

Day 1 - Tuesday 27 August

08:00 - 09:00 Coffees/registration - **WINDOW ON THE WALLACE/HOTEL RECEPTION**

09:00 - 10:30 **OPENING SESSION - LOGIE LECTURE THEATRE**

Welcome and introduction - **Colin Galbraith**
Minister for Energy, Connectivity and the Islands - **Paul Wheelhouse**
Jeremy Sainsbury, Natural Power; **Francesca Osowska**, SNH; **Eva Phillip**,
Vattenfall; and **Anne McCall**, RSPB
Summary - **Colin Galbraith**

10:30 - 11:15 Coffees - **BLAIR/ATHOLL ROOMS**

11:15 - 12:45 **TALK SESSION 1 - up to 15 minutes each**

Species specific issues
LOGIE LECTURE THEATRE

Avoidance behaviour of large-bodied birds to 222m high turbines

- **joint talk by Thorsten J.S. Balsby and Ole Roland Therkildsen**

Response of satellite tagged golden eagles to wind farms

- **Alan Fielding**

Displacement starts during construction of an offshore wind farm

- **Andrew Harwood**

Changes in harbour seal behaviour in response to offshore wind farm construction noise

- **Katherine Whyte**

Adding another dimension to species risk assessments - seabirds

- **Saskia Wischnewski**

Reducing uncertainty in seabird displacement at offshore wind farms

- **Mark Trinder**

Population level and ecosystems
WALLACE/MONUMENT ROOMS

Seabird populations: untangling their hidden dynamics and quantifying consequences for assessment

- **Julie Miller**

Best practices for use of PVA in forecasting seabird population trajectories in the face of sparse data: a comparison of methods

- **Kate Searle**

Developing and testing frameworks for assessing impacts of offshore wind farm construction on harbour seal populations

- **Paul Thompson**

A tool for using PVA to assess impacts of anthropogenic change on demographic rates and population forecasts

- **Adam Butler**

Wind-turbine noise drastically alters songbirds' behaviour and community assemblage in a natural environment

- **Yael Lehnardt**

Demographic impact of avian fatalities at wind energy facilities

- **Tara Conkling**

12:45 - 13:45 Lunch - **ABBEY CRAIG RESTAURANT**

13:45 - 15:30 **WORKSHOP SESSION 1 (1h 45mins each):**

or: **ROBIN RADAR DEMONSTRATION**

Offshore collision risk modelling workshop - **Ross McGregor HERMITAGE**

Marine biodiversity enhancement of offshore wind farms: options and challenges
- **Tom van der Have IONA**

Offshore wind and bats - **Robin Cox LOMOND**

Habitat restoration - **SNH MULL**

An opportunity to see how the Robin Radar system works. Visit the Robin Radar stand in Blair/Atholl for more information.

15:30 - 16:00 **Coffees - BLAIR/ATHOLL ROOMS**

16:00 - 17:30 **TALK SESSION 2 - up to 15 minutes each**

Species specific issues
LOGIE LECTURE THEATRE

Challenges and opportunities of long-term species monitoring - **Claudia Garratt**

Wolves avoid high concentrations of wind turbines - **Emma Dennehy**

Influence of landscape and time of year on bat-wind turbine collisions - **Charlotte Roemer**

Anthropogenic electromagnetic fields (EMF) influence on marine species - **Zoe Hutchison**

Predicting and mitigating impacts of construction on harbour porpoises - **Isla Margaret Graham**

Putting auks on the map - **Lila Buckingham**

Population level and ecosystems
WALLACE/MONUMENT ROOMS

Development of a tool to estimate sensitivities of seabirds to offshore renewable energy developments in Scottish waters - **Francis Daunt**

Review of the potential of UK seabird colony monitoring to inform monitoring programmes for consented offshore wind farms - **Liz Humphreys**

A North Sea-wide assessment of offshore wind-related habitat loss on seabird populations - **Tobias van Kooten**

Landscape-scale approaches and biodiversity banking in impact mitigation - **Marie Grimm**

Does high mortality at wind farms really mean high impact? A framework shift to reduce uncertainty and better determine impacts - **Paulo Cardoso**

A risk-based approach for addressing wind and wildlife interactions using ecosystem based management values - **Andrea Copping**

17:30 - 18:00 **Poster mini talks - FINTRY/ERSKINE AND DOLLAR/CALLANDER**

18:00 - 19:00 **Poster viewing, Vattenfall presentations (see p7) and drinks reception**

18:05 - 19:00 **VATTENFALL PRESENTATIONS - SILVER GLEN**

18:05 - 18:20 EOWDC - Dolphins, understanding Scottish east coast bottlenose dolphin population movements - **Ursula Verfuss/SMRU Ltd**

18:25 - 18:40 EOWDC - Auks, understanding movements of UK razorbills and guillemots in the non-breeding season - **Bob Furness/MacArthur Green, Lila Buckingham/CEH**

18:45 - 19:00 EOWDC - BCA, documenting avoidance behaviour of seabirds to wind turbines during the breeding season at AOWFL - **Mike Armitage/RPS, Henrik Skov/DHI**

Day 2 - Wednesday 28 August

08:00 - 09:00 Coffees - BLAIR/ATHOLL ROOMS

09:00 - 09:45 PLENARY 1: Towards a Social-Technical-Ecological system approach (STES) in WP-planning - Frank Hanssen - LOGIE LECTURE THEATRE

10:00 - 10:45 TALK SESSION 3 - up to 15 minutes each

Cumulative impacts

LOGIE LECTURE THEATRE

Together we can do so much: cumulative impacts of offshore wind farms on seabird populations - **Lucy Wright**

WindChoir: a tool for representing cumulative environmental effects - **Sverker Molander**

Can we site wind facilities to reduce landscape change and habitat fragmentation? - **Jay Diffendorfer**

Wind and wildlife in practice

WALLACE/MONUMENT ROOMS

Bat mortality monitoring at a UK windfarm site and dealing with new guidance, thresholds and mitigation - **Robin Cox**

Lessons learned: monitoring potential impacts of America's first offshore wind farm on fish and invertebrates - **Drew Carey**

Vantage Point (VP) biases during pre-construction monitoring: the observer effect and the VP radius - **Alvaro Camina**

10:45 - 11:15 Coffees - BLAIR/ATHOLL ROOMS

11:15 - 12:45 TALK SESSION 4 - up to 15 minutes each

Cumulative impacts

LOGIE LECTURE THEATRE

How are species and impacts scoped into cumulative effects assessments for offshore wind farms? - **Rebecca Hall**

Evidence of absence regression: a binomial N-mixture model for estimating bird and bat fatalities - **Trent McDonald**

Expanding availability of confidential data to evaluate bird and bat collision risk - **John Lloyd**

Towards a common environmental assessment framework (CEAF) for assessing cumulative effects - **Rob Gerits**

Disturbance or flexibility to wind farm development, prioritising threats to the Verreaux's eagle in South Africa - **Alvaro Camina**

Modelling key factors of nightjar avoidance behaviour at wind farms across Europe - **Andreas Traxler**

Wind and wildlife in practice

WALLACE/MONUMENT ROOMS

Achieving net gain for vultures at a proposed Kenyan wind energy project - **David Wilson**

Red kite (*Milvus milvus*) movement patterns and interactions with wind farms in the north of Scotland - **Ian Hulbert**

Communications needed for successful technology testing at a wind facility - **Laura Nagy**

Foraging range and distribution of lesser black-backed gulls across multiple breeding colonies - **Elsbeth Sage**

Is using collision risk models a reasonable approach to predict fatalities for collision risk assessments in EIA? - **Sandra Rodrigues**

Bats and windfarms, and lessons from Europe and Western Palearctic - **Fiona Mathews**

12:45 - 13:45 Lunch - ABBEY CRAIG RESTAURANT

13:45 - 14:30 TALK SESSION 5 - up to 15 minutes each

Cumulative impacts

LOGIE LECTURE THEATRE

Overlap between wind power plants and breeding sites of birds of prey on the island of Crete (Greece)
- **Dr Stavros Xirouchakis**

MARLIN and a large-scale/high resolution information system for marine biological data
- **Gregor von Halem & Ramona Beckmann**

Substantial effects of offshore wind farms on divers - **Henriette Schwemmer**

Wind and wildlife in practice

WALLACE/MONUMENT ROOMS

Is carcass searching for bats at operational wind farms useful? - **Jonathan Aronson**

Results of carcass searching at operational wind farms using trained detection dogs in the Republic of Ireland - **Chris Cullen**

Counting the living: a collaborative effort to combat bird and bat impacts
- **Emma Bennett**

14:30 - 16:00 WORKSHOP SESSION 2 (1h 30mins each, this session may run into the coffee break):

Wind-wildlife technology workshop: considerations for integration at operational wind farms and lessons learned from wind farm operators, turbine OEMs, and technology developers - **Laura Nagy HERMITAGE**

Measuring the impacts of offshore wind energy developments on abundance and distribution of seabirds: current challenges and future directions - **Gillian Vallejo IONA**

Standardisation of collision mortality data for birds and bats, and towards the creation of a global database - **Noa Steiner LOMOND**

Habitat restoration - **SNH MULL**

or: **ROBIN RADAR DEMONSTRATION**

An opportunity to see how the Robin Radar system works. Visit the Robin Radar stand in Blair/Atholl for more information.

15:30 - 16:00 Coffees - **BLAIR/ATHOLL ROOMS**

16:00 - 16:45 **PLENARY 2: Overview of issues: terrestrial** - Roel May - **LOGIE LECTURE TH.**

16:45 - 17:30 **PLENARY 3: Overview of issues: marine** - Martin Perrow - **LOGIE LECTURE TH.**

17:30 - 18:30 Poster viewing and Vattenfall presentations (see p11)

or: **ROBIN RADAR DEMONSTRATION**

A second opportunity today, as above.

19:00 - 00:00 Conference Dinner - **ABBEY CRAIG RESTAURANT**

17:40 - 18:30 **VATTENFALL PRESENTATIONS - SILVER GLEN**

17:40 - 17:55 OWSMRF - UK industry-led vehicle for identifying knowledge gaps and research opportunities in close collaboration with stakeholders - **Sue O'Brien/JNCC**

17:55 - 18:10 Red-throated diver energetics project - international collaborative project involving industry, government, JNCC, researchers and local ringing groups - **Sue O'Brien/JNCC**

18:15 - 18:30 NERC CASE PhD studentship (Vattenfall partner) on improving gannet population modelling in the context of wind farm impacts - **Chris Pollock/Leeds Uni**

Day 3 - Thursday 29 August

08:00 - 09:00 Coffees - **BLAIR/ATHOLL ROOMS**

09:00 - 09:50 **PLENARY PANEL SESSION 1: Developing markets - LOGIE LECTURE THEATRE**

09:55 - 10:45 **TALK SESSION 6 - up to 15 minutes each**

Mitigation, habitat management and wildlife challenges

LOGIE LECTURE THEATRE

Habitat management: wind farms and the Iberian wolf in Portugal - **Gonçalo Brotas**

Unmanned aerial systems and automated photo recognition method for eagle carcass detection at wind farms - **David Young**

Review of noise abatement systems for piling noise and the potential for their application in Scottish waters - **Ursula Verfuss**

Evaluation of bird detection efficiency of ProBird: tracking missed detection and false positives - **Hubert Lagrange**

Reducing uncertainty and looking forward
WALLACE/MONUMENT ROOMS

Insights into age-specific gannet distribution from aerial surveys and tracking - **Chris Pollock**

Validation and performance testing of a laser rangefinder for estimating avian flight in 3D - **Nicola Largey**

For the avoidance of doubt: avoidance rates and the precautionary principle - **Aly McCluskie**

Using a landscape scale GPS-tracking study to avoid and minimise wind farm related impacts on Brolga (*Antigone rubicunda*) - **Inka Veltheim**

10:45 - 11:15 Coffees - **BLAIR/ATHOLL ROOMS**

11:15 - 12:45 **TALK SESSION 7 - up to 15 minutes each**

Mitigation, habitat management and wildlife challenges

LOGIE LECTURE THEATRE

Limitations of acoustic bat deterrents - **Christine Sutter**

Obstacles and solutions on the way to a countrywide mitigation standard: five years of ProBat - **Oliver Behr**

Via Pontica and an integrated bird protection system - **Pavel Zehindjiev**

Early detection system for bird monitoring in wind farms in the Isthmus of Tehuantepec, Mexico - **Rafael Villegas**

Studying the flight behaviour of migrating birds with a full 3D bird radar to develop a predictive shutdown-model - **Jonne Kleyheeg-Hartman**

Reducing uncertainty and looking forward
WALLACE/MONUMENT ROOMS

Understanding seabird behaviour at sea in order to better assess the environmental impact of offshore wind farms - **Aonghais Cook**

A coordinated approach to marine renewable energy research in Scotland - **Janelle Braithwaite**

Combining telemetry and vantage point observations to investigate habitat preferences of soaring birds - **Francisco Cervantes Peralta**

LiDAR as a tool for estimating seabird flight heights - **Robin Ward**

The environmental and fisheries technical working groups: stakeholder engagement on offshore wind for New York state - **Kate Williams**

It's not easy being green! Does wind energy constitute a wicked socio-ecological problem? - **Juliane Biehl**

12:45 - 13:45 Lunch - **ABBEY CRAIG RESTAURANT**

Mitigation, habitat management and wildlife challenges

LOGIE LECTURE THEATRE

Developing apportioning approaches for gulls which are at risk of collision from both onshore and offshore wind
- **Lucy Quinn**

Catalogue of nature inclusive design solutions - **Ivana Prusina**

The German registry of underwater sound and monitoring, and assessment in regard of technical sound mitigation
- **Carina Juretzek**

Upgrades in offshore bird monitoring: from DTBirdV4 at Fino 1 to DTBirdV8N2 at Kincardine wind farm
- **Agustín Riopérez**

Global impacts of renewable energy on birds and mammals
- **James Pearce-Higgins**

Migrating bats at the North Sea
- **Sander Lagerfeld**

How to assess the ecological cost/benefit of future climate vs very large-scale renewable developments? - **Beth Scott**

Harnessing people's energy for better wind farm planning: the convention on migratory species energy task force
- **Noa Steiner**

Experimental approach towards the understanding of food web interactions in an offshore wind farm environment
- **Ellen Vlamincx**

Reducing uncertainty and looking forward

WALLACE/MONUMENT ROOMS

Wind power and vultures in Africa: a new threat?
- **Hanneline Smit-Robinson**

Challenges to mitigating wind energy impacts on bats in the tropics and sub-tropics
- **Cheryl Ng**

A sensitivity analysis of wind power and biodiversity in Kenya - **Tris Allinson**

Is the focus on raptors and migratory species at wind farms justified? The diversity of birds killed by collisions in S. Africa
- **Samantha Ralston-Paton**

Wind power planning with a multicriteria approach: integrating biodiversity and ecosystem services in the Rewind-GIS tool
- **Ulla Mörtberg**

Behavioural variables of lesser black-backed gulls and herring gulls in and around offshore wind farms - **Abel Gyimesi**

Long-term tracking of lesser black-backed gulls: how GPS telemetry is being used to improve estimation of collisions
- **Chris Thaxter**

Three months of bat monitoring by radar around three wind farms in north Hérault (France) - **Hubert Lagrange**

Within and beyond the turbines: life cycle assessment
- **Richard Hall**

15:30 - 16:00 Coffees - **BLAIR/ATHOLL ROOMS**

16:00 - 17:00 **PLENARY PANEL SESSION 2: Key issues and priorities for the future - LOGIE LEC. TH.**

17:00 - 17:30 Closing session - **LOGIE LECTURE THEATRE**