

# Nature Conservation Planning Guidance for Small Scale Wind Energy Developments



**October 2015**

## 1.0 Introduction and Summary of Key Points

**1.1** The aim of the Supplementary Planning Guidance note is to inform applicants of the nature conservation requirements for small scale wind energy developments. The guidance includes a broad guide on survey requirements, it is advised that developers appoint an appropriately qualified ecologist at the earliest opportunity as all developments will be required to submit some level of ecological survey.

**1.2** The guidance note enables developers to meet the Council's proactive approach towards achieving a high quality natural environment and to address statutory duties and social responsibilities, whilst having a positive attitude to renewable energy. This document will be a material consideration in determining small scale wind energy applications for planning permission.

## 2.0 Key Messages

**2.1** All applicants for small scale wind energy schemes will be required to submit an ecological survey report. The level of survey required will depend on the nature and scale of development and the sensitivity of the surrounding habitat and species. Developers should expect as a minimum the need for a Preliminary Ecological Appraisal (PEA) along with specialist surveys for impacts on bird and bat species. Where trees, tree roots or woodland areas are to be affected, then a BS5837:2012 survey will be required. All work areas should be included in the ecological survey including the turbine location and any temporary compounds or lay down areas. Access or cable routes should also be included if they form part of the application.

**2.2** Pre-application advice with the Local Planning Authority (LPA), including the LPA Ecologist, is available on request, this is subject to a charge and the planning department should be contacted for details. It is advised that developers appoint an appropriately qualified ecologist at an early stage to provide detailed professional advice, particularly where timescales may be tight. Surveys should be carried out at the beginning of the process so that they can inform the location and design, rather than trying to fit the results around any existing proposals.

**2.3** Many ecological surveys and mitigation can only be carried out at certain times of the year. Developers need to seriously consider these seasonal constraints and time work appropriately. Protected species are a material consideration in the planning process and applications will only be accepted where all the required information is provided upfront. The Council will not agree to the inclusion of planning conditions in order to undertake further survey work at a time more favorable to the applicant.

**2.4** Surveys, assessments and reports are required to be carried out in line with the British Standards for Biodiversity: Code of Practice for Planning and Development (BS42020:2013) along with relevant best practice survey guidelines (unless there are justified deviations) and by a suitably qualified, knowledgeable and experienced ecologist. Tree surveys are required to be undertaken in accordance with BS5837:2012, 'Trees in relation to design, demolition and construction' and by an appropriately qualified arborist.

**2.5** Survey reports should include the results of the survey and an assessment of the effect of the development on the species/habitats/sites, including cumulative assessments where necessary. It should also include recommendations for mitigation and enhancement

as necessary or for further survey or monitoring. Reports should be accompanied by appropriately detailed plans.

**2.6** In accordance with Local Development Plan Policy DM14: Biodiversity Protection and Enhancement and the Council's duties under the Habitat Regulations, the impacts upon the Usk Bat Sites Special Area of Conservation (SAC) is required to be considered for all turbine applications – a screening form is included in Appendix A.

**2.7** This guidance combines existing best practice guidance at the date of publication. If newer guidance has been published and adopted as best practice by the industry then this should be taken into consideration when formulating survey proposals.

### **3.0 Survey Requirements**

**3.1** For all small scale wind energy developments a Preliminary Ecology Appraisal (PEA) will be required to be submitted to include a desk study and field survey. Further surveys may be required dependant on the nature, scale and location of the turbine(s) and the sensitivity of the local environment as identified by the PEA. It is expected that in almost all cases additional species specific surveys for birds and bats will be required. In the case of bats, the survey results may be referred to Natural Resources Wales for further comment.

**3.2** Surveys will only be accepted by the Council where they;

- have been undertaken by a suitably qualified, knowledgeable and experienced ecologist and evidence of such is provided within the report
- have been undertaken within the appropriate seasons and are up-to-date (maximum 1 year old – bat surveys, maximum 2/3 years old – other surveys)
- follow best practice survey standards and methodology
- are compliant with the British Standard for Biodiversity: Code of Practice for Planning and Development (BS42020:2013)

### **4.0 Preliminary Ecological Appraisal - Desk Study**

**4.1** For every development a desk study and field survey will be required to be undertaken to determine the likelihood of any potential impacts on biodiversity. This must include the site of the turbine and any works related to the development such as temporary compounds, crane pads or lay down areas and access tracks or access improvements where they form part of the application. General guidance on PEA can be found on the [CIEEM](#) website.

**4.2** The Desk Study should include as a minimum -

- A Local Environmental Records Centre search from the South East Wales Biodiversity Records Centre (SEWBReC) which should include the following:
  - (i) Statutory and non-statutory designated sites within 2km of the proposed development;
  - (ii) Designated bat sites (Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs)) within 10 km of the proposed turbine location(s), to comply with Blaenau Gwent LDP Policy DM14 regarding the Usk Bat Sites SAC.
  - (iii)
  - (iv) Records for high risk bat species within 2 - 5km (Nathusius' pipistrelle, noctule and Leisler's bat).
  - (v) Records of high risk bird species listed in Appendix 1 of Natural England's TIN069: Assessing the effects of onshore wind farms on birds within 5km.

- (vi) Records of any species listed under BGCBC LBAP, Environment Act Section 7 (formerly NERC ACT Section 42), Birds Directive Annex 1, WCA Schedule 1 and RSPB red and amber lists within 2km.

**4.3** The desk study should also establish whether there are any wind turbines within 2km which have been consented or which are publically available in the planning system, this is in order to establish whether there will be any cumulative effects.

## **5.0 Preliminary Ecological Appraisal - Basic Field Survey**

**5.1** The field survey should include the development site plus other relevant areas such as temporary compounds and lay down areas along with cable and access routes (if included in the application). The survey should be comprised of an extended Phase 1 Habitat Survey which should be completed in accordance with the [\*Handbook for Phase 1 habitat survey - A technique for environmental audit \(JNCC, 2010\)\*](#).

**5.2** In addition to Phase 1 category, habitats should also be assessed against the Mid Valleys SINC Criteria to establish whether the Blaenau Gwent LDP Policy *DM14 Biodiversity Protection and Enhancement* applies. Note: sites are considered as SINCs if they meet the relevant criteria via ecological survey rather than via a formal designation process.

**5.3** Where hedgerows may be affected the value of the hedgerow should be defined under the Hedgerow Regulations 1997 and not simply by Phase 1 category.

**5.4** Signs of use and potential for use by protected and priority species should be noted along with any incidental recordings.

**5.5** All buildings, trees or features within 200m of the proposed turbine development, including access tracks and cable routes shall be externally, and if possible, internally assessed for potential roosting bats in accordance with Bat Conservation Trust 2012 Guidelines and Mitchell-Jones 2004, including land which is not in the ownership of the applicant.

**5.6** All buildings, trees and features in the land owner's ownership shall be externally, and if possible, internally assessed for potential roosting bats within 500m of the proposed turbine development.

**5.7** If trees or woodlands (including rooting areas) may be impacted by the development proposals, (including as a result of ancillary works that form part of the application) then a separate BS5837:2012 (Trees in relation to design, demolition and construction) survey should be undertaken by a suitably qualified arboricultural consultant. All reports must specify the qualifications held by the consultant and all surveyors. The Council will only accept reports from tree surveyors who hold the following qualifications or industry recognised standards:

- Certificate in Arboriculture level 4 (Tech Arbor A)
- Diploma in Arboriculture level 6 (Dip Arb (RFS))
- BSc or MSc (Degree or Masters) in arboriculture
- Professional Member or Fellow of the Institute of Chartered Foresters attained by an arboricultural route / Chartered Arboriculturist only (MICFor/FICFor)
- Fellow of the Arboricultural Association
- Arboricultural Association Registered consultant

## 6.0 Specialist Surveys - Bats

**6.1** The instances where bat surveys are not required will be rare as there are very few circumstances where impacts are likely to be negligible using the precautionary approach. In line with TAN 5, which states “*the level of likelihood that should trigger a requirement for developers to undertake surveys should be low where there is a possibility that European protected species might be present*” (Welsh Assembly Government, 2009). Therefore it is expected that almost all sites proposed for wind energy developments within Blaenau Gwent will require a bat survey.

| <b>Bat survey trigger list</b>                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bat SAC within 10 km – The Usk Bat Sites SAC is located to the North of Blaenau Gwent and this trigger alone is likely to include all developments within the Blaenau Gwent area. 10km radius is in line with Blaenau Gwent LDP Policy DM14.                                                                   |
| Bat SSSI within 5 km.                                                                                                                                                                                                                                                                                          |
| Pipistrelle roost within 1km.                                                                                                                                                                                                                                                                                  |
| High risk species as well as barbastelle and serotine known roost records within 5km (risk level as defined in TIN51)                                                                                                                                                                                          |
| Presence of a building, other structure, tree or habitat within 500m with medium to high risk of being a bat roost or an area with high bat activity (risk level as defined in TIN51).                                                                                                                         |
| Turbine blade tip within 50m of feature of high quality to bats (e.g. woodland (including scrub), traditional buildings, in-field ponds (and other water bodies), pasture and parkland). The distance of blade tip from the above listed habitats can be reduced to 30m for micro turbines (under 25m height). |
| Another turbine within 1km. This distance can be reduced to 500m for micro turbines.                                                                                                                                                                                                                           |
| Presence or connectivity to landscape-scale habitat features within 1km of the site.                                                                                                                                                                                                                           |
| Presence of potential foraging or breeding areas either side of turbine location.                                                                                                                                                                                                                              |

**6.2** The survey effort should be based on the risk as defined in Natural England’s guidance ‘[TIN051: Bats and onshore wind turbines Interim guidance](#)’ and Bat Conservation Trust Bat Survey Good Practice Guidelines (2012). Survey methodology should be in accordance with this guidance or if more recently published guidance has been adopted as best practice then that should be used. Where survey effort differentiates from the published guidance then justification must be given.

**6.3** Surveys will need to be carried out by a suitably qualified, knowledgeable and experienced ecologist and relevant details of their competence will be required at the beginning of the report. Where a surveyor does not hold a bat licence evidence to support their competence to carry out the activity surveys will be required. This may include CVs, previous reports and/or references. Ideally all surveyors will be licensed. [CIEEM](#) details the technical competencies which are required to undertake bat surveys.

**6.4** Both manual and static surveys will be required. Manual surveys will include at least transect surveys. If there is a recorded/medium to high potential bat roost within 200m then bat emergence and/or re-entry surveys will also be required. Alternatively vantage point surveys may be more appropriate (site dependent). Static (automated) surveys will be required for at least 5 consecutive nights, with one of those being at the same time as the manual surveys. Surveys should be carried out on warmer (temperature above 8°C), drier evenings when the wind speed is low (between 0 and 6 m/s).

**6.5** Timings of surveys should be considered when considering putting in a planning application. Emergence and re-entry surveys can only be carried out in the active season (April to September). Activity surveys at the proposed turbine site and surrounding area may be extended beyond the core active season depending on the area in consideration and the nature of any identified nearby roosts. A survey during peak breeding season (June to August) is essential. Further surveys are likely to be required throughout the active period (principally May to September). This takes into account seasonal variation in foraging behaviour. Additional survey effort will depend on risk and results of initial surveys. As a guide this is likely to be at least an additional spring/autumn static survey for low risk sites and at least a spring and autumn manual and static survey for medium risk sites. High risk sites will require much more intense survey effort in line with the BCT guidelines.

**6.6** Key aspects to include within the bat survey report are:

- An assessment of desk top and field information carried out so far
- Details of surveyors including the number and their qualifications/experience
- Details of the survey including dates, timings, duration, weather and survey vantage points, transects, routes etc.
- Results including estimated number of individuals and species, details of type of behavior (direction of travel, foraging or commuting), height, distance from bat detector microphone, time of bat passes, a map with flight patterns, etc.
- An assessment of the results in terms of a turbine of the specified height at that location including:
  - (i) The functionality of the site for foraging and/or dispersal purposes;
  - (ii) The risk of incidental injury or killing;
  - (iii) Providing enough information to inform assessment in respect of demonstrating no detriment to the maintenance of the Favourable Conservation Status of each population or colony of bats; and
  - (iv) Cumulative impact assessment.
- Recommended mitigation and enhancement should be included along with the need for any further survey or monitoring.

## **7.0 Usk Bat Sites – Special Area of Conservation (SAC) Habitats Regulations Assessment**

**7.1** The Usk Bat Sites SAC is located to the north of the Borough of Blaenau Gwent. The site has been primarily selected to conserve lesser horseshoe bats. The site is made up of several lesser horseshoe bat roosts, upland habitats, woodlands and cave systems located around the valley of the River Usk near to Abergavenny. The Council is required to meet its duties under the Conservation of Habitat and Species Regulations 2010 (as amended) to ensure that there will not be an impact upon the features of the SAC as a result of any proposed development.

**7.2** LDP Policy DM14 states that:

*“Development proposals which are within 10km of the Usk Bat Special Area of Conservation (SAC) that would have an impact on connectivity corridors or cause direct or indirect disturbance to the features must be subject to a project level Habitats Regulations Assessment (HRA)”.*

**7.3** Each turbine application within 10km of the SAC is required to be screened for any likely significant effect upon the SAC, if a significant effect is identified as being possible then a full ‘appropriate assessment’ is required. Information should be provided to allow

the LPA to undertake a HRA screening exercise for all small scale wind energy developments. Additional information and the appropriate form to undertake the HRA screening is contained in Appendix A.

## 8.0 Specialist Surveys - Birds

**8.1** For all turbine applications developers are required to undertake proportionate surveys to assess impacts upon bird species. Bird surveys should be carried out in accordance with the Scottish National Heritage guidance on birds and wind turbines (SNH, 2014 and SNH, 2006). A proportionate level of survey based on the size and scale of the wind energy development will be expected. Surveys should be undertaken by suitably qualified, knowledgeable and experienced ecologists (ornithologists). Relevant information should be provided at the beginning of reports to demonstrate the ecologist's validity. Evidence of competency may be requested via CV, copies of previous reports and/or references.

**8.2** Where methodologies including number of hours, number of seasons, timings etc. are not in accordance with these guidelines there must be a valid reason (the applicant has not provided enough time is not reasoned justification).

**8.3** Impacts with regards to bird surveys should take into account the following:

- Annex I birds of the EC Birds Directive;
- Schedule I birds of the Wildlife and Countryside Act (1981);
- NERC Act Section 42 species;
- Birds listed on the current version of RSPB Cymru's publication 'The Population Status of Birds in Wales' (red and amber lists of birds of conservation concern); and
- Bird species which are included in the Blaenau Gwent Local Biodiversity Action Plan.

**8.4** Key aspects to include within the bird survey reports include:

- An assessment of desk top and field information carried out so far.
- Details of the survey including dates, timings, duration, weather and survey vantage points, transects etc.
- Results including estimated number of individuals and species, details of type of behaviour, a map with flight patterns, etc.
- An assessment of the results in terms of a turbine of the specified height at that location including:
  - (i) The functionality of the site for foraging, migration and/or dispersal purposes;
  - (ii) The risk of incidental injury or killing through collision, disturbance and displacement; and
  - (iii) Cumulative impact assessment in relation to other existing or proposed turbines.
- Recommendations including further survey work and mitigation/compensation measures and any proposed monitoring.
- Recommended enhancements (added value to ecology over and above mitigation and compensation for impacts).

## 9.0 Reporting

**9.1** A final ecological report should be submitted to the Council to accompany the planning application. The report should be written in accordance with CIEEM guidance for ecological report writing and should include an **assessment of the impacts** associated with the development and ancillary development.

**9.2** The assessment of impacts should include impacts associated with the operation of the development along with an assessment of construction and post construction impacts, including (but not limited to):

- Impacts on protected sites or their features E.g. pollution, habitat loss, impacts on mobile species (in particular birds and bats).
- Habitat loss. E.g. birds/bats due to disturbance from habitat, badger sett destruction, loss of reptile basking/hibernacula, amphibian feeding area, bat roosts, bird breeding sites etc.
- Disturbance, e.g. bats/birds from habitat, breeding birds during nesting, breeding badgers, water voles.
- Displacement, e.g. birds from breeding/feeding sites.
- Death to individuals, e.g. birds and bats through collision and barotrauma, killing/injuring of reptiles, killing/injuring of badgers.
- Cumulative impacts from all of the above along with other wind turbines/farms and projects that have a similar effects.

**9.3** Recommendations for further survey work, mitigation, enhancement or monitoring as appropriate should also be included along with detailed and clearly referenced plans.

## **10.0 On-site Avoidance, Mitigation and Enhancement**

**10.1** When planning the location and construction of the turbine, in order to try to reduce risks to species and habitats from the turbine and in accordance with TAN 5 and LDP Policy DM14: Biodiversity Protection and Enhancement, the following points should be considered at an early stage. This may reduce the amount of mitigation required or reduce the survey effort, and in some cases may remove any ecological objections. In general, proposals would be less welcome on a local or UK designated nature conservation site or in close proximity to a bird/bat breeding area.

**10.2** Improved fields or industrial sites should be considered in the first instance when locating turbines. However it is important to note that in some instances improved fields may be good habitat for wintering bird flocks. Similarly, industrial land can also be of biodiversity value – e.g. brownfield sites can make very good breeding habitat for lapwing. Therefore, care must be taken in not assuming that all improved and industrial land is automatically acceptable for turbines but would be a more suitable place to start.

**10.3** Any ancillary development associated with the turbine, such as cabling, access tracks, temporary compounds, lay down areas, grid connection, electricity sub-stations and disposal sites should avoid removing trees, hedgerows, marshy grassland, scrub, woodland or any other habitat important for biodiversity. These areas should be included in survey work and in proposals for mitigation.

**10.4** Turbines should be located at least 50m from habitat more likely to be used by bats and 30m for micro turbines, where the distance is measured from the top of the habitat feature to the tip of the blade. However siting a turbine over 50m away from habitat suitable for bats does not automatically mean that surveys are not required, rather this should be a consideration once a proper assessment of the site has been undertaken.

**10.5** Diggings should be avoided within 30m of an active badger sett. Where within 30m, appropriate mitigation shall be required and need to be agreed. A badger licence is likely to be required.

**10.6** Any diggings should be covered over at night and a method of escape provided e.g. plank of wood placed in the digging to allow any animals to escape.

**10.7** Construction should be avoided when brown hares are breeding (determined by pre construction survey).

**10.8** Construction of the turbine should be carried outside of bird breeding season. This is generally good practice but may be a requirement if there are birds sensitive to disturbance from construction within 1km. This would usually be March to August inclusive but may be February to June inclusive for red kites.

**10.9** Where reptiles have found to be on-site a reptile mitigation strategy will be required to be agreed with the LPA.

## **11.0 Off-site Compensation**

**11.1** Some affected habitats may be recreated or alternative compensatory measures incorporated off-site. For example, where areas of hedgerow may need to be removed for access, it may be possible to replant elsewhere or to fill gaps of existing hedgerows. This will be at the discretion of the LPA and details will need to be provided of the extent of the compensation. Note that often with the removal of vegetation there are associated landscape impacts which may result in the proposals being unacceptable on landscape grounds, the Landscape Officer within the Council should also be consulted.

## **12.0 Curtailment**

**12.1** Where it has been shown through surveys that the turbine may impact on bats or birds, it may be possible to restrict turbine operation by way of curtailment in order to minimise negative effects. This may be with regards to certain weather conditions such as wind speed, temperature etc. or times of day or year or some other measureable factor.

**12.2** Where a curtailment condition has been applied to a turbine (post determination), the applicant may be able to show through additional survey work that the curtailment could be made more lenient, or removed entirely, and therefore could apply to the LPA to vary a curtailment condition. Where an applicant is considering this approach they should contact the LPA to determine the level of survey work which is likely to be required.

**12.3** It should be noted there is no guarantee that a condition may be able to be varied or removed as it will all depend on evidence. Therefore, developers should not count on the condition being removed as part of their economic evaluation of the turbine development.

## **13.0 Monitoring**

**13.1** Due to the lack of research into the impacts/effects of small-scale wind turbine developments, as opposed to wind farms, it is likely that a pre-construction baseline survey and post-construction monitoring of birds and/or bats will be required, all conducted by a suitably qualified ecological consultant. The precise details of the baseline survey and monitoring will vary from site to site. Typically, the baseline survey will gather data on both wintering and breeding habits of birds in the vicinity of the site for a period of one year. The survey may be requested before or after determination, but no more than two years prior to the beginning of construction. The monitoring will continue the survey methodology for a

period of up to five years post-construction. The data will then be compiled into a report produced by the ecological consultant and submitted to the Authority.

## 14.0 Policy and Legislation

**14.1** All wind turbine development applications will be required to comply with national and local Planning Policies relating to nature conservation. The primary national policy documents are *Planning Policy Wales*, *Welsh Government Technical Advice Note 5: Nature Conservation and Planning* (TAN 5) and the *Nature Recovery Plan for Wales*. At the local level, the relevant policies from BGCBC's Local Development Plan are SP10, DM1.1f, DM1.2e, DM2g, DM4a, DM14, DM15 and DM16.

**14.2** The Council is also required to meet its duties under relevant pieces of legislation. These include:

- Environment (Wales) Act 2016
- Planning (Wales) Act 2015
- The Conservation of Habitat and Species Regulations 2010
- Natural Environment and Rural Communities Act 2006
- Countryside and Rights of Way Act 2000
- The Hedgerow Regulations 1997
- Protection of Badgers Act 1992
- Wildlife and Countryside Act 1981

## 15.0 Additional Advice

**15.1** This SPG is specific to nature conservation and small scale wind energy developments, but other environmental aspects of a scheme need to be considered, such as hydrogeology, land contamination, landscape context and pollution prevention.

Applicants should be advised that:

*In addition to planning permission, it is their responsibility to ensure that they acquire all other consents, licenses or permits under other legislation. Relevant procedures can take several months to complete, and early contact with Natural Resources Wales is therefore advised on matters relevant to their remit. Guidance on matters within their remit can be found at [www.naturalresourceswales.gov.uk](http://www.naturalresourceswales.gov.uk) or [www.cyfoethnaturiolcymru.gov.uk](http://www.cyfoethnaturiolcymru.gov.uk). Here, they provide guidance on environmental planning and regulatory issues, including flooding, waste management and protected species. Where permits, consents or licenses from NRW are required, applicants are encouraged to engage in pre-application discussions with NRW at the earliest opportunity.*