East Asian – Australasian Flyway Partnership

8th Meeting of Partners, Kushiro, Japan

Special Session

Information sharing and discussion on minimizing bird strikes from wind turbines

Date: 13:00-16:30, January 16, 2015

Special Session

Information sharing and discussion on minimizing bird strikes from wind turbines

Program

13:00 Opening remarks

13:10 Richard Grimmett (Director of Conservation, BirdLife International)

EU nature legislation and best practise guidance in relation to wind energy development

13:50 Tristram Allinson (Science and Information Management Officer, BirdLife International)

Strategic planning and sensitivity mapping in relation to wind energy development

14:30 Kaori Tsujita (Assistant director, Ministry of the Environment Japan)

Measures taken by MOEJ for minimizing bird strikes from wind turbines

14:55 Tatsuya Ura (Conservation division, Wild Bird Society of Japan)

Wild Birds and Wind farm
"Impact in Japan, Challenges on Environmental Impact Assessment, and Activities by Wild Bird Society of Japan"

15:35 Panel discussion and Open discussion

Panellists;
Richard Grimmett (Director of Conservation, BirdLife International)
Tristram Allinson (Science and Information Management Officer, BirdLife International)
Tatsuya Ura (Conservation division, Wild Bird Society of Japan)
Keiji Nakajima (Director of Wildlife Division, Ministry of the Environment Japan)
Kaori Tsujita (Assistant director, Ministry of the Environment Japan)

Facilitator;
Judit SZABO (Science officer, EAAFP secretariat)

16:25 Close the session

Presentation Outline

■ **Special Guest:** Richard Grimmett (BirdLife International)

EU nature legislation and best practise guidance in relation to wind energy development

- Birds and wind energy development in the EU

  - *EU renewable energy policy*
  - *Wind energy and Natura 2000*

- Best practise guidance and requirements

  - *CMS Resolution on Renewable Energy and Migratory Species*
  - *Safeguard policies and procedures for wind energy development (International Finance corporation and others)*
  - *BirdLife guidance for wind energy development*

■ **Special Guest:** Tristram Allinson (BirdLife International)

Strategic planning and sensitivity mapping in relation to wind energy development

- Strategic planning and sensitivity mapping

  - *National tools—e.g. RSPB Bird Sensitivity Map for onshore wind farms in Scotland*
  - *Regional tools—the Soaring Bird Sensitivity Mapping Tool (Red Sea/Rift Valley Flyway)*

- Case studies (EU)

  - *Kaliakra IBA in Bulgaria*
  - *London Array, outer Thames Estuary in the United Kingdom*
  - *Black Law Wind Farm in Scotland*

- Case studies (outside EU)

  - *Smøla Wind Farm in Norway*
  - *Gebel El-Zeit in Egypt*

■ Kaori Tsujita (Ministry of the Environment Japan)

Measures taken by MOEJ for minimizing bird strikes from wind turbines

- Environmental Impact Assessment as a legal measure
- Project for the consideration of the measures for minimizing sea-eagle collision with wind turbines

■ **Special Guest:** Tatsuya Ura (Wild Bird Society of Japan)

Wild Birds and Wind farm
"Impact in Japan, Challenges on Environmental Impact Assessment, and Activities by Wild Bird Society of Japan "

- Impacts of wind farm on wild birds
- Challenges on Environmental Impact Assessment system in Japan
- Proposal for future
- Activities of WBSJ about conflict between wind farm and birds

CURRICULUM VITAE of special guests

Richard Grimmett

EMPLOYMENT

July 2012 - present: Director of Conservation, BirdLife International

August 2007 - June 2012: Head of Conservation Division, BirdLife International (and Assistant Director, BirdLife International, August 2010 – June 2012)

Director for Conservation, responsible for the co-ordination, development and implementation of BirdLife's conservation work including directorial responsibility for four Global Conservation Programmes: Preventing Extinctions, Forests of Hope, Flyways and Marine, as well as BirdLife's work with corporates.

Current responsibilities include oversight of the BirdLife/UNDP/GEF Migratory Soaring Birds Project which is covering 11 countries in the Middle East and North Africa and includes a specific focus on mainstreaming migratory bird conservation into the energy sector. This has required: (i) the development of best practice guidance on managing migratory bird risks in relation to wind energy development,; (ii) the development of a sensitivity map for the Red Sea-Rift Valley flyway, and (iii) technical support for the implementation of flyway-sensitive wind energy projects in Egypt .

Also, a major role in the implementation of the Important Bird and Biodiversity Areas (IBAs) Programme and leading the IBAs in Danger initiative. Current management responsibilities include BirdLife's partnerships with Rio Tinto and CEMEX. As Global Director, also responsible as part of the Management Team for the running of the BirdLife Secretariat (Cambridge and regional offices) and reporting to BirdLife's Global Council.

1994-2007 (July): Head of Asia Division, BirdLife International Secretariat

From April 1997 to April 2000 also Coordinator of BirdLife Indonesia Programme

1986-1994: Programme Officer/Senior Programme Officer, Europe & Asia, BirdLife International Secretariat

1985-1986: Assistant to Programme Director, BirdLife International Secretariat

EDUCATION

1979-1983: University of East Anglia, Norwich: B.A. (Hons.) Class 2, Division 1 (Social & Economic Sciences)(specialised in the economic and social history of India).

Tristram Allinson

EMPLOYMENT

2008 - Present: Science and Information Management Officer (Science division), BirdLife International, Global Secretariat, Cambridge

I provide scientific expertise and input across a number of BirdLife's key areas of engagement, with a particular focus on migratory birds and flyways conservation. I work closely with the Convention on Migratory Species (CMS)—contributing to technical materials that underpin a number of CMS Instruments, such as the Raptors MOU and the African-Eurasian Migratory Landbirds Action Plan (AEMLAP). Most recently, I oversaw a review of the global conservation status of the Asian Houbara Bustard *Chlamydotis macqueenii*, which was discussed at the 11th meeting of the Conference of the Parties (UNEP/CMS/COP11/Inf.17).

The impacts of wind turbines on birds and how these can be minimised is a particular area of interest for me. I oversee the development of a ground-breaking online mapping tool (http://maps.birdlife.org/MSBtool) that helps ensure the safe siting of wind farms along the Red Sea/Rift Valley Flyway—one of the world's most important migratory routes. Since its launch in early 2014, the tool has been extremely well received and is expected to become an established source of ornithological information for supporting the environmentally-sound expansion of renewable energy not just in this region, but beyond.

Through the management of the long-running '*State of the world's birds*' project, I am responsible for the communication of BirdLife's Science Programme. The project aims to provide governments, the BirdLife Partnership and the wider conservation community with access to up-to-date, scientifically credible and relevant materials for effective conservation action, learning and decision-making. I oversee the development of a wide range of conservation resources including publications, web tools and online databases. These include the highly acclaimed *State of the World's birds* reports, for which I am editor-in-chief. I also have oversight of various elements of BirdLife's 'Data Zone', the website through which our many datasets are made publically available.

EDUCATION

2006 – 2007: MSc. in Biodiversity, Conservation & Management, Oxford University, Green College, UK

1999 – 2003: First Class BSc. Hons. Ecology, University of East Anglia, UK

OTHER PROFESSIONAL EXPERIENCE

2003 – 2004: Project Coordinator, Orangutan Tropical Peatland Project, Kalimantan, Indonesia

Responsibilities included the supervision of a large team of British and Indonesian researchers conducting long-term monitoring studies of Orangutan density and distribution within the Sebangau peat swamp forests of Central Kalimantan, Indonesia.

Tatsuya Ura

EMPLOYMENT

2005 - Present: Conservation division, Wild Bird Society of Japan (WBSJ)

The active construction of wind power facilities started in 2003 due to the introduction of Renewables Portfolio Standard laws and subsidies, and this led to 22 cases of bird collision being discovered in Japan in 2005. Since 2003, WBSJ has been involved in gathering overseas information on bird collision and policy advocacy based on the information. In 2006, the year that I joined, we began full scale work on collecting information, public awareness, and policy advocacy. I am the main person in charge of our projects about natural energy which are one of the most important concerns in WBSJ. I'm involved in conservation activities, policy advocacy, acquisition of activity funds and the creation of new activities.

<Activities of the Wild Bird Society of Japan>
- Submission of written opinions and requests: create written opinions for a plan where bird collisions could possibly occur and submit them to concerned business operators.
- Policy advocacy: express opinions about balancing the introduction of wind power and protection of wild birds to a person in charge, targeting the Ministry of the Environment or local governments.
- Public awareness: hold training sessions, symposia and workshops. Through these activities, we were able to provide the latest overseas knowledge to Japanese officials.
- Inspection tour: visit and inspect project sites, mainly in Japan, where bird collision could occur. Also, we have carried out overseas inspection tours in order to obtain the latest information.
- Investigation research: develop seabird research methods related to the construction of offshore wind power and creating sensitive maps of rare seabirds.
- Academic meetings: report research results in Ornithological Society of Japan. I'm planning to join the CWW2015 at the Berlin University of Technology and report the status of bird collision in Japan.

EDUCATION

2000 – 2005: Hokkaido University Graduate School of Environmental Earth Science, Master and Doctoral degree courses (left after earning credits);

1995 – 1999: Kushiro Public University of Economics, Department of Economics

OTHER PROFESSIONAL EXPERIENCE (commissioner)

2014 – Present: Ministry of the Environment; development and demonstration of a bird strike measure system that utilizes 3D radar technology

2014 – Present: SB Energy; an expert review committee for selecting the site of wind power operation in the Japan sea side area of Hokkaido

2012 – Present: Ministry of the Environment; bird strike prevention measure work for sea eagles related to wind power generation

2012 – Present: Ministry of the Environment; Project review meeting for floating offshore wind power generation demonstration (Observer)

2011 – Present: NEDO; Offshore Wind Power Generation Technology Research and Development Committee

【Information】

EU nature legislation and best practise guidance in relation to wind energy development

Wind energy development and Natura2000

Birds and Habitats Directives

The Birds and Habitats Directives are the cornerstones of the EU's biodiversity policy. The Birds Directive requires the establishment of Special Protection Areas (SPAs) for birds. The Habitats Directive similarly requires Special Areas of Conservation (SACs) to be designated for other species, and for habitats. Together, SPAs and SACs make up the Natura 2000 network.

In Europe, the means of designation of SPAs has been strongly influenced by BirdLife's Important Bird and Biodiversity Areas (IBA), with some governments treating the IBA inventories as an initial blueprint for establishing their networks.

Natura 2000 network

Across the 28 EU countries there are currently 27,308 Natura 2000 sites covering 1,039,332 km^2. The network is considered almost complete in the terrestrial environment, however, designation of marine sites remains ongoing.

Within Natura 2000 sites, Member States must:

- take appropriate conservation measures to maintain and restore the habitats and species for which the site has been designated to a favourable conservation status (Article 6.1)
- avoid damaging activities that could significantly disturb these species or deteriorate the habitats of the protected species or habitat types (Article 6.2)

Like any other industrial activities, wind energy developments inevitably have an ecological footprint. The Habitats Directive does not, a priori, exclude wind farm developments in or adjacent to Natura 2000 sites. These need to be judged on a case by case basis.

Article 6 of the Habitats Directive

Article 6 of the Habitats Directive is one of the most important articles in the Directive as it determines the relationship between conservation and land-use. Paragraphs (3) and (4) set down the procedure to be followed when planning new developments that might affect a Natura 2000 site.

The first step is to determine whether a plan or project should undergo an Appropriate Assesment (AA). If it cannot be excluded that there will be a significant effect upon a Natura 2000 site then an Appropriate Assessment must be undertaken. The outcome of the AA is legally binding. If it cannot be ascertained that there will be no adverse effects on the integrity of the Natura 2000 sites then the plan or project cannot be approved. In exceptional cases, the authorities can decide that a plan or project should still be allowed to proceed on the grounds of imperative reasons of overriding public interest (IROPI). If so, then appropriate compensation measures must be identified and implemented to ensure that the overall coherence of Natura 2000 is protected. It rests with the EU Court of Justice to provide definitive interpretation of a Directive.

Outside Natura 2000 sites

Article 5 of Birds Directive requires Member States to take the requisite measures to establish a general system of protection for all wild bird species throughout their natural range within the EU.

Article 12 and 13 Habitats Directive requires Member States to take the requisite measures to protect the species listed in Annex IV throughout its natural range within Europe.

Therefore the two Directives require that wind energy developments do not cause any significant damage or disturbance to species of Community interest (i.e. those covered by the Directives) or their key habitats throughout their natural range within the EU.

The SEA Directive and the EIA Directive

Two other key pieces of EU environmental legislation are directly relevant to wind farm developments:

- Directive 2001/42/EC on the evaluation of the effects of certain plans and programmes on the environment (commonly referred to as ‘SEA’ Directive).

- Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, amended in 1997 (97/11/EC) and 2003 (2003/35/EC) – commonly referred to as the 'EIA' Directive.

Despite similarities, SEA and EIA cannot replace, or be a substitute for, an Appropriate Assessment as neither procedure overrides the other.

Recommended guidance documents

- European Union (2011) EU Guidance on wind energy development in accordance with the EU nature legislation. European Commission.
- Managing Natura 2000 sites: the provision of Article 6 of the 'Habitats' Directive 92/43/EEC.
- Assessment of plans and projects significantly affecting Natura 2000 sites: methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC: clarification of the concepts of alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, Opinion of the Commission.

The Strategic Ornithological Support Services (SOSS)

The Strategic Ornithological Support Services group brought together expert stakeholders to identify key ornithological issues relating to the expansion of the UK offshore wind industry, due to the potential for offshore wind farms to impact bird populations. A steering group, comprising representatives of developers, regulators and advisory bodies, oversaw a program of work to address these issues and inform the planning and consenting process. The key aim was to reduce the consenting risk posed by current critical gaps in knowledge of the effects of offshore wind farms on birds. To find out more about SOSS, read the Terms of Reference, or contact us with specific queries.

The Crown Estate

The Crown Estate owns and manages around 50% of the foreshore and beds of tidal rivers, together with almost all the seabed out to the 12 nautical mile limit.

SOSS Steering Group

The steering group is made up of representatives of regulators, advisory bodies, and offshore wind farm developers, as well as the SOSS Secretariat. Steering group members guide the identification and prioritisation of SOSS work, and advise on the development of scopes of work and project outputs. BTO and the Crown Estate are the SOSS Secretariat partner, RSPB is one of the advisors.

Areas of work were as follows:

- Improving understanding of how different species are displaced from an area following the construction of an offshore wind farm.
- Providing guidance on the methods used to estimate the risk of bird collisions with offshore wind farms.
- Developing methods to monitor collisions of birds with offshore wind turbines.
- Developing population viability analysis (PVA) techniques to assess the cumulative risk to key bird populations from all existing and planned offshore wind farms.
- Developing recommendations for the assessment of risk to migrant bird species, and identifying key gaps in knowledge.

Convention on Migratory Species guidance

UNEP/CMS/Resolution 11.27 on Renewable Energy And Migratory Species adopted by the Conference of the Parties at its 11th Meeting (Quito, November 2014).

Urges Parties and encourages non-Parties to:

- Apply appropriate SEA and EIA procedures and avoid protected areas and other sites of importance to migratory species.
- Undertake appropriate survey and monitoring both before and after development.
- Apply appropriate cumulative impact studies to describe and understand impacts at larger scale, such as at population level or along entire migration routes (e.g., at flyways scale for birds).

Instructs the Secretariat to convene a multi-stakeholder Energy Task Force, in order to:

- Promote the benefits of existing decisions.
- Encourage Parties to implement current guidance and decisions.
- Develop any necessary new guidelines and action plans as appropriate.
- Make recommendations on suitable responses to specific problems and gaps in knowledge.

BirdLife guidance for wind energy development

Key guidance for International Finance Institutions:

- Adopt a precautionary approach.
- Classify wind power projects as category A (high sensitivity).
- Require full Environmental Impact Assessments (EIA), and ensuring that these are of a high standard.
- Adopt a multi-stakeholder approach.
- Fully utilise appropriate ornithological assessments and trained experts.
- Make EIA data publically available.
- Require mitigation of any impacts of a development.
- Encourage sharing of good practice examples and information.

Key guidance for Governments and national authorities:

- Reviewing and where appropriate revising legal and regulatory mechanisms to ensure birds and biodiversity are safeguarded in wind energy developments
- Mainstreaming bird and biodiversity concerns across departments and sectors
- Carrying out strategic planning for wind farm developments, utilising the Strategic Environmental Assessment (SEA) approach, ensuring developments minimise their impact on birds and biodiversity
- Committing to a positive planning framework, and integrating bird and biodiversity concerns into any national development plans
- Adopting a precautionary avoidance approach in relation to siting of projects. Areas where there is a high risk of adverse impacts and high vulnerability, for instance Important Birds Areas and other sensitive sites, should be avoided
- Developing legislation which provides clear guidelines on Environmental Impact Assessment (EIA), and that EIA assessments are carried out to a high standard and are appropriate
- Ensuring EIA is carried out for all developments, and that it includes appropriate ornithological assessments and post-construction monitoring
- Providing further protection of areas of high biodiversity value and important sites for nationally or globally important species
- Committing to the publication of the environmental and ecological data generated as part of EIA and SEA, ensuring that it is freely available for review and consultation, and stored in a centralised information system
- Ensuring the availability of a non-technical EIA statement alongside an Environmental Management Plan
- Guaranteeing stakeholder consultation as part of any SEA and EIA

- Ensuring mitigation of impacts is enshrined in project contracts, documentation and bidding documents, and in legislation and regulations, and that these actions are informed by site-specific EIA
- Putting in place enforcement mechanisms to ensure compliance
- Promoting the regional sharing of good practice examples and information, to reduce impacts and improve knowledge within the sector.