

Plastic Debris Along the Georgia Coast

A variety of plastics and other debris are found on coastal beaches and marshes. For example, in one year, volunteers picked up 90,000 kg (200,000 lb) of plastic debris along 160.93 km (100 mi) of Georgia beaches through the Georgia Beach Sweep program. Bottles, styrofoam cups and floats, plastic utensils and nylon fishing lines are some of the plastics collected during beach surveys. Besides being unsightly, plastic debris can harm marine animals, including coral, turtles and seabirds.

While plastics are resistant to degradation, they eventually break

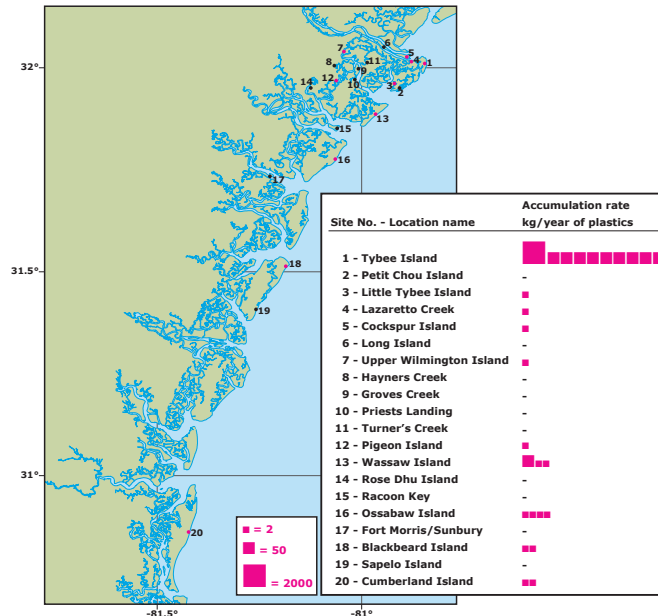


into small particles, now found in most of the world's oceans. What is the origin of all this plastic debris? Sources include cargo ships, boaters, fishermen and picnickers,

as well as plastics originating inland but carried by coastal rivers into the ocean. Thus, the debris comes both from the land and the ocean with the majority arriving from the land. Volunteers from Rivers Alive once collected 333,844 kg (368 tons) of debris (much of it plastics) along 3540.6 km (2,200 mi) of Georgia inland waters. A significant amount of this inland debris is carried into the ocean and eventually deposited on our beaches and marshes. Surveys of Georgia's barrier island beaches have found heavy accumulations of plastics on Tybee, Wassaw, Ossabaw and Cumberland Islands. Besides beaches, plastic also accumulates in the coastal estuaries.

Students, working with the University of Georgia Marine Extension Service on Skidaway Island near Savannah, have collected data on Wassaw Island's monthly accumulation rate, discovering a range of 160 to 1300 grams (5.64 to 45.86 oz) of plastic debris per month along the sampling transect (40 m x 200 m or 132.23 ft x 656.17 ft).

Be part of the marine debris solution.



Local annual accumulation rates in kg per year (pounds per year): Tybee Island - 2404.394 kg (5300 lbs); Wassaw Island - 91.625 kg (202 lbs); and Ossabaw Island - 16.783 kg (37 lbs). Figure from "Evaluating plastics abundance and degradation within coastal Georgia marshes," Drs. Jay Brandes and Richard Lee, Skidaway Institute of Oceanography.

To learn more about our marine debris programs, call the UGA Marine Extension Service at (912) 598-2496 or visit our website at www.uga.edu/marex



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This work was supported by NOAA's Southeast Atlantic Marine Debris Initiative.

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A growing concern for us all.

Response & Prevention

Organizations involved with debris cleanup

A number of organizations involve volunteers who regularly cleanup debris along Georgia's coast. These include:

- University of Georgia Marine Extension Service
- Georgia Sea Grant
- Clean Coast
- Ocean Conservancy
- Rivers Alive
- Tybee Beautification Association

Government programs involved with the assessment of debris along the coast include the Georgia Department of Natural Resources, University of Georgia Marine Extension Service and NOAA Marine Debris Division. Perhaps you and your family can join one of these organizations in the cleanup of debris on the beaches and marshes along the Georgia coast.



What you can do

There are many other activities that you and your family can do to address this problem including:

- use of the Marine Debris Tracker mobile application (<http://sea-mdi.engr.uga.edu/>)
- do not litter plastics when you visit the coast
- talk with your friends about the plastic debris problem
- write letters to your legislators asking them to pass laws that encourage production of degradable plastics
- if there are insufficient trashbins at heavily visited coastal sites, bring it to the attention of local authorities
- reduce your waste at home
 - use reusable items
 - recycle everything possible

Who's involved and how you can help.