# INTERNATIONAL TRASH TRAP NETWORK
# SIMPLE WASTE CHARACTERIZATION PROTOCOL

**Purpose:** This protocol is intended to collect the data necessary to estimate the amount of anthropogenic litter diverted from any aquatic waterbody using trash traps deployed across the globe.

**If you have a cellphone or tablet, download the Data Trapper App on Google Play or the App Store, free of charge, to easily record and submit your data!**



## Technical Notes:
- Please contact info@trashtrapnetwork.org with any questions regarding this protocol.
- This protocol was developed for Seabins and has also been tested and used with a LittaTrap. We hope this protocol can be used, and adapted if needed, for other types of trash traps. We would be happy to advise on how if relevant to your situation.
- Ensure you are maintaining your trash trap as recommended by the provider. For example, it is recommended that Seabins be emptied daily, whereas LittaTraps are to be emptied 1–2 times a year. Follow this protocol based on the requirements of your device.
- We do not expect to see animals in a trash trap, but if you find any live animals in your trash trap place them back into the water safely. Please note down any wildlife captured (alive or dead) on the datasheet and keep a record of the species (if possible) and count. If you encounter this more than once, consider moving your device to another area to avoid an impact to aquatic organisms.

## Safety Notes:
- Prior to retrieving your trash trap, put on your lifejacket if near a waterbody.
- If your device has an external energy source, check if the power needs to be OFF prior to collecting the debris from the device. If the power is left on, this may damage and clog the pump inside the device.
- When retrieving the debris from some devices you may need a tool to bring it ashore. This is dependent on the type and size of your device; we recommend an extension pole, pike pole or pool net.
- If dangerous materials are found, dispose of these items with care, e.g., a used syringe should be placed in a labelled sharps container to safely store them for proper disposal.

**Materials:**

**Safety Equipment**

| Item | Recommended Materials | Notes |
|---|---|---|
| Life jacket | No specific type required | |
| Gloves | Gardening or dishwashing gloves | Strong and reusable<br>Enable protection from sharp debris |
| Sharps Container | Yogurt container or butter tub | Any plastic container with a secure lid<br>Must be clearly labelled as 'Sharps' |
| Extension pole | Extension pole or pike pole | Requirement dependent on type of trash trap<br>Used to retrieve trash trap from waterway |
| Weather precautions | Sunscreen, water, hat, sunglasses | |
| First Aid Kit | No specific type required | |

**Waste Characterization**

| Item | Recommended Materials | Notes |
|---|---|---|
| Copy of simple waste characterization protocol | Find a copy on https://oceanconservancy.org/ittn | |
| Trash Scale | Luggage or fish scale, i.e. https://www.walmart.com/ip/N1-Digital-Hanging-Luggage-Scale-Portable-Handheld-Baggage-Scale-88-Pounds-2-Pack-New/377710866 | Requires a hook or clasp to hold the catch bag<br>Allows for measurement in Kilograms |
| Digital camera or cell phone camera | No specific type required | |
| Garbage bags | No specific type required | Large and strong enough to hold debris collected by the trash trap |
| Data Trapper App | Download from Google Play or the App Store | |

**Additional materials if not using the App**

| Item | Recommended Materials | Notes |
|---|---|---|
| Clipboard | No specific type required | |
| Paper Datasheets | Find a copy on https://oceanconservancy.org/ittn; print on waterproof paper | |
| Pencil/Pen | No specific type required | |

**Procedure:**

1. In the Data Trapper app (or paper datasheet if you are not using the app), fill out details of your organization/affiliation, the date of trash trap retrieval, details of your trash trap and the most recent period of deployment.
2. Record the GPS coordinates of your site using decimal degrees (e.g., 43.642397, -79.324571). You can find this by dropping a pin using the map on your phone or google maps on your computer.
3. Record if the trash trap captured a "wet event" during the most recent period of deployment. To be considered a wet event, the amount of rainfall must be >10 mm over a 24-hour period. This information is usually available on government weather websites and/or weather apps.
4. Record the wind and weather conditions at the time of retrieval.
5. If your trash trap is externally powered, turn off the power to prevent damage to the device while removing it.
6. Retrieve your trash trap from its deployment location. Some devices may require a tool to bring it ashore (e.g., an extension pole). Beware while extracting the device that if it is full to the brim it can become very heavy, and lifting may require two people.
7. Once the device is retrieved, shake it to remove most of the water.
8. Record how full your device is (empty, quarter full, half full, full to the brim).
9. Take a photograph of the contents caught in your device and ensure that the photograph clearly indicates how full the device is. If using app, please take a picture with the same device on which the data is being entered.
10. Weigh the catch bag full of debris using the luggage scale. Ensure to record the measurement in **kilograms**. If the compartment where the debris is stored in the device is non-detachable, empty the contents into a garbage bag and weigh the bag and debris together.
11. Dispose of the contents of your trash trap according to your local regulations, organizational goals or priorities for ecosystem health. For example, you may dispose of all debris into the garbage, or choose to separate out recyclables and/or organic matter to dispose of these separately.
12. Weigh the empty catch bag/garbage bag, and record this in **kilograms** on the datasheet.
13. Place the trash trap back into the water, and if applicable, turn the power back on.
14. If you are using a paper datasheet, please take a picture of the datasheet and send it together with pictures of the contents of the catch bag to: info@trashtrapnetwork.org.