

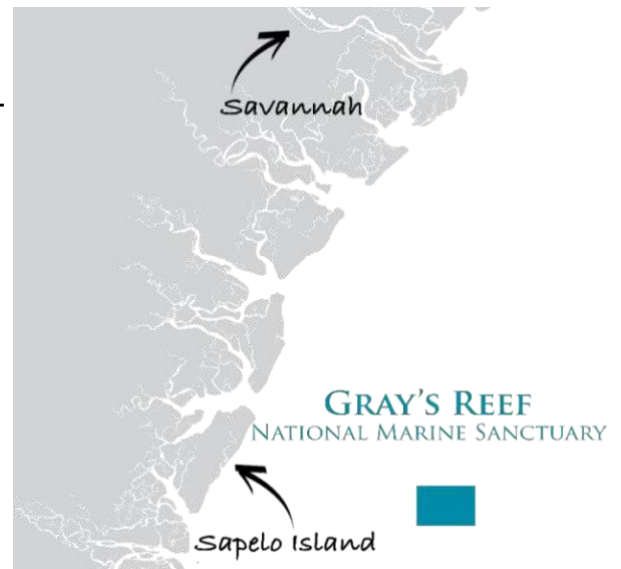


## Gray's Reef National Marine Sanctuary Accomplishments

### Fiscal Year 2021

Designated in 1981, Gray's Reef National Marine Sanctuary off the coast of Georgia is one of the largest near-shore "live-bottom" reefs of the southeastern United States. Gray's Reef National Marine Sanctuary is currently the only protected natural reef area on the continental shelf off the Georgia coast. The approximately 22-square-mile sanctuary (about 14,000 acres) is teeming with marine life and is part of the endangered North Atlantic right whale's calving ground. Loggerhead turtles rest at the reef, where scientists have identified more than 200 fish species.

Visit [graysreef.noaa.gov](https://graysreef.noaa.gov) for more information.



### Expeditions Aboard *Nancy Foster* Resume

In 2021, the sanctuary was able to utilize the NOAA Ship *Nancy Foster* as its research platform. Sanctuary scientists and partners from NOAA's Office of Marine and Aviation Operations and National Ocean Service mapped 55 square miles of high-priority ocean habitats outside the sanctuary. This research filled gaps in mapping the U.S. Exclusive Economic Zone. Working with Georgia Southern University researchers and in collaboration with NOAA Fisheries, dive teams completed more than 200 dives that collected microplastics, surveyed macroalgae for genetic analysis, and studied almost two dozen biodiversity hotspots.

### Exploration of Connectivity in the South Atlantic Bight

Gray's Reef is located on the mid-continental shelf in the Atlantic Ocean's South Atlantic Bight (SAB) and exemplifies live-bottom habitats from Cape Hatteras, North Carolina to Cape Canaveral, Florida. The sanctuary's mapping work collects baseline data to inform scientists of potential ecological connections between habitats. To foster collaboration among dozens of entities studying the SAB, the sanctuary organized a three-day workshop that documented prior knowledge about the SAB's live bottoms, what threats exist, and what possible protections might be needed. The sanctuary will publish the proceedings in early 2022.



The NOAA Ship *Nancy Foster* served as a research platform for the sanctuary. Photo: NOAA



Gray's Reef National Marine Sanctuary has a diverse seafloor. Photo: NOAA

## Gray's Reef Creates Multi-Use, Virtual Outreach Products

The sanctuary created virtual outreach products that can be strategically deployed in numerous settings and easily updated. The sanctuary installed multimedia touchscreen galleries that offer interactive films, games, underwater photos, and stories of Gray's Reef in partner facilities in South Carolina and Georgia. Using grant funds from the National Marine Sanctuary Foundation, The Nature Conservancy worked with the sanctuary, the South Atlantic Fishery Management Council, and the Georgia Department of Natural Resources to create the online Gray's Reef Best Fishing Practices guide to show offshore anglers how to fish sustainably at the sanctuary and elsewhere.



A sanctuary exhibit was installed in the new Tybee Island Marine Science Center. Photo: NOAA

## Looking Ahead

- The sanctuary will substantially expand its on-water science missions and partner opportunities with the acquisition of a new research vessel. Design specifications will be finalized to maximize research and ocean monitoring capabilities in the sanctuary.
- Ocean explorers will discover the wonders of Gray's Reef when the sanctuary opens its first visitor center, a valuable community resource. As the only ocean-focused attraction in the Historic District, the center will welcome many of Savannah's eight million tourists.
- To generate the sanctuary's first condition report since 2008, Gray's Reef staff will host two workshops with experts that discuss and evaluate indicators of sanctuary health. The condition report will establish current trends and the status of the sanctuary.



The National Marine Sanctuary System is a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters. The network includes a system of 15 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.