

Project Focus

Multiple expeditions to explore and map deep-sea coral ecosystems in the Southeast United States in 2017

National Oceanic and Atmospheric Administration (NOAA)

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Last year, the National Oceanic and Atmospheric Administration (NOAA) launched the Southeast Deep Coral Initiative (SEDCI), a four-year effort that aims to study deep-sea coral and sponge ecosystems across the Southeast U.S., a region including the U.S. waters of the South Atlantic Bight, Caribbean Sea, and Gulf of Mexico. The initiative is the latest regional research effort by NOAA's [Deep Sea Coral Research and Technology Program](#). It is led by a multidisciplinary science team from multiple NOAA offices, including National Ocean Service, National Marine Fisheries Service, and Office of Oceanic and Atmospheric Research, that works in close collaboration with other federal and academic institutions.

Guided by the [SEDCI science plan](#), the initiative has five research expeditions planned for this year, in addition to ten complementary research projects focused on seafloor mapping, species identification, environmental monitoring, habitat suitability modeling, and data mining. Expeditions planned for 2017 include (1) two expeditions aboard the NOAA Ship *Nancy Foster* that will survey deep-sea coral habitats off Florida using an ROV and multibeam mapping, (2) a 12-day expedition aboard the NOAA Ship *Pisces* that will survey deep-water canyons off North Carolina using AUV *Sentry*, and (3) two expeditions aboard the R/V *Manta* that will survey deep-water banks in the Northwestern Gulf of Mexico using ROV *Mohawk*. These research expeditions will be led by NOAA scientists Peter Etnoyer, Martha Nizinski and Emma Hickerson, respectively, and include partners from academic institutions and federal agencies.

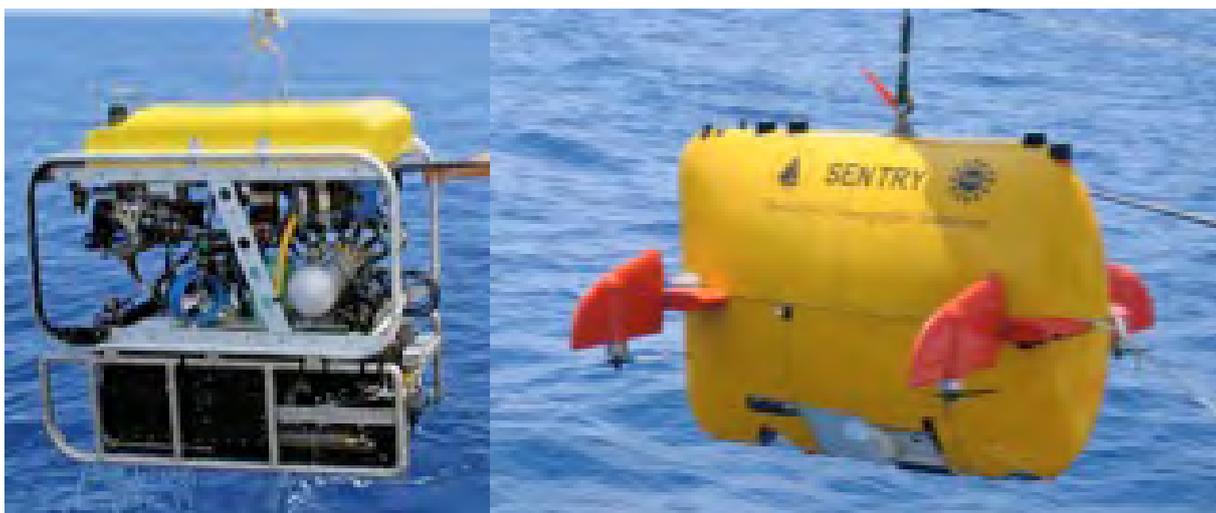
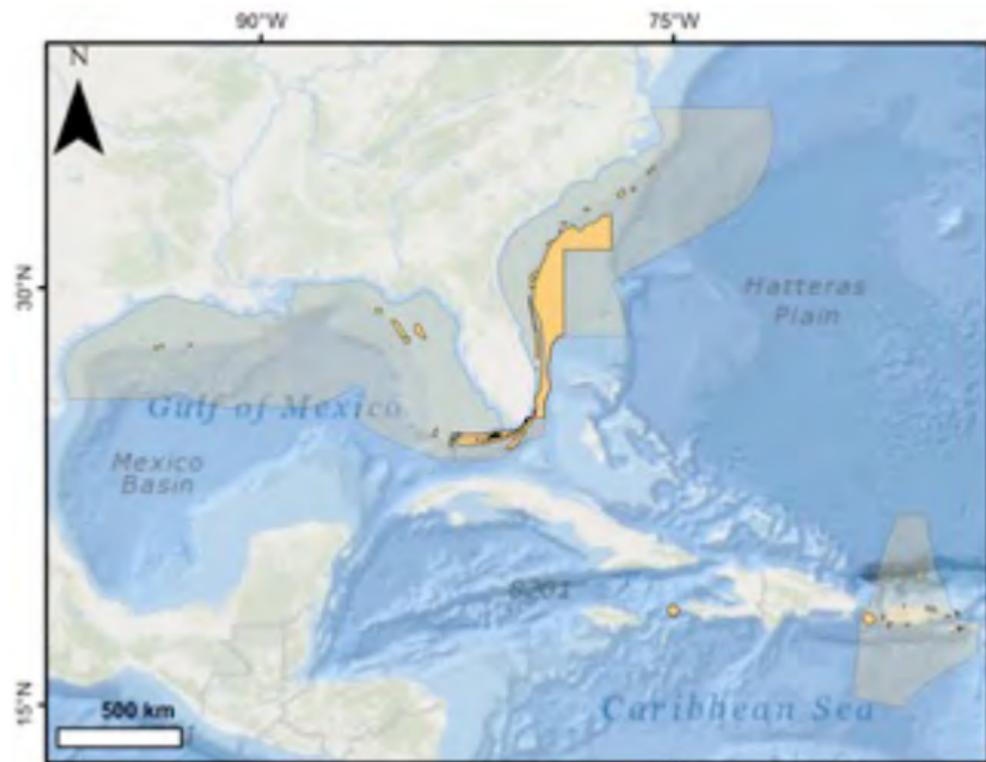


Figure 1 (Left): ROV Mohawk will be used during two 2017 expeditions that will survey deep-water (50-300 m) banks in the Northwestern Gulf of Mexico in support of management of the Flower Garden Banks National Marine Sanctuary (credit: NOAA/UNCW-UVP). Figure 2 (Right): AUV Sentry will be used during a 2017 expedition that will survey deep-water canyons off North Carolina (credit: NOAA/WHOI).

The overall objective of SEDCI is to collect scientific information in order to improve the management and conservation of deep-sea coral ecosystems. In particular, there are several proposals for the establishment of managed areas in deep waters of the Southeast U.S., including proposed expansions of the Flower Garden Banks National Marine Sanctuary, potential new habitat areas of particular concern in the Gulf of Mexico, and new special management zones in the



U.S. South Atlantic. SEDCI expeditions will target many of these areas this year, and additional expeditions are planned in 2018-2019. Funding for SEDCI expeditions is provided by NOAA through the Deep Sea Coral Research and Technology Program, the Office of Exploration and Research, the Southeast Fisheries Science Center, the Office of National Marine Sanctuaries, and the National Centers for Coastal Ocean Science.

Figure 3: Map showing the three geographic regions where the Southeast Deep Coral Initiative will operate in 2016-2019. Areas where deep-sea corals are protected through fishing restrictions are shown in orange. (Credit: NOAA).