

MISSISSIPPI COASTAL CLEANUP Program









## **CONTENTS**

#### 02

ABOUT THE PROGRAM

#### 03

**PROGRAM STATS** 

05 IN THE CLASSROOM

06 MISSISSIPPI INLAND CLEANUP

#### 07

BARRIER ISLAND CLEANUP INITIATIVE

#### 09

SUSTAINABILITY WITH AWARENESS AND PREVENTION SOLUTIONS (SWAPS)

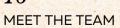
#### 11

DERELICT VESSELS

12 DERELICT CRAB TRAPS

14 WHAT TO LOOK FOR IN 2024

## 16









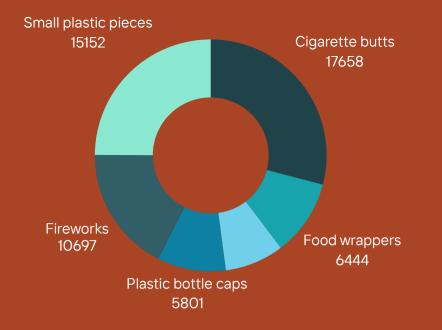


#### ABOUT MISSISSIPPI COASTAL CLEANUP PROGRAM

The Mississippi Coastal Cleanup Program (MSCCP) is a non-profit educational program that promotes the conservation of the local marine environment by facilitating active stewardship within coastal Mississippi. This program is administratively housed under the Mississippi State University Coastal and Marine Extension Program and co-run through the Mississippi Sound Estuary Program and Mississippi-Alabama Sea Grant Consortium. The MSCCP mission is to prevent and remove litter from the coastal environment through education, outreach, research, and cleanup events. The MSCCP organizes beach cleanups, provides in-class presentations, and hosts outreach booths at multiple public events throughout the year. By integrating the latest research, the MSCCP supports the prevention and removal of litter through promoting active stewardship that empowers communities to make more sustainable decisions regarding litter and marine debris. This program promotes active stewardship, enables long-lasting education and outreach, and provides other toolkits that empower communities to make environmentally and economically sound decisions regarding litter and marine debris.

Litter can be defined as trash that is left lying in an open or public place while 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 as well as litter on sidewalks, parking lots, and streets that is washed or blown away by gulf winds. Even larger objects, such as fishing nets, construction materials, and derelict boats, are also considered marine debris. These items persist in the environment where they can be extremely harmful to wildlife on land, in the air, and in water.





#### **TOP ITEMS**

Single-use plastic was by far the most common material collected during cleanup events. Check out these top items!

## **PROGRAM STATS**

In 2024, the MSCCP hosted and facilitated **42 cleanup events**. During MSCCP events, volunteers are required to collect data on the different types and how much trash is collected. Unsurprisingly, single-use plastic items are the most common materials collected on the beaches. Some of the commonly found plastic trash items include cigarette butts, food wrappers, small plastic pieces, bottle caps, and beverage bottles.

Plastic is a manmade material that our earth cannot naturally break down. Plastic items persist in the environment and eventually break up into smaller and smaller pieces becoming what we know as microplastics. Microplastics are plastic fiber, fragment, bead, and film pieces smaller than 5mm that wreak havoc on the environment as they are commonly mistaken for food by marine life and are therefore ingested. Toxins and pollutants in the water can bind to microplastics, impacting the animals ingesting the pieces on a physiological level. Studies have shown that microplastics have entered our food chain posing not just detrimental impacts to animal health, but possibly to human health as well.

We know litter, especially plastic, pollution is a problem and providing actionable opportunities for the public to get involved with reducing plastic pollution is key. The MSCCP has many sister programs that focus on prevention, removal, and research pertaining to marine debris and litter. The Mississippi Inland Cleanup Program (MSICP) is an expansion program of the MSCCP to extend litter awareness efforts beyond the three coastal counties. The Barrier Island Cleanup Initiative is another expansion program, this one in partnership with the National Park Service to extend south to our barrier islands. The Derelict Trap Reward Program focuses on how abandoned crab traps impact local shrimpers in the water of the Mississippi Sound. SWAPS is a no-cost-to-you program that provides litter and waste prevention solutions and materials so the community can take an active part in preventing waste!

Keep reading to see what these amazing programs were up to in 2024!

## **PROGRAM STATS**

Check out the different types & amounts of debris removed during 2024 by the volunteers of the Mississippi Coastal Cleanup Program!

#### **COMMONLY FOUND ITEMS:**

Cigarette butts	17,658
Food wrappers	6,444
Take out containers (plastic)	636
Take out containers (foam)	394
Bottle caps (plastic)	5,801
Bottle caps (metal)	1,607
Lids (plastic)	1,353
Straws/stirrers	2,305
Forks, knives, spoons	674

#### PACKAGING MATERIALS:

6-pack holders	106
Other plastic/foam packaging	2,142
Other plastic bottles (oil, bleach, etc.)	609
Strapping bands	322
Tobacco packaging/wrap	705

#### **FISHING GEAR:**

Fishing buoys, pots, and traps	253
Fishing nets & pieces	428
Fishing line (1 yard = 1 piece)	490
Rope (1 yard = 1 piece)	537

#### **TINY TRASH:**

Foam pieces	5,007
Glass pieces	3,162
Plastic pieces	17,135

Beverage bottles (plastic)	3,951
Beverage bottles (glass)	1,095
Beverage cans	2,093
Grocery bags (plastic)	1,660
Other plastic bags	1,922
Paper bags	1,118
Cups & plates (paper)	784
Cups & plates (plastic)	923
Cups & plates (foam)	1,021

#### PERSONAL HYGIENE:

O - m d - m -	50
Condoms	59
Diapers	102
Syringes	104
Tampons/tampon applicators	144
Gloves & masks (PPE)	156
Clothing & shoes	161

#### **OTHER TRASH:**

Appliances (fridge, washer, etc.)	17
Balloons	411
Cigar Tips	2,087
Cigarette lighters	193
e-Cigarette waste	9
Construction materials	1,306
Fireworks	10,697
Tires	41
Toys	130
Other	1,383

#### 2024 CLEANUP SUMMARY:

Number of bags filled	748
Weight of trash collected (pounds)	8,937
Distance cleaned (miles)	50 +
Number of volunteers	1,816

MISSISSIPPI COASTAL CLEANUP PROGRAM | ANNUAL REPORT 2024

## IN THE **CLASSROOM**

Reducing litter and marine debris starts long before a beach cleanup. While cleanups are important to collect data as well as the types and possible sources of that debris, the cycle will never end if we do not stop it at its source. A critical step toward this end is education.

MSCCP visits classrooms in K-12 schools as well as community organizations to teach students about the hazards associated with marine debris and ways to reduce the amount of waste we produce in our daily lives. Students then filter water samples for microplastics and observe them using a microscope.

## **CONNECT** WITH US



mscoastalcleanup **O** mscoastalcleanup x mscoastcleanup

evelyn.mcqueen@msstate.edu

http:// Smscoastalcleanup.org





K-12







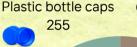
## **MISSISSIPPI INLAND CLEANUP PROGRAM**

Litter is an issue that impairs the environment, stormwater infrastructure, tourism, and industry along inland waterways, which eventually lead to coastal waters.

The Mississippi Inland Cleanup Program was formed with the mission of preventing and removing litter from the inland environment through education, outreach, research, and cleanup events.

In 2024, the program organized or facilitated a total of 9 cleanup events which attracted 142 volunteers who contributed 284 volunteer hours to remove 292 lbs. of litter from the inland roads, waterways, wetlands, and metropolitan areas of southeastern Mississippi. Top litter items removed included small plastic pieces (761), food wrappers (363), cigarette butts (257), plastic bottle caps (255), and plastic beverage bottles (146). During these events, volunteers also collected data on the specific types of litter removed, to identify sources and design targeted prevention methods.

We are working directly with MSCCP in 2025 to bring our shared mission beyond the three coastal counties.



**Cigarette butts** 257



**Food wrappers** 363

Small plastic pieces 761

Plastic beverage bottles 146

## CONNECT WITH US



mississippiinlandcleanup



**O** msinlandcleanup

evelyn.mcqueen@msstate.edu



### BARRIER ISLAND CLEANUP INITIATIVE

In late 2023, the National Park Service awarded Mississippi State University Extension Service a 3-year award to support volunteerbased efforts to remove marine debris along the Gulf Islands National Seashore. The aptly named Barrier Island Cleanup Initiative is a sub-chapter of the Mississippi Coastal Cleanup Program. Our main duties are to promote environmental stewardship within the volunteer and for-hire charter communities through outreach, education, and participation in this new, one-of-a-kind initiative. Cleanups occur on the 2nd Saturday of each month, from April to October. Be sure to check out our website to sign up for April 2025 and other events!

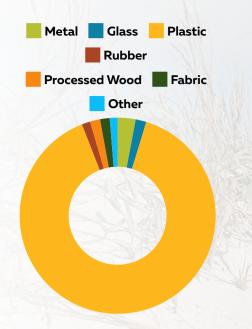
#### BARRIER ISLAND CLEANUP INITIATIVE

## IN 2024,

we hosted 7 volunteer-based cleanups across Cat, Petit Bois, and Horn Islands. The program received help from 149 participants, 10 for-hire charter captains, and the NPS team. Captains shuttled volunteers to cleanup locations and took an extra step to help consolidate collected trash. During 2024, volunteers removed 13,384 pieces of marine debris with an estimated total weight of 3,364 pounds! Cleanup data indicated that 86.4% of all debris removed was PLASTIC!

With data, we can look for accumulation trends, categorize by marine debris type, and accurate data helps us justify the need for supplemental funding through federal and state grants to fund programs just like this! pounds of trash have been removed from our barrier island beaches!





# A Special Thanks

WE WOULD LIKE TO SAY THANK YOU TO ALL VOLUNTEERS, PARTICIPATING FOR-HIRE CHARTER CAPTAINS, AND THOSE THAT USED PERSONAL VESSELS FOR STICKING IT OUT WITH US, ESPECIALLY DURING UNBEARABLE HOT SUMMER MONTHS. WE LOOK FORWARD TO SEEING EVERYONE IN 2025 TO HELP US REMOVE MARINE DEBRIS FROM MISSISSIPPI'S BARRIER ISLANDS!

MARINE DEBRIS TYPES REMOVED

# A note to charter captains

In an effort to continue to include Mississippi fishing industries in environmental stewardship, we would like to remind all for-hire charter captains if they're interested, they can sign-up to help shuttle volunteers. Captains currently enrolled must renew their contracts.

#### **ONLY REQUIREMENTS:**

1. Captains must be USGC certified

2. Captains must carry insurance.

For-hire charters are well-compensated for their time using a pre-determined 4-hour rate.

For more information, please contact Kristi Gay for information on how to sign-up or if you have any questions at **kg1595@msstate.edu** 

0.8

Program Coordinators: Kristi Gay, Alyssa Rodolfich, Keith Chenier

## **SWAPS**

#### Sustainability With Awareness and Prevention Solutions (SWAPS) Rounds Out Its Most Successful Year Yet!

The Sustainability With Awareness and Prevention Solutions team entered its 3rd year of teaching plastic and food waste reduction practices focused on inland escaped trash and marine debris prevention. And what a year it has been! The team continues to lead schools, community workshops, and professional conferences in best-practices and providing guidance, resources, and hands-on training throughout Mississippi.

This year, SWAPS led 83 classes, workshops, outreach events, and professional speaking events across 34 organizations, schools, and community groups. **The team directly interacted with 2,100 people, equaling 180 hours of education and engagement.** Now that's a lot of talk about reducing waste! Eliminating Single-Use Plastics remains communities' favorite module and we've added do-it-yourself, food-grade, beeswax crayons to the module. All of our recipe cards, DIY videos, and resources for educators and community organizers can be found on our website. The program also donated 3 water-refill stations to local schools who previously did not have water fountains with bottle filling stations. Efforts like this are another step we take to directly

> prevent excessive waste and marine debris while providing students with filtered water!

# MEET THIS YEAR'S TEAM!

LODES

All that tremendous work requires great teamwork and plenty of extra hands. In March, we welcomed Keely Colinger through the Gulf of Mexico Alliance intern program and she moved to a full time SWAPS co-lead position. We also had the opportunity to work with interns from USM's GenSea Program! They loved working with SWAPS so much, they decided to present a poster at their final presentation on their work within our program.

SWAPS serves the state of Mississippi and its neighboring regions along the Gulf of Mexico. Workshops, trainings, and presentations are provided at no-cost to any community, school, or organization that wants to incorporate low-waste education. For more information, please visit our website at www.ccrlab.org/swaps for our coordinators' contact information on how to sign-up or if you have any questions!

Program Coordinators: Elizabeth Englebretson, Keely Colinger, Keith Chenier

#### IN 2024 SWAPS WAS PART OF 83 DIFFERENT EDUCATIONAL ENDEAVORS AND REACHED OVER 2,100 PEOPLE.

Sustainability With Awareness and Prevention Solutions

#### RETHINKING TRASH

Not all of our "trash" or "waste" belongs in the Landfill but we rarely have options to dispose of things differently. In 2023, SWAPS, in collaboration with Plastic Free Gulf Coast and MS Inland Cleanup, brought the three-bin system to our campus. This is a simple way to change our understanding of waste and divert as much as possible from our landfills

Composting food and dry materials from our office throughout the year keeps our 3 vermicomposting bins active and fed. We use the three-bin trash can system to collect dry compost such as cardboard and paper, which is shredded for the worms, and our main office building kitchens have countertop compost scrap bins for food waste from lunches and snacks. The countertop compost scrap bins eliminate at minimum 104lbs. of food waste from entering the landfill annually. We also recycle aluminum cans and other metal from our office and office events at the local scrap yard. We received \$70 in 2024 from recycling and saved over 400 lbs of recyclable materials from the landfill.

## OFFICES MAKING THE SWAP

In 2023 SWAPS launched our reusable tableware project in collaboration with Plastic Free Gulf Coast furthering our effort to support Zero-waste events and meetings at our campus and beyond. SWAPS provides access to a set of over 200 plates, bowls, cutlery, glasses, mugs, and more for organizations to borrow while at the CREC and for meetings and events outside of our campus. Through this program, SWAPS is providing a way for people to lower their waste footprint and enjoy a plastic-free meal.

Throughout 2024, we have been using the reusable dishes at all CCR events, in-house and out in the community. Reusable dishes and water dispensers have saved us time and money in 2024 and drastically reduced our waste output for all meetings and events. A highlight: we supported 3 large-scale events

using reusable dishware and low-waste techniques reaching over 320 attendees and reducing waste output for these meetings to less than a 50-gallon trash bag per meeting (MSEP Advisory meeting, MSU Extension Year-end meeting, and MSU Extension Producers Advisory Council yearly meeting).

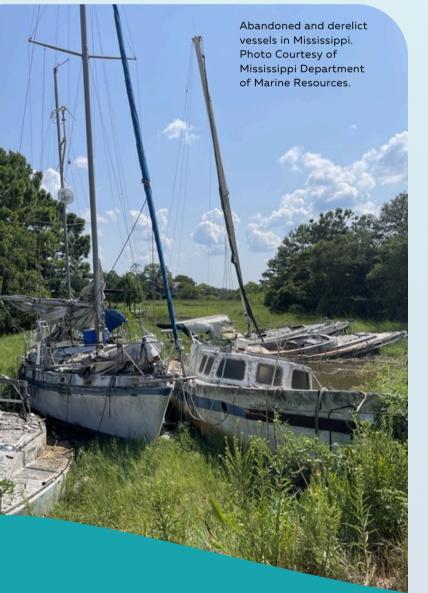


## CONNECT WITH US

f msuswaps msu\_swaps msuswaps@gmail.com If you're interested in SWAPS organizing a community workshop or teaching your students, contact Elizabeth Englebretson & e.englebretson@msstate.edu

## DERELICT VESSELS

Mississippi State University Extension Service has partnered with the Gulf of Mexico Alliance for a new project that involves the removal of abandoned and derelict vessels (ADVs) from waterways along the Gulf coast over a four-year period. Through this project, supported by the NOAA Marine Debris program with funding from the Bipartisan Infrastructure Law, our team works closely with GOMA and state agencies including the Texas General Land Office, the Mississippi Department of Marine Resources, and the Alabama Law Enforcement Agency.



In 2024, 18 vessels were removed by DMR in MS (approximately 441,000 pounds of debris with a footprint of 2125 square feet). Preremoval assessments were carried out for 115 vessels in AL and TX, covering 175 miles of shoreline. The first groups of vessel removals for AL and TX should be starting in early 2025.

Follow the Coastal Conservation and Restoration socials for updates on the project!



CoastalConservationandRestoration

**O** msu\_coastalconservation

http:// K ccrlab.org/derelictvessels

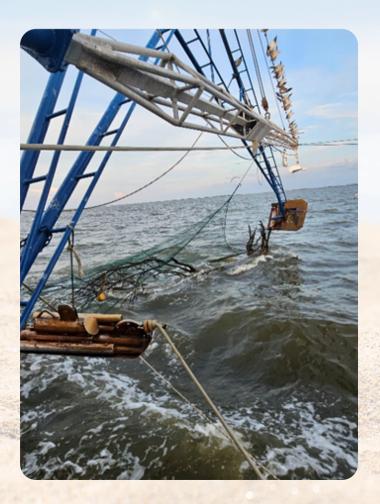
For more information you can contact the project lead Megan Chevis at megan.chevis@msstate.edu





## DERELICT CRAB TRAPS

The Mississippi State University Extension Service and Mississippi Commercial Fisheries United (MSCFU) have continued their successful partnership to remove derelict crab traps for a sixth consecutive year. Lost or abandoned crab traps pose significant economic and environmental challenges. The Derelict Trap Reward Program invites commercial shrimpers to participate in this incentive-based initiative. Currently, 30 active participants are enrolled, and the project team continues to recruit new shrimpers.



As commercial shrimpers encounter derelict traps at sea, they remove entangled traps from their trawls and deposit them at designated harbors along Mississippi's coast. In 2024, shrimpers removed a total of 589 derelict crab traps, with participation from 30 shrimpers. Since the program's inception in 2019, 3,547 traps have been removed from the Mississippi Sound and surrounding waters, significantly improving the health of local marine ecosystems.

LEARN MORE AT msucoastal.com/derelict-trap-reward/

## DEER ISLAND DEBRIS REMOVAL AND AERIAL MAPPING

The Mississippi State University Extension Service (MSU) and Mississippi Commercial Fisheries United (MSCFU) are pleased to highlight the progress of their marine debris removal program, which began in January 2023. This program is open to participants of the Derelict Trap Reward Program and federally registered boats holding a valid Mississippi commercial shrimping license. The initiative incentivizes shrimpers to properly dispose of various types of marine debris, including singleuse plastics, tires, and metal. Incentive rates vary based on debris categories and weight, as outlined in the program's incentive matrix. In 2024, the program successfully removed 25 marine debris items with a total estimated weight of 516.5 pounds. The most common items this year were large metal materials and small aggregated plastics. Since the program's inception in 2023, a total of 58 debris items have been removed, with an overall estimated weight of 2,442.3 pounds. Fish aggregating devices (FADs) remain the most frequently encountered debris type.

For more information you can contact the project lead:

alyssa.rodolfich@msstate.edu

As part of ongoing efforts to engage the Mississippi fishing industry in marine debris removal, MSU and MSCFU have conducted regular aerial mapping of Deer Island in Biloxi to identify and recover derelict oyster farming gear. In 2024 alone, 66 oyster aquaculture cages were recovered, with a combined weight of 3,291 pounds. Since the program began, a total of 114 cages have been removed, amounting to an estimated weight of 6,085 pounds.

By collaborating with shrimpers, oyster farmers, and volunteers, this program continues to improve marine habitats, reduce harmful debris, and strengthen the partnership with the Mississippi fishing industry. Through aerial mapping and debris recovery efforts, MSU and MSCFU also aim to gain valuable insights into habitat recovery following debris removal.

## WHAT TO LOOK FOR IN 2025:

Stay tuned for new partnerships and exciting new initiatives to further the mission of the MSCCP and MSICP programs!

## LITTER GITTERS

A Litter Gitter is a tactical in-stream litter collection device used to intercept floating litter from storm-water runoff. They are cleaned out by the Osprey crew a minimum of twice a month and after major rain events. The Osprey crew cleans them out at least twice a month and after major rain events.

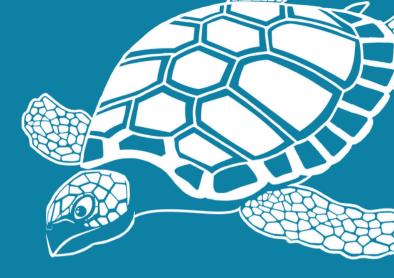
Since 2021, the four coastal Mississippi Litter Gitters have collected **3,362 lbs. of tras**h and debris, with **442 lbs. recycled**. This project is currently funded by the Mississippi Department of Environmental Quality.

In 2025, additional locations are being added to deploy the devices.











## **2025 EVENTS:**

#### MARDI GRAS CLEANUP March 1st, 2025

March 1st, 2025 Ocean Springs Front Beach

STAR-SPANGLED CLEANUP July 5th, 2025 @ multiple sites

ANNUAL MISSISSIPPI COASTAL CLEANUP October 18th, 2025 @ multiple sites

Please visit our website for event details.

mscoastalcleanup.org http://

# MEET the TEAM



Dr. Eric Sparks MSCCP Lead



Evelyn McQueen MSCCP & MSICP Coordinator



Kristi Gay Barrier Island Initiative Coordinator



Elizabeth Englebretson SWAPS Coordinator



Keith Chenier SWAPS Coordinator



Keely Collinger SWAPS Coordinator



Alyssa Rodolfich DTRP Coordinator



Megan Chevis DV Coordinator



Erin Wallace Communications Coordinator

# **THANK YOU 2025 SPONSORS**



We cannot undertake these activities without donations from our great sponsors. If you would like to support the MSCCP events and its associated educational programming, please consider donating to our cause. For more information please visit the MSCCP website and click the "<u>Donate</u>" tab.

#### mscoastalcleanup.org





This work was supported ["in part," if appropriate] by the Mississippi-Alabama Sea Grant Consortium, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and the states of Alabama and Mississippi. Federal grant number NA24OARX417C0155-T1-01. The statements, findings, conclusions and recommendations are those of the authors and do not necessarily reflect the views of any of these funders.

This project was paid for [in part] with federal funding from the RESTORE Council and the Mississippi Department of Environmental Quality under the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act).