



WREN Webinar Series Goals

iea wind

WREN*: Working Together to Resolve Environmental Effects of Wind Energy

WREN's webinar series, launched in September 2014, supports WREN's goals to:

- Facilitate international collaboration that advances global understanding of environmental effects of offshore and land-based wind energy development.
- Create a shared global knowledge base and community of practice around research, monitoring and management of the environmental effects of wind energy development.

* IEA Wind Task 34



Implementing Agreement for Co-operation in the Research, Development, and Deployment of Wind Energy Systems



WREN Webinars Held to Date

iea wind

Webinar #1, September 2014 covered best practices for assessing the **impact of wind energy development on bats** with a focus on the combination of operational minimization and deterrents as a possible strategy to minimize bat fatalities at wind turbines. Speakers: Cris Hein of Bat Conservation International and Oliver Behr of University of Erlangen in Germany

Webinar #2, December 2014 covered research efforts to **measure seabird and marine mammal attraction and avoidance at offshore wind farms**. Speakers: Debbie Russell, Research Fellow from the Sea Mammal Research Unit, University of St. Andrews and Ross McGregor, Senior Ornithologist from UK's Natural Power

Webinar #3, April 2015 was on understanding **avian collision rate modeling and what this means in a population context**. Speakers: Mark Collier from Bureau Waardenburg in the Netherlands; and Aonghais Cook from the British Trust for Ornithology in the UK.

Webinar #4, August 2015 was on **avian sensitivity mapping and wind energy projects**. Speakers: Julia Wilmott from Normandeu Associates, Sinead Cummins of BirdWatch Ireland and Roel May of the Norwegian Institute for Nature Research.





Today's Webinar #5 – Wednesday Dec 2, 2015 from 3 to 4:30 pm UTC (8 am PT/11 am ET)

Wildlife Monitoring and Wind Energy as presented by:

- **Kate Williams of the Biodiversity Research Institute**
- **Henrik Skov of the DHI Group**

The speakers will present on tools and approaches they have developed and/or used to monitor wildlife at existing and potential wind energy development sites, both onshore and offshore.

For additional information visit the WREN Hub at:

<http://tethys.pnnl.gov/events/wildlife-monitoring-and-wind-energy>

Note that there was a complementary webinar from BRI as part of the Tethys webinar series on November 17th, that focused on the geographic and temporal patterns of wildlife distributions observed during the Mid-Atlantic Baseline Studies (MABS) project. Please go to this link for more information: <http://tethys.pnnl.gov/events/mid-atlantic-baseline-study-webinar>





Webinar #5 Speaker Biographies

iea wind

Kate Williams – Kate is the Wildlife & Renewable Energy Director at the Biodiversity Research Institute, a nonprofit scientific research organization based in Maine. Kate's research has focused on 1) survey methodologies and biases in studies of animal populations, and 2) understanding wildlife movements, distributions, and habitat use in relation to environmental variables and anthropogenic stressors. Kate has degrees from Tufts University and the University of Florida, and has a wide range of field and analytical experience. Since 2008 she has managed a series of large-scale, highly collaborative projects focused on environmental contaminants and wind-wildlife issues.

Henrik Skov – Henrik has more than 30 years of experience in the application of field and analytical methods for assessing the effects of human activities at sea on marine birds. He has also managed several strategic studies and more than 60 marine impact assessments. The method development and innovation within impact assessment has included multi-sensor detection systems, dynamic habitat modelling, remote sensing, sensitivity mapping and GIS-based decision support systems. His experience record includes marine wind farms, small- and large-scale marine protected areas, bridges and tunnels, oil & gas activities, sustainable commercial and artisanal fisheries and dredging activities.





Potential Future Webinar Topics

iea wind

Some ideas being considered:

- Development Tools
- Mitigation
- Compensation
- Environmental Uncertainty and Risk
- Environmental Regulation
- Environmental Practices
- WREN Hub
- WREN White Papers

What would you be interested in learning more about and participating in a deeper discussion on?



Thank You!

- For more information on WREN including the webinar series, visit the WREN Hub at: <http://tethys.pnnl.gov/about-wren>
- For questions, contact:
 - Karin Sinclair karin.sinclair@nrel.gov
 - Andrea Copping andrea.copping@pnnl.gov
 - Jocelyn Brown-Saracino jocelyn.brown-saracino@ee.doe.gov

Notice: The IEA Wind agreement, also known as the Implementing Agreement for Co-operation in the Research, Development, and Deployment of Wind Energy Systems, functions within a framework created by the International Energy Agency (IEA). Views, findings and publications of IEA Wind do not necessarily represent the views or policies of the IEA Secretariat or of all its individual member countries.

