

Conference Agenda

Monday, March 9

18:00 - 21:00

Conference Reception

Day 1 Tuesday, March 10

08:00 - 09:00

Registration/ Coffee & Pastries

	Convener: Johann Köppel		Plenary Hall A
09:00 - 09:15	Opening & Welcome		
09:15 - 09:45	State Secretary Jochen Flasbarth	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)	
09:45 - 10:25	Edward B. Arnett	A global perspective – Bats and wind energy development	
10:25 - 11:05	Ommo Hüppop	What we (should) know about offshore bird migration	

11:05 - 11:25

Coffee Break/ Poster/ Innovation Exposition (20 min)

11:25 - 12:55	Session 1a: Tools & Technology		Session 7b: Planning & Siting	
	Chair: Cindy Hull		Chair: Rowena Langston	
	<u>Session Hall C1</u>		<u>Session Hall B</u>	
	Christian Voigt	Using miniaturized GPS to monitor the movement of bats in proximity to wind turbines	Marc Reichenbach	Wind turbines and birds in Germany – a review of current knowledge, new insights and remaining gaps
	Aya Taniguchi	Can video image of bird strike contribute to elucidation of collision mechanism?	Maarten Platteeuw	Towards an instrument for describing and assessing cumulative effects of offshore wind farms on birds, bats and marine mammals in the southern North Sea
	Miguel Mascarenhas (Ana Teresa Marques)	From gigantic databases to targets of interest: using machine learning techniques to filter radar databases	Alkis Kafetzis	Wind farms in areas of high ornithological value - conflicts, solutions, challenges: The case of Thrace, Greece
	Chris Thaxter	GPS telemetry reveals within-wind farm behavior of Lesser Black-backed Gulls during the breeding season	Benedict Gove	Wind farms and Birds: An updated analysis of the effects of wind farms on birds, and best practice guidance on integrated planning and impact assessment

12:55 - 13:55

Lunch Break/ Poster/ Innovation Exposition (60 min)

13:55 - 15:25	Session 2a: Species Behavior & Behavioral Responses		Session 6b: Monitoring Approaches & Long-term Effects	
	Chair: Roel May		Chair: Andrew Gill	
	<u>Session Hall C1</u>		<u>Session Hall B</u>	
	Alvaro Camiña	Reduced effect of wind farms in the Golden Eagle (<i>Aquila chrysaetos</i>) in Spain and Europe	Jennifer Dannheim	Lessons learned from the benthic monitoring evaluation in alpha ventus

Klaus Hochradel	Bats are attracted to wind turbines – determining the distribution of bats by a stereo thermal camera system	Holger Janßen	Offshore wind farms in the south-western Baltic Sea: A model study of regional impacts on oxygen conditions and on the distribution and abundance of the jellyfish <i>Aurelia aurita</i>
Cris Hein	Monitoring Bat Activity and Behavior at Wind Turbines Using Thermal Imagery and Ultrasonic Acoustic Detectors	Hendrik V. Winter	Evaluating the effects of offshore wind farms on fish: experiences from the Netherlands
Hermann Hötter	Red Kites and wind farms – telemetry data from the core breeding range	Debbie Russell	The effects of construction and operation of wind farms on harbour seals (<i>Phoca vitulina</i>).

15:25 - 16:05

Coffee Break/ Poster/ Innovation Exposition (40 min)

16:05 - 17:35	Session 3a: Collision Risk & Fatality Estimations		Session 5b: Mitigation, Compensation & Effectiveness of Measures	
	Chair: Edward B. Arnett Session Hall C1		Chair: Shawn Smallwood Session Hall B	
	Jay Diffendorfer	Forecasting the impacts of future wind energy development on birds and bats in the United States	Oliver Behr	'Bat-friendly' operation of wind turbines – the current status of knowledge and planning procedures in Germany
	Thomas Grünkorn	A large-scale, multi-species assessment of avian mortality rates at onshore wind turbines in northern Germany (PROGRESS)	Virginia Morandini	Avian mortality in wind farms: the State of the Art in Spain
	Regina Bispo	Enhancing the study design of carcass removal trials for bats and birds at wind farms	Joana Bernardino (Anabela Paula)	Compensation scenarios to deal with wind farm's impacts on birds: the challenges of moving from theory to practice
	Sabrina Weitekamp	Predictive modelling versus empirical data – collision numbers in relation to flight activity in 55 German wind farm seasons	Ricardo Tomé	Radar assisted shutdown on demand ensures zero soaring bird mortality at a wind farm located in a migratory flyway
17:35 - 17:45	Announcements & Closing		Announcements & Closing	

17:45 - 21:00

Poster Reception/ Innovation Exposition/ Light Refreshments

Day 2 Wednesday, March 11

08:30 - 09:00

Coffee & Pastries

09:00 - 09:05	Session 4a: Landscape Features & Gradients		Session 4b: Landscape Features & Gradients	
	Chair: Åsa Elmqvist Session Hall C2		Chair: Christian Voigt Session Hall B	
	Welcome & Announcements		Welcome & Announcements	
09:05 - 10:20	Allix Brenninkmeijer	Bird mortality in two Dutch wind farms: effects of location, spatial design and interactions with power lines	Fabio Bontadina	Massive bat migration across the Alps: implications for wind energy development
	Hanjo Steinborn	Impact of wind turbines on woodland birds	Hendrik Reers	Bat activity at nacelle height over forests
	Sonja Krüger	Using spatial analyses of Bearded Vulture movements in southern Africa to inform wind turbine placement	Petra Bach	Activities and fatalities of Nathusius's Bat at different wind farms in Northwest Germany

10:20 - 10:40

Coffee Break/ Poster/ Innovation Exposition (20 min)

10:40 - 12:50	Session 5a: Mitigation, Compensation & Effectiveness of Measures Chair: Meike Scheidat Session Hall C2		Session 3b: Collision Risk & Fatality Estimations Chair: Kjetil Bevanger Session Hall B	
	Michael Bellmann	Is there a State-of-the-Art regarding Noise Mitigation Systems to reduce Pile Driving Noise?	Julie Beston	Factors affecting avian mortality levels at onshore wind turbines in the United States
	Philipp Stein	Measurements of hydrosound emissions and soil vibrations during monopile installation with combinations of independent noise mitigation systems	Martin Perrow	Avoidance of an offshore wind farm by a breeding seabird has implications for the offshore renewables industry
	Alexander Schubert	Noise mitigation reduces negative effects of pile driving on harbour porpoises	Matthew Merrill	Methodology to assess impacts to wildlife from wind energy development
	Eva Philipp	Mitigation of piling noise during construction of offshore wind farms – special focus OWP Dan-Tysk	Manuela Huso	Evidence of Absence or Absence of Evidence? Inferring Fatality When X=0
	Heidi van der Meij	FaunaGuard implemented in the Dutch North Sea; effectiveness of an acoustic porpoise deterrent device validated	Timothy Coppack	Avian collision risk and micro-avoidance rates determined at an existing offshore wind farm
	Ursula Verfuss	Does noise mitigation matter? Population consequences of piling noise on marine mammals with and without the application of noise reduction methods	Hein Prinsen	Wind farm impact assessment: overview from onshore field studies and application in legislation procedures in the Netherlands.

12:50 - 13:50

Lunch Break/ Poster/ Innovation Exposition (60 min)

	Convener: Meike Scheidat		Plenary Hall A	
13:50 - 14:30	Cindy Hull	Wind energy down under: what have we learnt?		
14:30 - 15:10	Andrew Gill	Filling gaps in understanding ecologically relevant interactions between marine animals and offshore wind developments		
15:10 - 15:20	Change of rooms			
15:20 - 16:30	Session 6a: Monitoring Approaches & Long-term Effects Chair: Hans Buser Session Hall C2		Session 2b: Species Behavior & Behavioral Responses Chair: Ommo Hüppop Session Hall B	
	Thoralf Hoth	Are offshore wind farms the wishing table for fish? – How demersal fish species benefit from Biofouling?	Jared Wilson	Estimating the effects of breeding season displacement and barrier effects from offshore wind farms on seabird demographic rates
	Pavel Zehindjiev	Bird migration monitoring in the Saint Nikola Wind Farm territory, NE Bulgaria, and analysis of potential impact after five years of operation	Reinhold Hill	After construction changes in bird migration patterns at an offshore wind farm
	Fiona Mathews	A nationwide assessment of the impacts of wind turbines on bats	Elisabeth Debusschere	Offshore pile-driving and young fish, a destructive marriage?

16:30 - 17:00

Coffee Break (30 min)

	Convener: J.-O. Helldin		Plenary Hall A
17:00 - 17:40	Roel May	Avoid being trapped: Theoretical foundations for avian responses to wind turbines	
17:40 - 18:20	Kjetil Bevanger	Facts on bird collisions with power lines – have we taken it on board to understand and mitigate bird wind-turbine conflicts?	
18:20 - 18:30	Closing & Announcements		
18:30 - 22:00			
Conference Dinner			

Day 3 Thursday, March 12

08:30 - 09:00

Coffee & Pastries

	Session 7a: Planning & Siting		Session 1b: Tools & Technology	
	Chair: J.-O. Helldin		Chair: Marc Reichenbach	
	Session Hall C2		Session Hall B	
09:00 - 09:05	Welcome & Announcements		Welcome & Announcements	
09:05 - 10:55	Tristram Allinson	Introducing a New Avian Sensitivity Mapping Tool to Support Sustainable Renewable Energy Development in Northeastern Africa and the Middle East	Rowena Langston	Exploring the utility of bird-borne telemetry in wind energy environmental impact assessment
	Deron Lawrence	Eagle Conservation Plan and the NEPA Environmental Assessment: Permitting Nexus of Adaptive Management and Mitigation	Jan Reubens	Acoustic telemetry for fish – applications for monitoring and management
	Ulla Mörtberg	Wind power planning in Sweden – the treatment of biodiversity and ecosystem services	Karen Krijgsveld	Bird collisions at OWEZ offshore wind farm measured with WT-bird
	Veronika Braunisch	A spatial concept for guiding wind power development in endangered species' habitats: Underpinning the precautionary principle with evidence.	Görres Grenzdörffer	A bird's-eye view of offshore wind energy and wildlife: optimizing the sampling design for digital aerial surveys
	Karin Sinclair	WREN – A New International Collaborative Under the International Energy Agency	Caroline Höschle	Applying the wireless detection system (WDS)-a real-time monitoring tool for porpoise activity around construction sites

10:55 - 11:15

Coffee Break/ Poster/ Innovation Exposition (20 min)

	Convener: Johann Köppel		Convener: Michelle Portman	
	Session Hall C2		Plenary Hall A	
11:15 - 12:35	WREN Panel (80min)		Short Presentations & Debate (80min)	
	WREN – Working Together to Resolve Environmental Effects of Wind Energy		Lothar Bach	The importance of offshore bat investigation in wind farm planning
	VISION IEA Wind Task 34 – WREN is the leading international forum for supporting deployment of wind energy technology across the globe through a better understanding of environmental issues, efficient monitoring programs, and effective mitigation strategies.		Adeline Bas	Ecological Equivalency and Offsetting in the context of Offshore Wind Farms: Myth or Reality? A discussion on the practice of offsetting through the example of offshore wind farms projects in France.

<p>https://www.ieawind.org/task_34.html</p> <p>This international panel will focus on the risks and challenges associated with the implementation of adaptive management and how to manage those challenges. The panel will discuss current adaptive management research being conducted in different countries and focus on how adaptive management is implemented from a biological, operational, and financial perspective.</p>	<p>Finlay Bennet</p>	<p>Cumulative effects assessment and the precautionary principle: what goes up must come down. The Scottish regulatory experience with offshore wind and declining seabird populations</p>
	<p>Robert Furness</p>	<p>Cumulative impacts of offshore wind farms on seabird populations: when will compensation for impacts on SPA features be required?</p>
	<p>Colin Galbraith</p>	<p>The Scottish Wind farm Bird Steering Group: A model for Best Practice and collaborative research?</p>
	<p>Jesper Kyed Larsen</p>	<p>Beyond monitoring – understanding impacts</p>
	<p>Alessandra Maciel</p>	<p>Development of wind energy and environmental impacts in Brazil</p>

12:35 - 13:35

Lunch Break/ Poster/ Innovation Exposition (60 min)

	<p>Convener: Rowena Langston</p>	<p>Plenary Hall A</p>
13:35 - 14:15	<p>Shawn Smallwood</p>	<p>What comes next? - The challenges of repowering</p>
14:15 - 14:55	<p>Johann Köppel</p>	<p>What have we learnt so far? A synoptical perspective on wind energy's wildlife implications</p>
14:55 - 15:35	<p>Summary (Session Chairs)</p>	
15:35 - 15:50	<p>Poster Award</p>	
15:50 - 16:05	<p>Announcements & Closing (Convener: Johann Köppel)</p>	

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