



MISSISSIPPI COASTAL CLEANUP PROGRAM



MISSISSIPPI STATE UNIVERSITY™
EXTENSION



2020 Mississippi Coastal Cleanup Program Summary

This year has exemplified what it means to be adaptable in uncertain situations. From a global pandemic to a record year for hurricanes, there were many reasons to remain idle. However, the volunteers and employees associated with the Mississippi Coastal Cleanup Program wouldn't let the stress of 2020 keep them from removing marine debris from the environment.

Marine debris is defined as any manmade material that is intentionally or unintentionally, directly or indirectly disposed of or abandoned into our marine environment, according to the [NOAA Marine Debris Program](#). Marine debris includes everyday items we toss in the trash (food wrappers, product packaging, beverage bottles, etc.); litter on sidewalks, parking lots, and streets that is washed or blown away by gulf winds; and even larger objects, such as fishing nets, construction materials, and derelict boats.

Unsurprisingly, single-use plastic items were the most common materials collected during Mississippi Coastal Cleanup Program activities. Some of the commonly found trash items included cigarette butts, food wrappers, plastic beverage bottles, and plastic bottle caps. These materials can be extremely harmful to wildlife on land, in the air, and in water. Among other impacts, these items can break up into smaller pieces that wildlife can mistake for food, leading to the introduction of plastic into the food web.

The Mississippi Coastal Cleanup Program's mission is to prevent and remove litter from the coastal environment through education, outreach, research, and cleanup events. In addition to the large-scale cleanups, the Mississippi Coastal Cleanup Program organizes monthly small-scale beach cleanups, citizen science microplastic monitoring, school group presentations, and educational booths at multiple events throughout the year.

Cleanup Krewe



Mardi Gras is one of the South's most anticipated traditions, with costumes, beads, parades, and balls. The Mississippi Gulf Coast comes alive with festivities. Unfortunately, these celebrations leave behind large amounts of trash that takes days to pick up. Debris that is left in streets and on sidewalks can be blown or washed into storm drains, causing blockages that increase flooding, or into the local environment, creating a hazard to wildlife. City and cleanup crews take to the streets to pick up what is left behind, but the volume of single-use plastics and debris can be daunting.



In an effort to spread awareness and promote a low-waste celebration, the Mississippi Coastal Cleanup Program and [Plastic Free Gulf Coast](#) partnered to have the first-ever Cleanup Krewe float in the Gulf Coast Carnival Association Mardi Gras parade in Biloxi on February 25, 2020. Our goal was to promote mindful, low-waste partying and start a conversation about how our actions affect the environment around us.



The Cleanup Krewe in action, picking up debris at the Biloxi Mardi Gras parade. Photo by MSCCP.

Volunteers walked with the float, which was decorated with trash items, and picked up debris as they went. Cleanup Krewe members also interacted with parade attendees, asking them to put the trash at their feet into buckets. All the collected trash was tossed onto the float, bagged, and later separated and counted. Volunteers picked up nearly 3 tons of trash, including 5,406 pounds of beads! All of the beads were donated to be recycled for future Mardi Gras events.

Cleanup Krewe volunteers included caring community members and members of various organizations, such as the Audubon Mississippi Coastal Bird Stewardship Program, Mississippi Aquarium, Mississippi Gulf Coast Community College–Harrison County Science Club, Mississippi Institute of Dolphin Science, Mississippi Master Naturalists, Mississippin’ Challenge, Coastal Conservation and Restoration Program, City of Biloxi, Biloxi Library, and Coastal Mississippi. The Cleanup Krewe’s goal to promote a fun Mardi Gras with a low waste twist was a complete success. We hope to keep spreading awareness that Mardi Gras can be fun and clean.

Adapting in 2020

The Mississippi Coastal Cleanup Program (MSCCP) began a Request-a-Bin initiative that encourages volunteers to request supplies to conduct their very own cleanup events. The supply bins included trash bags, gloves of various sizes, hand sanitizer, first aid kits, buckets, trash grabbers, and data collection materials (data cards and clipboards). More than 230 volunteers participated in this initiative in 2020, removing about 7,856 pounds of trash and debris from the environment, while following COVID-19 guidelines.

On the virtual side of things, the team used Zoom to give educational presentations on topics such as sustainable floristry design practices, preventing marine debris with Student Naturalists, and microplastic citizen science for teachers. We would love to bring awareness to your class



Bucket full of fireworks picked up by volunteers the morning after Fourth of July celebrations. *Photo by Jamie Erb Beiser.*

or organization about preventing marine debris. Please [reach out to us](#) at any time of the year for a chat!

Following the success of the Request-a-Bin initiative, the MSCCP continued on with the cleanup event that has taken place every year for the past 32 years—but with a twist. Instead of holding the event on one day, we extended it throughout the entire month of October, bringing 640 volunteers to our beaches and waterways, being sure to follow COVID-19 guidelines. We provided supplies, buckets, and trash grabbers all month to groups of volunteers, who were able to pick up their supplies when and where they cleaned.

Volunteers filled more than 290 bags of trash, resulting in 4,654 pounds of trash removed. Additionally, the 640 volunteers helped collect data that will be used to categorize the major sources of marine debris entering the coastal environment. At the end of the month, we held a raffle for volunteers. Two winners from each of the coastal counties received either a kayak or a goody bag containing reusable, everyday items.



A bin of supplies for volunteers interested in participating in a cleanup. *Photo by MSCCP.*

We would like to extend our sincerest gratitude to county coordinators Letha Boudreaux, Jessi James, and Mandy Sartain, who helped coordinate the volunteers for this event. A special thanks to the [Pascagoula River Audubon Center](#) in Moss Point and St. Stanislaus College in Bay St. Louis for helping hand out supplies to volunteers.

Expanding Inland Mississippi Inland Cleanup Program

The Mississippi Inland Cleanup Program (MSICP) is an expansion of the Mississippi Coastal Cleanup Program. This new educational and cleanup program will extend the efforts of the coastal program by providing outreach to remove litter from inland communities. The inland cleanup program ultimately aims to provide its educational services across 21 southeastern Mississippi counties. Despite this year's many challenges, four Mississippi counties safely hosted community cleanups that removed more than 12,500 pounds of litter.

The Mississippi Inland Cleanup Program will add a sub-program to next year's initiatives, called Adopt-a-Campground. Through conversations with community partners, campgrounds have been identified as prime locations for some of the first MSICP activities. Locals and tourists alike enjoy exploring the abundant natural resources throughout Mississippi, and campgrounds often serve as the primary entrance for some of the most picturesque landscapes throughout the state. Their close proximity to natural areas, often water bodies, and number of visitors make campgrounds a perfect location to promote conservation—however, they are also a major source of litter.

Are you interested in preserving our natural resources as an individual, group, or organization? Consider adopting your local campground! More information on this program and how to get involved with other local litter prevention and removal programs can be found [here!](#)

Expanding Offshore Derelict Crab Trap Program

In January 2019, a collaborative effort began among the Mississippi State University Extension Service, Mississippi-Alabama Sea Grant, Mississippi Commercial Fisheries United, and the NOAA Marine Debris Program to create a year-round derelict crab trap removal and research program in the Mississippi Sound.

Derelict crab traps are those that have been lost or abandoned by fishers. Over time, traps kill a variety of marine wildlife while becoming battered, bent, broken, and heavily fouled. Derelict traps contribute to various environmental and economic problems. Catching just one derelict crab trap can result in costly trawl repairs, damaged boat propellers, and even decreased catch.



As commercial shrimpers enrolled in the Derelict Trap Reward Program encounter derelict traps at sea, they remove entangled traps from their trawls and deposit them at designated harbors. The program currently has about 40

active participants, and the project team continuously recruits new shrimpers. This year, they have removed about 1,000 traps with an estimated weight of 10,000 pounds from the Mississippi Sound and surrounding waters. Since the program began, nearly 2,300 traps have been removed from the waters and most have been recycled.

In addition to the Derelict Trap Reward Program, a subset of participating shrimpers was selected to collect additional marine debris data (i.e., photos and logbook documentation of every marine debris occurrence) that will be used to improve our understanding of the distribution and economic impact of marine debris on the commercial shrimping industry. This data collection took place during the 2020 shrimping season (June to December). The 2020 data indicates that shrimpers lose an average of 26 minutes and 21 pounds of shrimp per tow due to encounters with marine debris. The results of this incentive program and data collection will help create cleaner, more profitable coastal waters.

You can find more information about this program [here](#).



A crab trap disposal area at a harbor. Photo by Alyssa Rodolfich.



Debris caught in a shrimp net. Photo by Derelict Crab Trap Program.

Check out these **informational videos** about the Derelict Crab Trap Program!

Barrier Island Monitoring

About 11 miles offshore and running parallel to the Mississippi coast are barrier islands that protect the coastline, marshes, seagrass beds, and our coastal communities from high-energy wave action from storms. Unfortunately, these islands are prone to accumulating large amounts of debris swept to their shores by such storm activity.

In an effort to document the debris, EPA has funded marine debris monitoring on the barrier islands since 2018. Each season, the team removes marine debris from 300 meters of Dauphin, Petite Bois, and Horn Islands to calculate accumulation rates of marine debris. The marine debris found is categorized by type, counted, and weighed.

Items such as shoes, tires, and single-use plastics are found regularly, but the most commonly found item is unidentifiable foam pieces. During 2020, the MSCCP team removed more than 400 pounds of trash from the islands.



The team collects debris from the barrier island beaches as part of an effort to monitor debris accumulation. *Photo by MSCCP.*

Upcoming in 2021

Even with so much uncertainty about the future, there is something that you can be sure of—we will continue to provide resources to the community during the coming year. The **Monthly Beach Cleanups** resumed in January and follow the most up-to-date **MSU Extension COVID-19 guidelines**. We will also provide supplies to any individuals or groups of volunteers interested in doing their own cleanup through the Request-a-Bin initiative.

If you are interested in having one of our marine debris experts give a virtual talk to your organization or class, please reach out to our program coordinator, *Mandy Sartain*, at amanda.sartain@msstate.edu.

2021 EVENTS

Monthly Cleanups	January to September
Earth Day Celebration Cleanup	April 24
Kayak Cleanup	TBD
World Oceans Beach Cleanup	June 12
Star-Spangled Cleanup	July 5–11
Annual Mississippi Coastal Cleanup	October 16

These dates are subject to change.

For more information, such as locations and times, please visit **MSCCP** online.

Let's See the Data

Table 1. Marine debris collected through Mississippi Coastal Cleanup Program activities during 2020.

CLEANUP SUMMARY			
	Number of trash bags filled		460
	Weight of trash collected (pounds)	28,168	
	Distance cleaned (miles)		32
	Number of volunteers		1,039
COMMONLY FOUND ITEMS		TOTAL #	
Cigarette butts		10,653	
Food wrappers		3,091	
Take-out containers (plastic)		455	
Take-out containers (foam)		717	
Bottle caps (plastic)		2,784	
Bottle caps (metal)		995	
Lids (plastic)		815	
Straws/stirrers		1,562	
Forks, knives, and spoons		1,463	
PACKAGING MATERIALS		TOTAL #	
6-pack holders		38	
Strapping bands		357	
Tobacco packaging/wrap		479	
Other plastic/foam packaging		740	
Other plastic bottles (oil, bleach, etc.)		428	
FISHING GEAR		TOTAL #	
Fishing buoys, pots, and traps		1,154	
Fishing net and pieces		197	
Fishing line (1 yard = 1 piece)		147	
Rope (1 yard = 1 piece)		103	
TINY TRASH		TOTAL #	
Foam pieces		1,969	
Glass pieces		1,056	
Plastic pieces		5,413	
COMMONLY FOUND ITEMS		TOTAL #	
Beverage bottles (plastic)		2,924	
Beverage bottles (glass)		841	
Beverage cans		1,594	
Grocery bags (plastic)		1,641	
Other plastic bags		831	
Paper bags		332	
Cups and plates (paper)		453	
Cups and plates (plastic)		763	
Cups and plates (foam)		717	
PERSONAL HYGIENE		TOTAL #	
Condoms		5	
Diapers		66	
Syringes		11	
Tampons/tampon applicators		12	
OTHER TRASH		TOTAL #	
Appliances (refrigerators, washers, etc.)		9	
Balloons		119	
Cigar tips		1,366	
Cigarette lighters		170	
Construction materials		663	
Fireworks		620	
Tires		32	
Large trash		1,347	

We Appreciate YOU

Thank you for adapting with us.

The Mississippi Coastal Cleanup Program would not be possible without the support of our sponsors. We would like to thank and recognize Chevron Pascagoula Refinery, Waste Management, Mississippi Department of Marine Resources, Mississippi Department of Environmental Quality, Harrison County Beautification Commission, Mississippi-Alabama Sea Grant Consortium, NOAA, EPA Gulf of Mexico Program, Keep Mississippi Beautiful, The Shed Barbeque & Blues Joint, and Ocean Conservancy.



The Cleanup Team

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Publication 3588 (POD-03-21)
MASGP-20-004

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Produced by Agricultural Communications.

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Extension Service of Mississippi State University, cooperating with U.S. Department of Agriculture. Published in furtherance of Acts of Congress, May 8 and June 30, 1914. GARY B. JACKSON, Director