



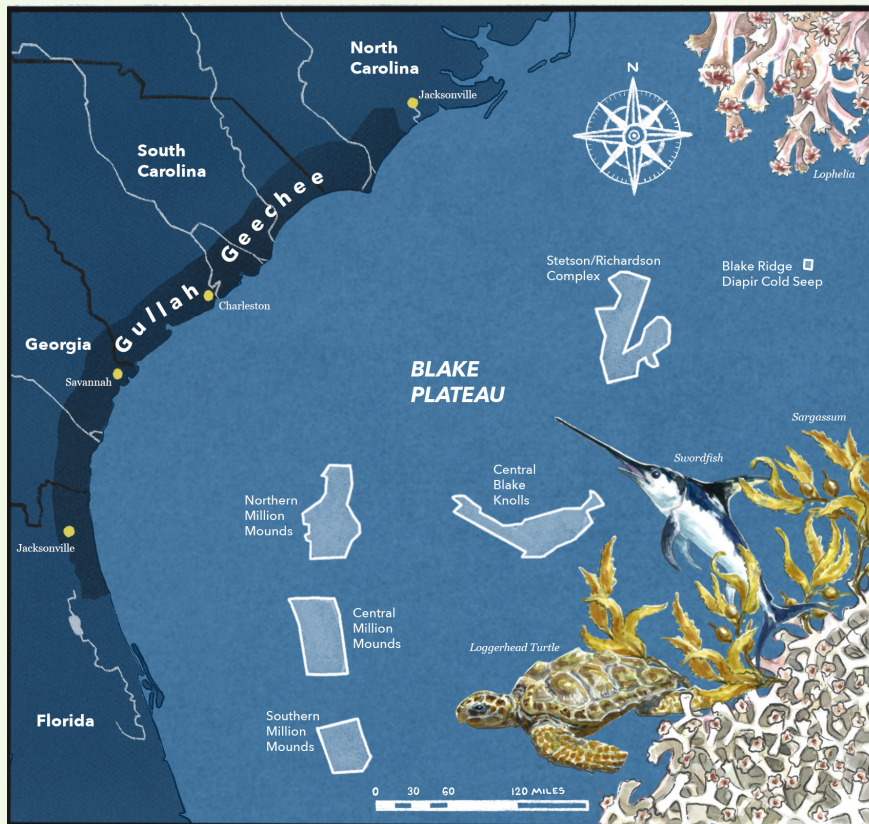
OCEANS CONNECT

Blake Plateau: A Southern Treasure

Blake Plateau is home to the world's largest deep-sea coral habitat.¹ This remarkable hotspot of marine life is roughly 80 miles off the southeast coast of the United States. It hosts an impressive array of ocean life, from sperm whales that feed on squid 1,000 feet below the sea's surface to unique mussels that live off bacteria in deep methane seeps. It also holds cultural and spiritual significance for the Gullah/Geechee, as it is the ancestral resting place for those enslaved relatives who did not survive crossing the Blake Plateau as part of the Middle Passage.

Fueled by the powerful Gulf Stream, the Blake Plateau fosters dynamic ocean ecosystems from surface to seabed. Its pervasive *Sargassum* seaweed meadows, methane seeps, and at least 200 species of deep-sea corals support a rich diversity of marine life.²

Important Ecological Features of the Blake Plateau



*Please note that while the Blake Plateau stretches from North Carolina to Florida, this map only shows key areas offshore South Carolina, Georgia, and Florida. Conversations with scientists helped shape the polygons' boundaries.

Map by Jessica Russo; Illustrations by Richard Jones

The plateau contains numerous coral “neighborhoods” with unique characteristics, including individual mound structures that can be as tall as the Statue of Liberty. Among the most striking is what scientists believe to be the largest continuous deep-sea coral reef on earth, called the “Million Mounds.” This “coral highway” runs about 200 miles from Georgia to central Florida.³ The plateau also contains other important deep-sea coral areas, including the Central Blake Knolls and the Stetson/Richardson Complex.⁴ As our ocean warms, these colder, deeper areas serve as an important refuge for deep-sea coral species, potentially securing their long-term survival.⁵

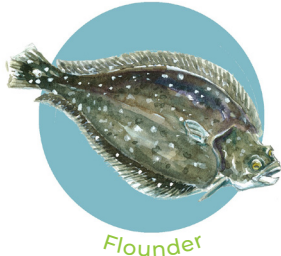
The Blake Plateau hosts the largest deep-sea coral habitat on earth. Major coral formations, as indicated by the polygons, occur across the plateau, including the world's largest deep-sea coral reef, the Million Mounds.



Lophelia coral

The reef-like structures are mainly made up of a deep-sea coral named *Lophelia*, which is a ghostly white. The *Lophelia* coral “mounds” grow in complete darkness over tens of thousands of years, supporting a diverse community of wildlife, including close to 100 species of fish.⁶

Some scientists believe that the harsh conditions of the deep sea—with its high pressure, absence of light, and cold temperatures—provide a Noah’s ark of genetic resources that can be used to create novel chemical compounds for new pharmaceutical innovations. Chemicals found in the ocean are leading to discoveries in the lab to treat Alzheimer’s disease, cancer, and COVID-19.⁷



Flounder

In addition to providing an important habitat for fish and marine life, the deep-sea corals on the Blake Plateau consume organic matter that rains down from the ocean’s surface and recycle it into essential nutrients for the entire ecosystem. As the Gulf Stream rolls over the plateau, it pushes these nutrients back up to the surface, supporting the ocean’s wildlife. These nutrients ultimately sustain the region’s fisheries, and all of us who rely on them.

This landscape is still largely pristine, with limited protections from harmful industry like oil and gas and only a minimal amount of commercial fishing activity (and no subsistence fishing) in the Blake Plateau’s deep waters. However, with threats of greater ocean industrialization looming on the horizon, we need to conserve this amazing location for future generations to cherish. The Blake Plateau is a world-class natural wonder in our backyard. For more information on how you can help safeguard this important and sacred place, visit ConserveBlakePlateau.org.

ENDNOTES

- 1 Derek C. Sowers et al., “Mapping and Geomorphic Characterization of the Vast Cold-Water Coral Mounds of the Blake Plateau,” *Geomatics* 4, no. 1 (March 2024): 17-47, <https://doi.org/10.3390/geomatics4010002>.
- 2 Steve W. Ross and Martha S. Nizinski, “State of Deep Coral Ecosystems in the U.S. Southeast Region: Cape Hatteras to Southeastern Florida,” in *The State of Deep Coral Ecosystems of the United States*, eds. S. E. Lumsden et al., National Oceanic and Atmospheric Administration (NOAA), 2007, NOAA Technical Memorandum CRCP-3, https://www.coris.noaa.gov/activities/deepcoral_rpt/DeepCoralRpt2007.pdf; Thomas F. Hourigan et al., “Deep-Sea Coral Taxa in the U.S. Southeast Region: Depth and Geographical Distribution,” NOAA, Smithsonian Research Online, 2017, <http://repository.si.edu/xmlui/handle/10088/34999>.
- 3 Derek C. Sowers et al., “Mapping and Geomorphic Characterization of the Vast Cold-Water Coral Mounds of the Blake Plateau,” *Geomatics* 4, no. 1 (March 2024): 17-47, <https://doi.org/10.3390/geomatics4010002>.
- 4 Ibid
- 5 Ryan Gasbarro et al., “Distribution and Predicted Climatic Refugia for a Reef-Building Cold-Water Coral on the Southeast,” *Global Change Biology* 28, no. 23 (December 2022): 7108–25, <https://doi.org/10.1111/gcb.16415>.
- 6 Steve Ross and Andrea Quattrini, “The Fish Fauna Associated With Deep Coral Banks off the Southeastern United States,” *Deep Sea Research Part I: Oceanographic Research Papers* 54, no. 6 (June 2007): 975-1007, <https://doi.org/10.1016/j.dsr.2007.03.010>.
- 7 NOAA, “What Does the Ocean Have to Do With Human Health?,” National Ocean Service, last updated January 20, 2023, <https://oceanservice.noaa.gov/facts/ocean-human-health.html>; NOAA, “NOAA Discovery of Green Deep-Sea Sponge Shows Promise for Cancer Research,” news release, July 26, 2017, <https://www.noaa.gov/news/noaa-discovery-of-green-deep-sea-sponge-shows-promise-for-cancer-research>; Torsten Thiele, Marie-Christine Imbert, and Timothy Bouley, “A Healthy Ocean Can Help Fight Pandemics,” *China Dialogue Ocean* (blog), May 4, 2020, <https://chinadialogueocean.net/en/conservation/13619-healthy-ocean-help-fight-pandemics/>.