## **Environmental Studies Program: Ongoing**

**Study Area(s):** Atlantic

**Administered By:** Office of Renewable Energy Programs

**Title:** Expanding the Utility of the Northwest Atlantic Seabird

Catalog to Support Energy Development on the Outer

Continental Shelf

**BOEM Information Need(s) to be Addressed:** The development of offshore renewable energy facilities has the potential to impact bird species. Compiling data collected by marine bird surveys is key to being able to manage the decisions related to offshore energy proposal reviews. Continued support for developing and maintaining the integrity of databases housing marine bird data in addition to conducting the analyses and syntheses necessary to support the review of offshore energy proposals will allow BOEM to use the most recent and best available information decision-making.

**Period of Performance:** FY 2019-2024

Conducting Organization(s): NOAA, National Centers for Coastal Ocean Science

**BOEM Contact(s): Dr. David Bigger** 

## **Description:**

<u>Background</u>: With the passage of the Energy Policy Act of 2005, the BOEM was delegated responsibilities for alternative energy activities on the Outer Continental Shelf. This responsibility includes offshore wind energy projects. Experience from onshore wind development suggests that the careful siting of facilities is critical to minimize impacts to bird species. Over the past ten years, the BOEM, USGS, NOAA, and other organizations, have generated a vast array of marine bird biological data.

Resource stewardship and public accountability obliges the BOEM to reap the full benefit of these investments, both for use internally and by our conservation partners. However, the full benefit can only be achieved with effective and efficient long-term data management, including data sharing, as well as the capacity to conduct data analyses. Furthermore there is demand for access to this data, both within BOEM and by our agencies' partners, all who are having to make decisions about offshore energy projects and fulfill their responsibilities under the National Environmental Policy Act, the Endangered Species Act, the Migratory Bird Conservation Act and other legal requirements. Meeting these needs will require sustained institutional support of data management and data syntheses and organizational commitments to developing a culture that fully embraces knowledge management, data sharing, and collaboration with partners

In 2007, the BOEM funded a study to compile existing observational datasets of seabirds and shorebirds titled "Compendium of Avian Occurrence Information for the Continental Shelf waters along the Atlantic Coast of the U.S." (Mo8PG20033). The resulting dataset has served as a starting point to identify the presence and distribution of avian species as well as identify areas where data are lacking. The BOEM funded a follow-on study ("Compendium of Avian Information" M11PG00059) to add data collected more recently and to conduct analyses into the correlation between bird distributions and oceanographic features. After that BOEM funded the study "Compendium of Marine Bird Data for Offshore Renewable Energy Decision Making" (M14PG00014). A summary is available through the Marine Cadaster, a web-based system to display geospatial information to support renewable energy siting decisions.

The current database represents the most comprehensive accumulation of observations available along the Atlantic coast and is invaluable as a foundation for future field efforts. However, the database is most valuable if it is readily accessible to the public, maintained, and annually updated. The BOEM is already incorporating the requirement that investigators submit their data to the catalog as a repository for sharing and compiling observations. The long-term maintenance requires dedicated funding to ensure that it is maintained. This study will establish an agreement with the NCCOS to maintain the database for the next five years.

<u>Objectives</u>: Provide access to and updating of the Northwest Atlantic Seabird Catalog to support energy siting decisions as well as other seabird research activities along the Atlantic coast and OCS.

<u>Methods</u>: The NCCOS will be the primary source for the database and responsible for maintaining and updating the database and ensuring the valuable datasets are available to the public for the next five years. Tasks associated with this responsibility include:

- Acquire and integrate new avian tabular datasets with surveys of the OCS into the database.
- Conduct QA/QC of all data residing and populating the Atlantic marine bird databases.
- Develop scripts to ingest new datasets
- Standardize legacy datasets as needed
- Maintain and update or create a new segmentation algorithm

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