



FOR IMMEDIATE RELEASE

October 27, 2015

Contacts

Kate Williams, Wildlife and Renewable Energy Program Director
Biodiversity Research Institute
kate.williams@briloon.org
207-839-7600 x108

U.S. Department of Energy Office of Energy Efficiency and Renewable Energy
EE.Media@ee.doe.gov

BRI ANNOUNCES THE RESULTS OF ITS MID-ATLANTIC BASELINE STUDIES PROJECT TO ASSESS THE DISTRIBUTION AND ABUNDANCE OF WILDLIFE ALONG THE EASTERN SEABOARD

Portland, ME—Biodiversity Research Institute (BRI) and collaborators announce the results of a three-year, multi-state project that fills significant ecological data gaps on bird, marine mammal, and sea turtle distributions and movements. The goal of this project, one of the largest of its kind ever conducted, was to improve the understanding of species composition and use of the mid-Atlantic marine environment in order to inform sustainable offshore development in the mid-Atlantic United States, from Delaware to Virginia.

Funded by the Department of Energy’s (DOE’s) Wind and Water Power Technologies Office in 2011, with additional support from a wide range of partners, the Mid-Atlantic Baseline Studies Project represents an extensive collaborative effort between government agencies, universities, nonprofits, and private industry. In 2013, boat and aerial surveys were expanded off Maryland’s Atlantic coast.

According to the DOE blog *Innovative Study Helps Offshore Wind Developers Protect Wildlife*, “The results provide a new tool to help regulators, resource managers, researchers, and developers minimize issues during offshore wind siting and permitting processes, as well as informing natural resource management and conservation efforts...As a model for future studies, the results will be used to make environmental management decisions by a variety of stakeholders, including government agencies, developers, environmental consultants, and nonprofits.”

“This comprehensive study is important because we now have baseline data that will become a foundation for making well-informed environmental management decisions,” said Kate Williams, director of BRI’s Wildlife and Renewable Energy Program and lead researcher on the project. “With the help of our collaborators, we also made a variety of technological, methodological, and analytical advancements to move the state of technology forward for future wildlife studies. This project is a model for future studies of its kind. This type of large scale baseline study, and the focus on methodological development to improve future environmental studies, doesn’t happen without sustained support from federal and state agencies.”

~ ~ more ~ ~

A spokesperson from US Wind, Inc., a company that holds the lease for a planned commercial-scale wind energy area offshore of Maryland, said “The results of these surveys, studies and data sets provide an important starting point in the understanding of the Mid-Atlantic Bight. This vital foundational step will help offshore wind developers better understand how to minimize the impacts while at the same time embracing the responsible development of offshore renewable energy sources in an effort to replace land-based carbon sources. US Wind, Inc. encourages continued funding and support to study further this important marine habitat, as we look forward to installing and operating our offshore wind farm in the Maryland Wind Energy Area based on the best practices and in the most environmentally responsible manner possible.”

Primary components of the Mid-Atlantic Baseline Studies Project included:

- *Surveys*: Researchers conducted standardized surveys to quantify wildlife abundance throughout the study region, and identify important habitat use or aggregation areas. Boat-based surveys and high-resolution digital video aerial surveys were conducted to reach this objective.
- *Tracking*: Researchers used individual tracking methods for several focal bird species to provide information on population connectivity, individual movements, and seasonal site fidelity that is complementary to survey data.
- *Models*: Statistical models were developed to help understand the drivers of wildlife distribution patterns and to predict the environmental conditions likely to support large densities of wildlife.

Key findings of the study include:

- Digital aerial surveys may be particularly useful for covering offshore areas at broad scales, where general distributions of taxonomic groups are a priority; boat surveys can provide more detailed data on species identities and behaviors, but are more limited in geographic scope due to their slower survey pace. The two survey methods are largely complementary.
- The study area was important for wintering and breeding taxa, and its location also made it a key migratory corridor. There was considerable variation in species composition and spatial patterns by season, largely driven by dynamic environmental conditions.
- Habitat gradients in nearshore waters were important influences on productivity and patterns of species distributions and abundance. Though some species displayed a more offshore distribution, there was generally higher overall abundance and diversity of wildlife within about 30-40 km of shore.
- Areas offshore of the mouths of Chesapeake and Delaware Bays, as well as to the south of Delaware Bay along the coast, were consistent hotspots of abundance and species diversity, regardless of survey methodology or analytical approach.

~ ~ more ~ ~

For more information on the Mid-Atlantic Baseline Studies Project

A webinar on the project will be held as part of the DOE's Environmental Webinar Series through Pacific Northwest National Labs: <http://tethys.pnnl.gov/events/mid-atlantic-baseline-study-webinar>

DATE: November 17, 2015

TIME: 16:00–17:00 UTC (11:00–12:00 EST)

Step 1: <http://ems7.intellor.com/login/700448>

Step 2: Instructions for connecting to conference audio will then be presented on your computer. You will be connected to the conference with the AT&T Connect Web Participant Application - there is no software download or installation required.

If you are unable to connect to the conference by computer, you may listen by telephone only at 1-877-369-5243 or 1-617-668-3633 using 0550477#.

Collaborators for this project included North Carolina State University, College of Staten Island (City University of New York), Duke University, Oregon State University, University of Oklahoma, HiDef Aerial Surveying Ltd., and many others (mostly involved with the seabird telemetry projects, which are still ongoing).

Additional funding support for various project components was provided by the Bureau of Ocean Energy Management, U.S. Fish and Wildlife Service, Sea Duck Joint Venture, The Bailey Wildlife Foundation, The Nature Conservancy, Ocean View Foundation, The Bluestone Foundation, Maine Outdoor Heritage Fund, and Davis Conservation Foundation.

* * *

The mission of Biodiversity Research Institute is to assess emerging threats to wildlife and ecosystems through collaborative research, and to use scientific findings to advance environmental awareness and inform decision makers. BRI has been researching topics related to wildlife and renewable energy since 2009. For more information about BRI's Wildlife and Renewable Energy Program, visit: www.briloon.org/mabs.