MISSISSIPPI STATE UNIVERSITY EXTENSION

Gulf Coast Fisherman

Sea Grant Mississippi-Alabama

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Trash in the Splash

A day at the seashore isn't complete without sandcastles, swimming, picnic lunches, and… marine debris? If you've recently visited the coast, you've probably noticed trash in or near the water. This is termed *marine debris*, and unfortunately, it has become one of the worst pollution problems facing today's oceans. Indeed, in coastal Mississippi, approximately 13 tons of marine debris

is collected during annual, one-day Coastal Cleanup events. Below, we'll define marine debris, outline the various types of debris, elaborate on the diverse impacts of this debris, and share ways to prevent and reduce marine debris.

What is marine debris? Marine debris consists of persistent solid materials that are manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment. Marine debris comes from both land-based and ocean-based sources. Marine debris can be separated into *3 main categories*:

1. Trash: This includes many types of materials, such as plastics, cloth, glass, metal, paper, wood, and rubber. Plastics comprise a large portion of marine debris because they are so prevalent in today's society. Unfortunately, most plastics never fully degrade – they simply break down into smaller and smaller pieces called *microplastics*.

2. Derelict (abandoned) vessels: A variety of factors, from natural disasters to boat ownership neglect, can lead to derelict vessels. Derelict vessels can persist for years, and the debris associated with them can become widespread.

3. Derelict (abandoned) fishing gear: This includes nets, fishing line, buoys, traps, and other recreational or commercial fishing equipment. Ghost fishing occurs when lost or discarded fishing gear continues to fish, thereby trapping and killing marine life.

What are the potential impacts of marine debris?

Environmental: Fishes and other marine life eat marine debris, which irritates and damages the digestive system. If the debris is not passed, this can lead to malnutrition or starvation. Marine debris can cause wildlife entanglement, which in turn can result in injury, suffocation, and death. Marine debris, particularly derelict gear, can damage habitats and kill endangered and threatened species.

Navigation safety: If marine debris is floating below the surface, this can result in damage to the vessel's body or motor.

Economy: Ghost fishing can cause economic losses from target species mortality and costs associated with replacing lost gear. Marine debris on

beaches can cause economic losses if the beaches are popular tourist destinations.

Invasive species: If an organism attaches to marine debris, it can be carried hundreds of miles in the currents and land in a non-native area, thus becoming an invasive species. These can have extensive negative environmental and economic impacts.

Human health and safety: Scientists are conducting research to determine how marine debris might impact our health and safety.

How can we prevent and reduce marine debris?

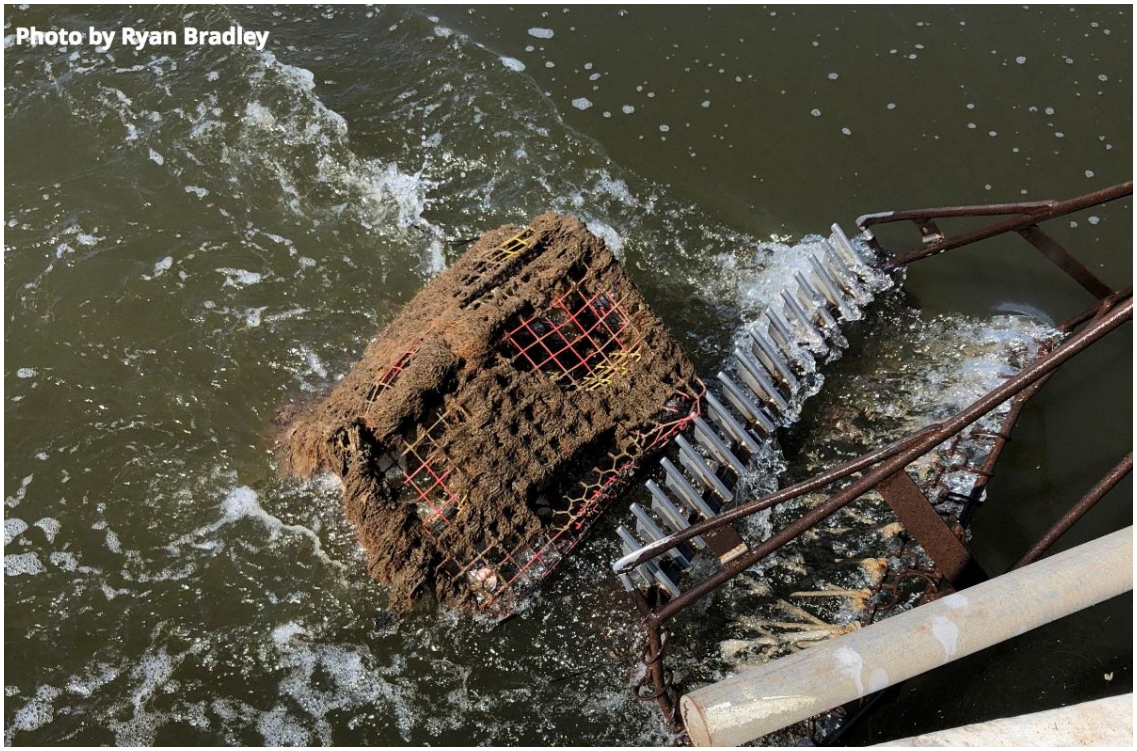
- Participate in local cleanups
- Reduce the amount of waste we produce
- Dispose of waste properly
- Reuse and recycle as many items as possible
- Serve as a positive example to others

References

Check out these links for more information on marine debris in our area:

NOAA Marine Debris
Mississippi State University Marine Debris

Attention Commercial Shrimpers!



Do you frequently encounter abandoned (derelict) crab traps while shrimping?

Do these traps and other types of marine debris cost you time, money, and frustration?

Want to get paid to do something about it?

A new project funded by the Environmental Protection Agency and led by Mississippi State University, Mississippi Coalition for Vietnamese-American Fisher Folks & Families, and Mississippi Commercial Fisheries United will enable researchers to characterize and reduce the impacts of marine debris in Mississippi Sound. Beginning January 1, 2019, licensed commercial shrimpers who encounter derelict crab traps while fishing may dispose of them at any of 4 designated coastal Mississippi sites to receive a $5 award.

Shrimpers must pre-register in order to participate in the project and receive compensation. During the registration process, shrimpers will need to provide their name, address, phone number, and a current shrimping license. Selected shrimpers may also be selected to participate in an economic study of marine debris in Mississippi Sound for additional compensation.

For more information and to register, please attend an informational meeting on **December 5, 2018** at **6 PM** at Mississippi State University

Coastal Research and Extension Center, 1815 Popps Ferry Road, Biloxi, MS 39532.

The first 50 shrimpers in attendance will receive a $25 training stipend!

Questions? Contact
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Readers: We Need Your Help!

Thank you for supporting MSU Marine Fisheries Ecology and Mississippi Alabama Sea Grant by subscribing to our newsletter! We value the opportunity to connect with you. As 2018 draws to a close, we'd appreciate your honest critique of our newsletter. Please click here to take our 5-minute survey for a chance to win a small set of shark jaws AND an MSU Marine Fisheries Ecology hat! *Please note – this survey opens on December 1, 2018, at 12 AM and closes on December 15, 2018, at 11:59 PM.)*

I'm Marcus Drymon, an Assistant Extension Professor at Mississippi State University and a Marine Fisheries Specialist at Mississippi-Alabama Sea Grant. I'd like to hear from you - please send any comments or questions to marcus.drymon@msstate.edu, and click on the links below for more information on my website and Facebook page.

Contributing authors shown with their favorite fishes: Extension Associate Amanda Jefferson (left, with triggerfish), and Extension Program Associate Emily Seubert (sharpnose shark).

Facebook Website