

A Biogeographic Assessment of Seabirds, Deep Sea Corals and Ocean Habitats of the New York Bight: Science to Support Offshore Spatial Planning



Charles Menza

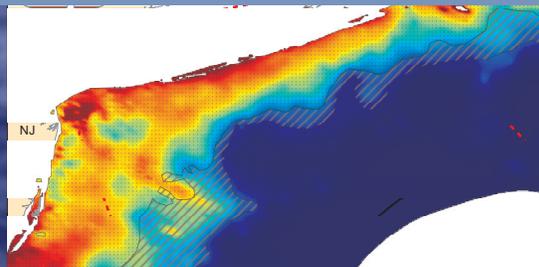
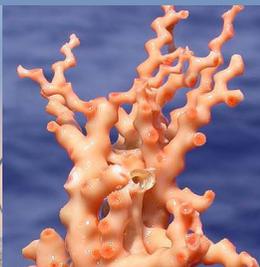
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March 2012

NOAA TECHNICAL MEMORANDUM NOS NCCOS 141

NOAA NCCOS Center for Coastal Monitoring and Assessment



Citation

Full report citation:

Menza, C., B.P. Kinlan, D.S. Dorfman, M. Poti and C. Caldow (eds.). 2012. A Biogeographic Assessment of Seabirds, Deep Sea Corals and Ocean Habitats of the New York Bight: Science to Support Offshore Spatial Planning. NOAA Technical Memorandum NOS NCCOS 141. Silver Spring, MD. 224 pp.

Citations for individual chapters (example Chapter 6):

Kinlan, B.P., C. Menza, and F. Huettmann. 2012. Chapter 6: Predictive Modeling of Seabird Distribution Patterns in the New York Bight. pp. 57-127. In: C. Menza, B.P. Kinlan, D.S. Dorfman, M. Poti and C. Caldow (eds.). A Biogeographic Assessment of Seabirds, Deep Sea Corals and Ocean Habitats of the New York Bight: Science to Support Offshore Spatial Planning. NOAA Technical Memorandum NOS NCCOS 141. Silver Spring, MD. 224 pp.

Acknowledgments

This work would not have been possible without the numerous contributors who shared their data, time and expertise. Many people are acknowledged among the individual chapters of this report, but we must also thank Jamie Higgins for organizing and formatting the content of this report, as well as Kevin McMahon, Sarah Hile, Tom McGrath and Moe Nelson for preparing this report for publication.

Cover and Back

Seabird photos on the front and back cover were provided by D. Pereksta (BOEM); the wind turbine photo on the front cover was provided by A. Meskens (Wikimedia Commons); the coral *Madrepora oculata* on the front cover was provided by Islands in the Sea 2002, NOAA/OAR; the large photo of the coral *Paragorgia hirez* on the back cover was provided by MBRI/NOAA and the small photo of the sponge by Mountains in the Sea Research Team, IFE/NOAA; and the gray seafloor map was provided by US Geological Survey.

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About this document

This report provides a compilation of maps and spatial assessments of bathymetry, surficial sediments, oceanographic habitat variables, deep sea corals, and seabirds for offshore waters of New York. The information was compiled to support an offshore spatial plan being developed by the New York Department of State's Ocean and Great Lakes Program (OGLP). The report is a product of collaboration started in 2009 between scientists at the National Oceanic and Atmospheric Administration's National Centers for Coastal Ocean Science (NCCOS) and coastal managers at OGLP. NCCOS and OGLP worked closely to identify priority scientific needs, plan the analytical approach, assess existing data, and compile findings into this report. The targeted users of this report are coastal managers at OGLP, but other State and federal decision-makers, offshore renewable energy development interests and environmental advocates will also find the information useful.

The presented data and maps are the most accurate and up-to-date ecological information available for the study area. The diverse ecological themes which are treated here represent priority data gaps and were requested by OGLP to better understand and balance ocean uses and environmental conservation. The data will feed into a larger project led by OGLP to compile and assess existing data for offshore spatial planning.

NCCOS is a recognized scientific leader in developing biogeographic assessments. These assessments are organized around the development of geospatial data layers for ecological parameters, integrated analyses, and specific quantitative products to aid in resource management. The spatial analyses in this report build on and advance existing biogeographic techniques developed by NCCOS for other coastal and marine areas, including the Gulf of Maine, North and Central California, and the Northwestern Hawaiian Islands. This report, along with similar biogeographic products from around the nation, is also available online. For more information please visit NCCOS' webpage (<http://coastalscience.noaa.gov/>) or direct questions and comments to:

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Chapter 6: Online Supplements

Online Supplements can be found by going to <http://oceanservice.noaa.gov/programs/nccos/welcome.html> and searching on the keywords: *New York Spatial Plan*

Online Supplement 6.1: Predictor variable transformation details

This document provides additional detail on the statistical preparation of potential predictor variables for analysis.

Online Supplement 6.2: Species and group seasonal models, full diagnostic reports

This Online Supplement is presented in the form of an HTML document providing links to full diagnostic reports from each of the seasonal species/group predictive models.