

## CAPABILITY STATEMENT

### Onshore Wind

BSG Ecology provides specialist ecological and ornithological advice for onshore wind schemes from concept through to post construction monitoring. We have detailed knowledge of specific relevant survey techniques (for birds, bats and botanical survey), and have contributed to industry-standard guidance. We undertake collision risk analysis, impact assessment and provide mitigation advice and represent clients (where necessary) at public inquiry.

#### Onshore Wind

BSG Ecology provides specialist ecological and ornithological advice and assessment for onshore wind schemes from concept through to post construction monitoring. We have detailed knowledge of specialist relevant survey techniques (for birds, bats and botanical survey), and have contributed to the development of industry-standard guidance. We undertake collision risk analysis, impact assessment and provide mitigation advice and also represent clients (where necessary) at public inquiry.

We provide ecological support to onshore wind at all scales, from single turbines to wind farms of over forty turbines, and have worked on over 100 onshore wind generation projects.

#### Field Survey

We have a large team of ecologists, many of whom have significant experience of ecological assessment of wind turbines / wind farm developments, and who are supplemented by a network of regionally based specialist sub-contractors.

We have project experience of the following field survey work that is of particular relevance to onshore wind projects:

- Birds: Vantage-point (VP) survey at sites throughout the UK and Ireland; breeding wader, grouse and raptor survey; wintering waterfowl survey; landscape-scale distribution mapping of flock-forming species; and, thermal imaging survey.
- Bats: Transect and static surveys; roost assessments; 'at height' surveys; internal inspections of buildings and aerial inspections of trees; and, radio tracking of high sensitivity species;
- Vegetation mapping: Phase 1 survey to identify habitat types, followed by National Vegetation Classification (NVC) (where applicable) to attribute these to specific community types. Application of the SNIFFER guidance for evaluation of wetland habitats and identification of ground water dependent terrestrial ecosystems (GWDTes);
- Protected species: surveys of water courses for species including otter, water vole and freshwater macroinvertebrates; and, survey for badger, hazel dormouse, great crested newt, badger and various other terrestrial mammals in appropriate habitat.

#### Data Analysis

We use GIS to analyse and present ecological data. This makes it accessible and transferable across multi-disciplinary project teams. For birds, Collision Risk Analysis can be modelled based on flight line data, and theoretical bird mortality calculated. We are also experienced in the collation, interpretation and effective presentation of flight line, breeding and wintering bird data.

We are at the forefront of bat data analysis. In addition to using standard software to interpret bat calls, we understand the limitations and advantages of different types of bat detector, and we make use when necessary of weather stations to collect additional meteorological data. This can be very useful in understanding the environmental conditions in which bats use a particular site. The value of this approach has been demonstrated at Public Inquiry, where we have been able to draw on site-specific weather data to support our conclusions.

#### Ecology Consultancy Services

BSG Ecology provides a comprehensive onshore wind farm ecological consultancy service, including:

- Preliminary site appraisal to enable early understanding of likely survey requirements, costs and project risk;
- Detailed desk study, involving the purchase of data, interrogation of aerial photographs, maps and information on designated sites, and where necessary the review of planning applications;
- Survey design and implementation based on published guidance, knowledge of local conservation priorities and likely sensitivities;
- Liaison with statutory and non-statutory nature conservation consultees;
- Input to scoping reports;
- Attendance at public exhibitions;
- The production of baseline reports in support of EclA Chapters;
- Ecological and Ornithological Impact Assessments based on industry guidance; and,
- Habitats Regulations Assessment advice, reports and consultation.