

Get Started

Sketch, upload or select a planning area within the red outlined study area to generate results

Select a Feature or Area

or

SKETCH

or

UPLOAD

Missing features? Contact us

Southeast Marine Mapping Tool

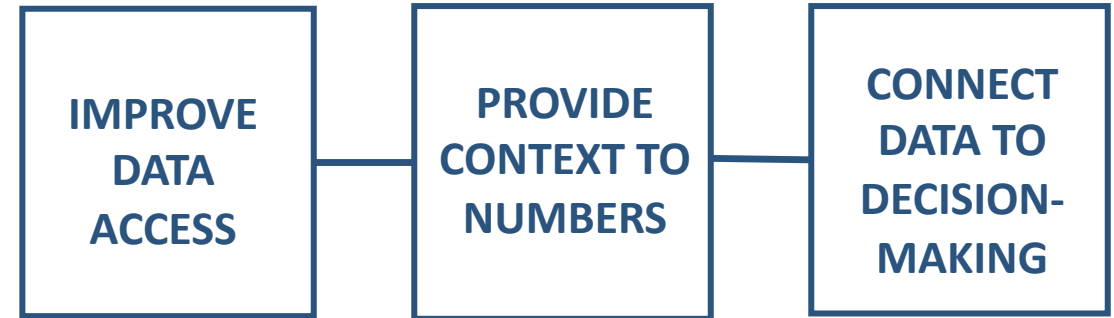
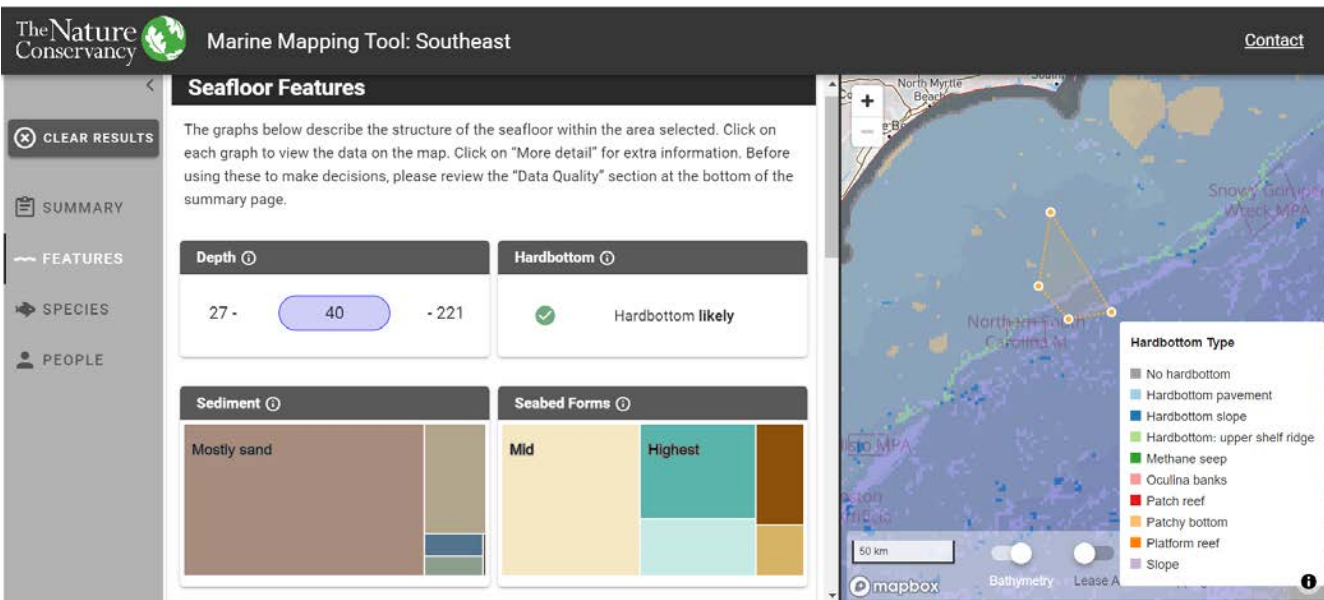
Increasing access to regional ecological data to help inform offshore ocean use decisions

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Overview of the Project

OUR PROJECT: Leverage marine-life, habitat, and use data available to provide guidance so all users can be part of decision-making process. Tool now available for NE and SE regions.



<https://maps.tnc.org/marinemap/>

Accomplishments

The Southeast Marine Mapping Tool, released in January 2023, enables users to unpack feature, species and management information for a selected ocean area.

OVERALL “FLAGS”

Species

- High diversity of corals
- Fish: Priority species observed
- Marine mammals: sensitivity to high frequency sounds
- High diversity of birds
- Birds: ESA listed species
- Birds: species of high priority for conservation (AMBCC high)

People

- HAPC for one or more species

Features

- Probable hardbottom

ECOLOGICAL GROUPINGS

24 out of 24 species estimated

Species by density level

Species diversity relative to ecoregion

Group	Far Below	Same	Far Above
Deep-sea Corals - All:	0	100	0
Soft Deep-sea Corals:	0	100	0
Stony Deep-sea:	0	~80	~20

SPECIES DATA

Select a group: Stony Deep-sea C

Year Round: Model Estimate | Sightings

Stony Deep-sea Corals

By species:

Species	Model Estimate	Sightings
Anthothela	~50%	1
Cladocora	~50%	1
Enallopsammia	~50%	1
Lophelia	~50%	1
Madrepora	~50%	1
Oculina	~50%	1
Solenosmilia	~50%	1
Stylasteridae	~50%	✓

DATA SOURCES

NCCOS NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

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NCCOS PROJECT

Deep Coral Predictive Habitat Modeling in the U.S. Atlantic and Gulf of Mexico: Focusing on Uncharted Deep-Sea Corals

Research Area: Marine Spatial Ecology / Coral, Habitat Mapping, Stressor Impacts and Mitigation
 Regional of Study: Watersheds / Atlantic Ocean, Gulf of Mexico
 Primary Contact(s): peter.stroyan@noaa.gov; matthew.potts@noaa.gov

This project began in August 2021 and was completed in September 2023.

We are using statistical models that combine distributions of known deep-sea coral beds with information about key habitats to predict and map suitable habitat for deep-sea corals in the U.S. Atlantic and Gulf of Mexico. The resulting habitat suitability maps will improve the conservation planning, management, and exploration of deep-sea coral ecosystems.

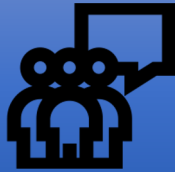
Why We Care

Deep-sea coral is a diverse and valuable resource that, among many things, provides habitat for fish and invertebrates. Because of their slow growth rates and vulnerability to bottom disturbance, deep-sea coral ecosystems are particularly important to conserve. The distribution of deep-sea coral habitats is poorly understood because of the logistical difficulty and expense of surveying the deep ocean. Predictive modeling of deep-sea coral habitats is essential for supporting conservation planning and for targeting areas for future mapping and exploration. Modeling can also lead to insights into the environmental factors driving the distribution of deep-sea corals, helping to build our knowledge base of how these unique ecosystems function.



Challenges and Looking Ahead

Phase 2 Objective: Engage decision-makers and interested parties across the region in tool refinement, ensuring it is readily accessible and provides relevant information in a digestible format



Engage Decision-Makers and Interested Parties

- Creation of a project Steering Committee
- Presentations and outreach to user groups



Enhance the Online Tool

- Modify data displays and reports
- Identify information gaps for future iterations



Enable Connection with Related Online Tools

- Meet with creators of national and regional tools
- Develop materials to communicate differences to user groups