



Ecological Assessment of Site Proposed for Small-scale Wind Farm Development at Baydon Meadow, West Berkshire

Report from

JUST ECOLOGY¹
to

NATIONAL WIND POWER

August 02

INTRODUCTION

JUST ECOLOGY was contacted by NATIONAL WIND POWER (NWP) to carry out a brief ecological assessment of land proposed for the location of single wind turbine at Baydon Meadow, located West Berkshire (NGR SU2976NE).

The area of land identified for the proposed development is small (just 180 by 70m – maximum dimensions), comprising the ground where the turbine will be sited and that needed for a dirt access road, buried cables and small switch gear building.

An ecological survey and evaluation of the site was needed as part of the information to be provided to West Berkshire District Council. JUST ECOLOGY was contracted to:

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- Request from the relevant English Nature and County Wildlife Trust offices any relevant protected area, habitat or species information that pertains to that site?
 - Undertake a habitat survey of site to Phase 1 and/or Phase 2 detail, as appropriate to the site.
 - Add target notes to record features of particular ecological interest and note any evidence of/likelihood for the presence of protected and/or Biodiversity Action Plan species or habitats.
 - Provide a short report to summarise our ecological appraisal of the site (incorporating any information received from consultees).

This is the report in fulfilment of the contract.

METHODS

A Phase 1 habitat survey of the site was undertaken on 8th August 2002, in accordance with the techniques described in JNCC (1993)³. Limited botanical recording was undertaken because it was clear that the site was of limited botanical interest (see below). A faunal survey was undertaken on the 12th August.

There were no ecology reports available for the site from the client. Letters requesting information were sent to English Nature, West Berkshire District Council (the location of the Environmental Records Centre) and the Berkshire, Buckinghamshire & Oxfordshire Wildlife Trust (BBOWT) on the 8th and 10th August, with a two weeks deadline for reply (i.e. c.26th August). The replies received are reproduced in Annex 1.

RESULTS AND DISCUSSION

Site & habitat description

The site is situated between the M4 and minor roads connecting the villages of Baydon and Woodlands St Mary. It comprises of a small field (once part of a larger field) that is currently

² Requests will be time-limited and we assume will be processed free of charge

³ JNCC. 1993. Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC, Peterborough

overgrown with thistles and ragwort, predominantly. It was in arable production only a few years previously.

The field is bordered to the north by limited hedgerow and tree lines that run alongside the minor road. There are fence lines to the west, east and south. The fields to the west and east are now grazing pastures, though recently sown.

Consultations indicate that the site does not correspond with any sites with any statutory (e.g. SSSI⁴) or non-statutory (e.g. County Wildlife Site) conservation designations (Annex 1), and so does not have any local or national protected status.

Botanical survey

The vegetation of the survey area is uniformly ruderal in character, visually dominated by tall (1m+) ragwort (*Senecio jacobaea*), spear thistle (*Cirsium vulgare*) and false-oat grass (*Arrhenatherum elatius*). These species occur in a mosaic throughout the site and tend to occur in clumps surrounded by areas of bare ground with lower-growing common arable weeds and acrocarpous mosses. Typical species found below the taller herbs and grasses include frequent annual meadow grass (*Poa annua*), scarlet pimpernel (*anagallis arvensis*) and black grass (*Alopecurus myosuroides*).

The vegetation is very similar in the recently topped part of the field adjacent to the survey area. A hedge consisting primarily of hawthorn (*Crataegus monogyna*) and a little oak (*quercus robur*) runs outside the northern boundary along the B road. A plant species list is provided in the following table.

Latin name	Common name	Frequency (DAFOR ⁵)
<i>Aethisia cyanapum</i>	Fool's parsley	R
<i>Alopecurus myosuroides</i>	Black grass	F
<i>Anagallis arvensis</i>	Scarlet pimpernel	F
<i>Aphanes arvensis</i>	Parsley piert	R
<i>Arrhenatherum elatius</i>	False oat-grass	LA
<i>Bromus sterilis</i>	Barren Brome	F
<i>Cirsium arvense</i>	Creeping thistle	O
<i>Cirsium vulgare</i>	Spear thistle	LA
<i>Dactylis glomerata</i>	Cocksfoot	O
<i>Epilobium montanum</i>	Broad-leaved willowherb	F
<i>Fallopia convolvulus</i>	Black bindweed	O
<i>Geranium dissectum</i>	Cut-leaved cranesbill	O
<i>Geranium molle</i>	Dove's-foot cranesbill	F
<i>Geranium pusillum</i>	Small cranesbill	R
<i>Heracleum sphondylium</i>	Hogweed	R

⁴ Site of Special Scientific Interest.

⁵ Dominant, Abundant, Frequent, Occasional, Rare

Latin name	Common name	Frequency (DAFOR ⁵)
<i>Holcus lanatus</i>	Yorkshire fog	O
<i>Hypochaeris radicata</i>	Common catsear	R
<i>Malva sylvestris</i>	Common mallow	O
<i>Myosotis arvensis</i>	Field forget-me-not	O
<i>Poa annua</i>	Annual meadow-grass	A
<i>Poa trivialis</i>	Rough meadow-grass	O
<i>Polygonum aviculare</i>	Knograss	F
<i>Polygonum persicaria</i>	Redshank	O
<i>Rhapbanus Rhabaristrum</i>	Wild radish	R
<i>Rumex crispus</i>	Curled dock	O
<i>Senecio jacobaea</i>	Ragwort	LA
<i>Senecio vulgaris</i>	Groundsel	O
<i>Sonchus asper</i>	Prickly sow-thistle	O
<i>Stellaria media</i>	Chickweed	F
<i>Taraxacum agg.</i>	Dandelion	R
<i>Trifolium repens</i>	White Clover	O
<i>Tripleurospermum maritimum</i>	Scentless mayweed	O
<i>Veronica serpyllifolia</i>	Thyme-leaved speedwell	R
<i>Viola arvensis</i>	Field pansy	O

Faunal survey

The site was checked for field evidence of protected species, or for the potential for them to be present given the nature of the habitat. This evaluation is summarised in the following table.

Faunal Group	Discussion
Amphibians	<ul style="list-style-type: none"> Great crested newt: Not relevant due to absence of wetland habitat
Birds	<ul style="list-style-type: none"> Rare species: None recorded and unlikely to be present as breeding species. Field may be used as feeding site by farmland birds, including high priority species like skylark, linnet, song thrush etc.. Common species: A range of common species was recorded on the field visit. Some may breed on site, but only grassland species.
Invertebrates	<ul style="list-style-type: none"> Butterflies: Some common species recorded: gatekeeper, meadow brown, painted lady. Habitat unlikely to be attractive to rare species associated with chalk grassland. Moths: Not evaluated – would require intensive fieldwork. Others, e.g. beetles, flies, molluscs, spiders: Not evaluated – would require intensive fieldwork.
Mammals	<ul style="list-style-type: none"> Badger: Pathways exist throughout the site indicating that the area is used for feeding purposes. There is no set on site. Pathways were traced back for c.200m – no sets were located. Dormice: Habitat on site not suitable. Water vole: Not relevant due to absence of wetland habitat Bats: There are no trees or buildings on site that have the potential to contain bat roosts. Bats may forage over the field since it would be rich in insect foods.
Reptiles	<ul style="list-style-type: none"> Lizards: Slow worms are a possibility give the nature of the habitat. Common lizards also, though extremely unlikely in the

	predominantly arable landscape. ▪ Snakes: Adders and grass snakes are unlikely to occur.
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Implications

The site is of low value botanically consisting mainly of common ruderal species that are typical of disturbed, nutrient-rich, heavy soils. The site has low potential with respect to protected animal species also, offering some limited feeding opportunity for a range of birds, bats and nearby badgers.

Recommendations

It would be prudent to:

1. Remove any potential breeding habitat for bird species (e.g. tall herbs) in the winter pre-development so that breeding species are neither destroyed nor disturbed.
2. Site the turbine at the south of the field (near the motorway) since the field evidence indicates that this end seems relatively unused by foraging badgers.
3. Ensure badgers can continue to use the site by inserting badger gates or tunnels, if needed.
4. Consider providing new and appropriate habitats for wildlife during the detailed design of the works.

Annex 1.

Correspondence from key consultees with respect to the wildlife importance of Baydon Meadow, West Berkshire

1) E-mail of 19th August:

JEFF, with regard your recent enquiry as to BBOWT's knowledge of Baydon Meadow in West Berkshire, I can confirm that this is not a statutorily protected site. The nearest site to it is a SSSI called White Shute SSSI (which happens to be one of our reserves) it is approx 4km away. Unfortunately I am unaware of Baydon Meadow, and currently the lack of a Biological Records Centre in the Berkshire means I am unable to provide any ecological information about the site. However, all the downland in the area is chalk and there are some very good butterfly sites within 10km of this area (for Marsh fritillary, Small Blue, Brown Argus, Duke of Burgandy, Chalkhill blue).

I am sorry I cannot be of further help, however, should you wish any information on the protected sites in the vicinity then please let me know.

RICHARD ELSTON
BERKSHIRE RESERVES OFFICER
Berkshire, Buckinghamshire & Oxfordshire Wildlife Trust
01628 829 574
(F) 01628 829 083
E-mail: bbowtberks@cix.co.uk

2) Letter from English Nature (9th August):



Thames & Chilterns Team
Fishball House, Crookham Common, Thatcham, Berkshire RG19 2BJ
Tel 01645 266661 Fax 01645 268970
email: thames.chilterns@english-nature.org.uk
www.english-nature.org.uk

Dr J Kirby
Just Ecology Environmental Consultancy Ltd
Head Office, Brookend House
Old Brookend
Berkeley
Gloucestershire
GL13 9SQ

9 August 2002
Your Ref:

Dear Dr Kirby

BAYDON MEADOW IN WEST BERKSHIRE

With reference to your letter to the above land, dated 8 August, I can confirm that:

1. that no part of the land marked on the map is an SSSI and that there are no proposals to schedule any as such in the vicinity;
2. that we hold no records of Sites of Interest for Nature Conservation on the land marked on the map or in the immediate vicinity. Please contact the Environmental Department at West Berkshire Council for this information.
3. that we have no records of any protected species occurring on the land – this does not mean that there are none present, merely that we do not know of them, and any developer should be aware that the presence of bats, badgers, great crested newts or watervoles, if discovered, would have to be taken into account during the planning process.
4. that there is an Ancient Woodland Site at Lodge Farm and though it is not on the immediate area marked I have enclosed a copy of this site.

There is no charge for this information.

Yours faithfully

A handwritten signature in cursive script that reads "Karen Allen".

Karen Allen
Admin Assistant
karen.allen@english-nature.org.uk

Enc.



Working today for nature tomorrow