
Woods Hole Oceanographic Institution
Biology Department Seminar



Thursday, September 19, 2024 – 12:00 Noon

Where to Place Offshore Wind Farms if Birds Matter

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Offshore wind energy development (OWEDs) is a key part of the U.S. push to increase renewable energy production over the foreseeable future, but like any natural resource exploitation there are potential costs of such development that ideally are minimized. We describe the process (called the Ocean Special Area Management Plan, OSAMP) used to decide where to locate the first OWED in U.S. waters, and outline why it's better than the traditional approach typically used to assess potential impacts of human development projects. Birds were a key part of the OSAMP analysis because southern New England is a recognized important area for many types of marine birds. For example, during winter most sea ducks in eastern North America inhabit nearshore coastal areas where >400,000 ha are now leased for offshore wind energy developments (OWED) by the Bureau of Ocean Energy Management (BOEM). We combined spatial distribution models of marine birds from aerial and boat-based surveys with spatial conservation prioritization (SCP) software to identify sites with high marine bird conservation priority that aided evaluation of proposed OWED sites, and led to the ban of OWED in nearshore waters <20 m deep in Rhode Island. We also assessed movements of satellite-tagged sea ducks throughout their annual cycle to delineate key habitats selected on their wintering grounds, along with migration routes to and from breeding, molting, and wintering areas. We discuss the important implications of this information for bird conservation and management as OWED becomes more common off the U.S. Atlantic coast.

HYBRID! **In Person:** Redfield Auditorium **Zoom:** <https://whoi-edu.zoom.us/j/97000865816> Meeting ID: 970 0086 5816 **By phone:** Find your local number: <https://whoi-edu.zoom.us/u/adlvMow3LQ>