cleanup, select UGA as the organization.

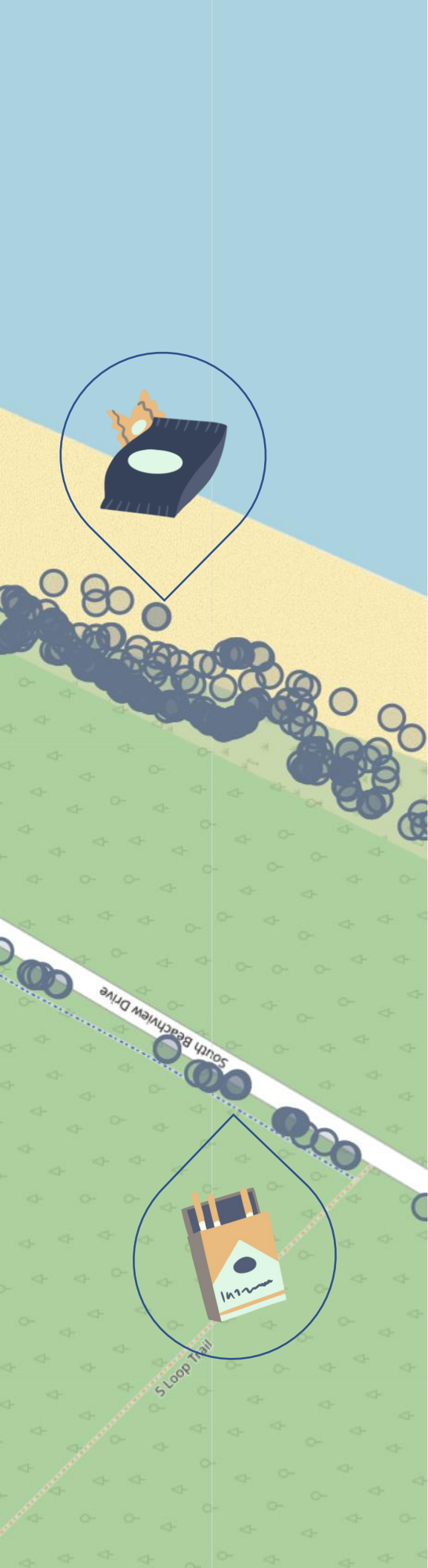
Your journey with community science doesn't have to stop here. Debris Tracker is a free, open-access tool that can be used by anyone, anywhere to collect data on litter they see, and contribute to a growing database on plastic pollution around the world. When you collect data with Debris Tracker, whether on a neighborhood walk or along the river, you're joining a global community of educators, researchers, and people around the world just like you! You can even start your own Debris Tracker project to collect data and inspire local actions in your community.

OUR GOAL:

Remove **100,000 pieces** of litter to beautify and unify communities across the state of Georgia and around the globe.



Explore data from citizen scientists around the world at debristracker.org/data.





Thank you.

Together, we can create a bigger picture of marine debris and plastic pollution through collecting open data, generating scientific findings, informing policy, and inspiring upstream design.



Marine Debris Tracker

Powered by
Morgan Stanley



**UNIVERSITY OF
GEORGIA**
Office of Sustainability

