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07/18/59

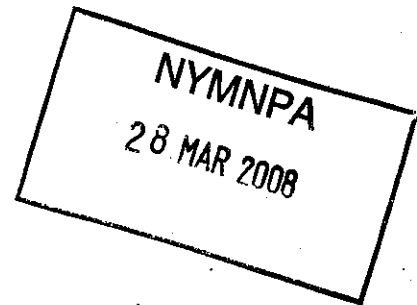
ADDITIONAL AMENDMENTS

- Amended layout of buildings/outside areas
- Additional background information
- Amended design
- Revised access arrangements
- Change of description of proposed development - as indicated on the previous page
- Change in site boundaries
- Other (as specified below)

**SCOPING REPORT
WIND TURBINE LOCATION SURVEY
NEWBIGGIN HIGH FARM
AISLABY
NORTH YORKSHIRE**

Grid Ref NZ84037 07679

**FOR
MR. E. THACKRAY**



Naturally Wild Consultants Limited
Unit 6, Chapel Barn Yard,
Wylde,
BA12 0QQ

Email: [REDACTED]

STATUS:	R1
TYPE SURVEY	19/03/08

Planning Issues

Natural England currently advises local planning authorities that:

Where developments requiring planning permission are likely to impact upon protected species it is essential that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005, accompanying Planning Policy Statement 9 (Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, 16 August 2005) which states that:

'The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'

In addition, paragraph 99 of ODPM Circular 06/2005 states:

'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted'

It should also be noted that paragraphs 41 and 45 of the ODPM Circular 08/2005 (Guidance on Changes to the Development Control System) state that:

'Potential developers (at pre-application stage) and local planning authorities (at application stage) must provide sufficient information to the statutory consultee (Natural England) to enable it to give a substantive reply',

'the period prescribed for the purpose of the duty to respond is 21 days starting with the date the statutory consultee receives the information necessary to allow it to provide a substantive response, or any other period agreed in writing between both parties.'

Where development would result in damage to, or obstruct access to, any bat roost, whether occupied or not, or to harm or disturb a bat a licence is required from DEFRA to allow the development to proceed. Obtaining a DEFRA licence can take up to 60 working days.

Bats

Recent findings from the Bat Conservation Trust's ongoing National Bat Monitoring Programme (NBMP) suggest that populations of greater and lesser horseshoe bats, Daubenton's bat, Natterer's bat and the common pipistrelle have risen since regular monitoring began in 1997. Nationally, Daubenton's bat populations are estimated to have been increasing at an annual rate of 4.4% since 1997.

However, this is the first evidence that some bat populations could be recovering from historic population declines. The general consensus, both in Britain and

continental Europe is that most other bat species are still declining and vulnerable.

Factors thought to have contributed to this decline include:

- Reduction in insect prey abundance, due to high intensity farming practice and inappropriate riparian management
- Loss of insect-rich feeding habitats and flyways, due to loss of wetlands, hedgerows and other suitable prey habitats
- Loss of winter roosting sites in buildings and old trees
- Disturbance and destruction of roosts, including the loss of maternity roosts, due to development and the use of toxic timber treatment chemicals

Because of past declines, some species including pipistrelle have been designated as priority species by the government and have individual Species Action Plans; these contain objectives relating to the maintenance and restoration of populations to former levels.

Objectives of survey

The objective of the survey was to:

- Ascertain if the development is likely to be detrimental to the local bat population

Survey area

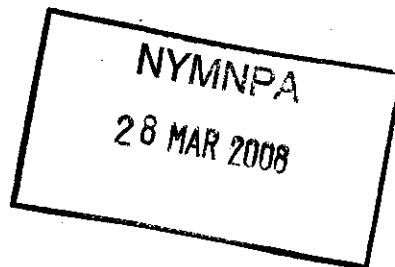
Newbiggin High Farm and outbuildings, Aislaby.

Habitat description

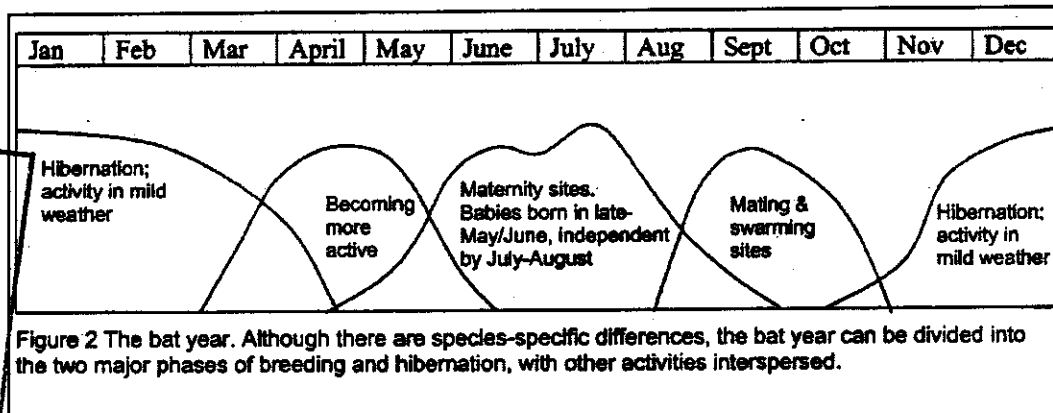
The site comprises of a stone farmhouse with attached cottage situated to the north western corner of the site. The conversion of an existing granary and stables into accommodation is underway to the east. Various steel and wood barns are located to the south and east of the farm house.

Limitations to this scoping exercise

UK bats are insectivorous; therefore during the winter when few insects are available bats hibernate. During September and October prior to hibernation the bats gain weight, then as mean temperatures fall they locate roosts appropriate for overwintering. Bats are capable of reducing body temperature and slowing their metabolism in order to conserve their food reserves until the following March / April. Bats can also enter a state of torpor as a result of inclement weather conditions that prevent foraging. Disturbance of bats during the hibernation period increases the amount of energy used, with a subsequent reduction in food availability for overwintering.



The figure below shows the typical bat year.



(Bat Mitigation Guidelines A. J. Mitchell-Jones 2004)

The site was visited in March; the initial survey was undertaken during daylight when bats tend to be inactive. Therefore readers of this report should take this into consideration. During the visit observations were made for evidence of bats having been present both externally and internally to the barn.

In their guidelines for bat surveys, Natural England indicates the types of building and trees that are more or less likely to support bat roosts. Sections relevant to this site are highlighted:

The risk of bat roosts being present will be higher where structures have:

- o Pre-20th Century construction
- o **A lowland rural setting**
- o **Woodland, mature trees, species-rich grassland and/or water nearby**
- o Large dimension roof timbers with cracks, joints and holes
- o Numerous crevices in stonework and structures
- o Uneven roof covering with gaps, though not too draughty
- o Hanging tiles or roof cladding, especially on south-facing walls
- o Roof warmed by the sun.
- o Disused or little used; largely undisturbed

The risk of bat roosts being present will be lower where structures have:

- o Urban setting with little green space
- o Heavy disturbance
- o Small, cluttered roof void (particularly for brown long-eared)
- o Modern construction with few gaps or crevices that bats can fly or crawl through (though Pipistrelle bats may still be present)
- o **Prefabricated of steel or sheet materials**
- o Active industrial premises

Please note that the above 'trigger list' provides generic screening criteria only (BMG Section 5.2) and there are exceptions to consider. For example, pipistrelle breeding roost sites are often found in modern housing estates and therefore the absence of bats from such locations should not always be assumed.

2. METHODS

Initial survey of the site involved following the external perimeter dealing with individual features as they occurred. This was then followed by a detailed internal inspection.

This initial detailed scoping exercise was undertaken using Visual Encounter Survey (VES) techniques.

All works were undertaken by an experienced senior ecologist with over 8 years experience in surveying for bats.

3. RESULTS

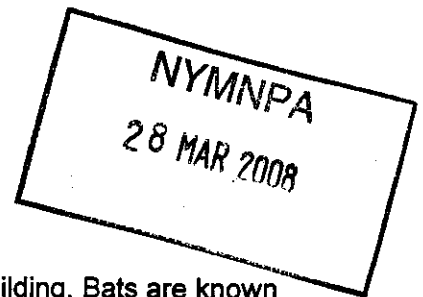
A careful examination of all horizontal and vertical surfaces internally and externally failed to show any evidence of bats using the building as a roost or feeding site.

Desktop Study

Consultation with the National Biodiversity Network Gateway shows the following species of bat have been recorded within the 10km grid square which surrounds the site:

Common Pipistrelle
Brown long eared
Whiskered / Brandt's

Pipistrellus pipistrellus
Plecotus auritus
Myotis mystacinus / brandtii



4. CONCLUSIONS AND RECOMMENDATIONS

No evidence of bats was found internally or externally to the building. Bats are known to utilise the farmhouse nearby. Exit points from the farmhouse, numbers of bats and species are at present unknown. As a result flight lines and feeding habitat is also unknown.

Little or no research has been conducted into the effects of domestic wind turbines on foraging or commuting bats. Research to date has in the main originated from studies of large wind farms within the USA involving migratory bat species.

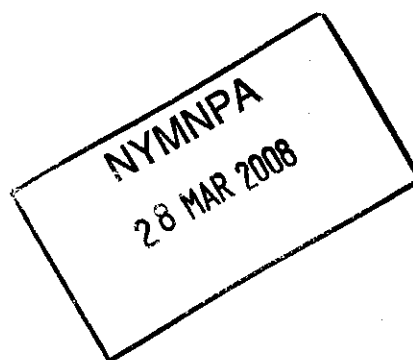
It is noted that the proposed Proven 6 (6kW) turbine has 3 blades with a rotational diameter of 5.5 meters. The designed operating rotational speed of the blades is 200 rpm, maintained at this level in winds in excess of 12 m/s by a design feature that allows the blades to twist thus maintaining the power and speed of the rotor.

From simple calculations it is estimated that the rotor tip speed at 200 rpm equates to 3,460 meters a minute. This equates to a speed of approximately 129 mph. A bat being struck by a blade travelling at this speed of rotation is likely to sustain severe injury or death.

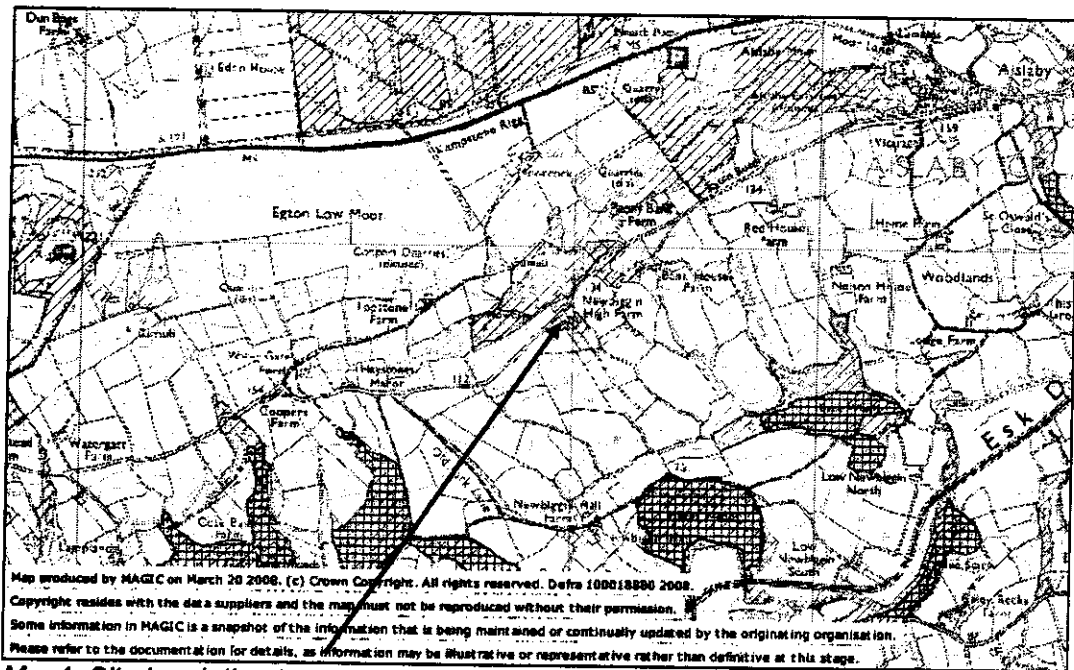
Linear features link the proposed turbine site with the surrounding landscape are described as good. To the north of the farmhouse is National Inventory Woodland; to the south at several locations are various stands of Ancient Semi Natural and Replanted woodland. These areas of woodland not only provide foraging habitats for bats, but act as direct links through the surrounding countryside by commuting bats.

It is advised that prior to planning permission being sought a full series of bat surveys be undertaken, these surveys being conducted during the bat breeding season (April to October) in accordance with the Bat Survey Guidelines. The information gathered will permit understanding of the species together with what purpose bats are utilising this site and the surrounding habitat.

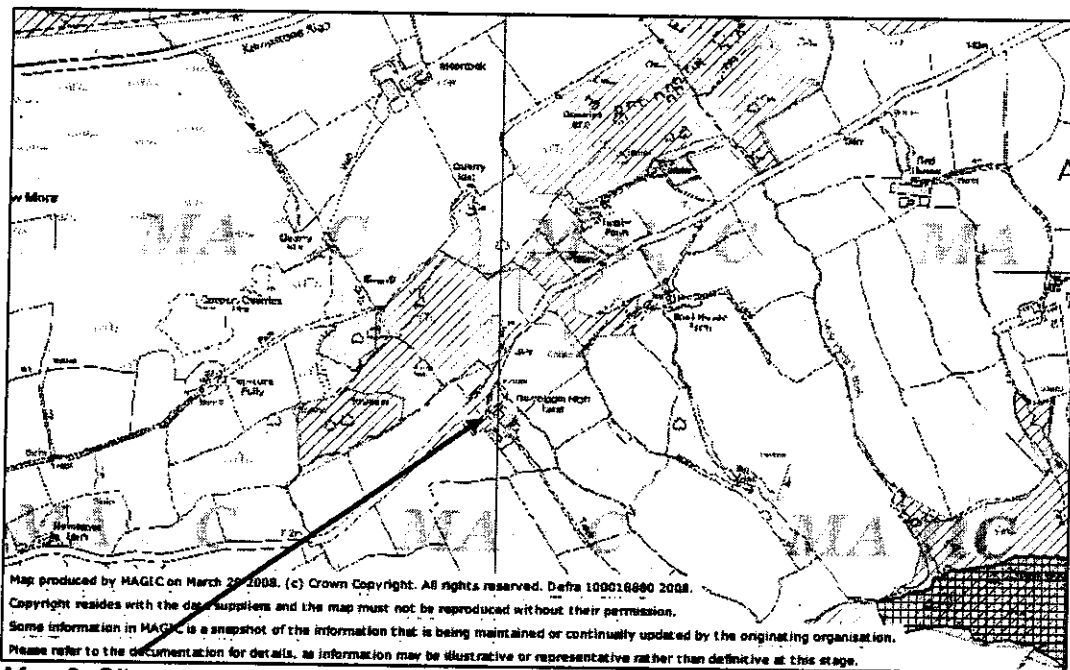
On completion of the relevant surveys a report will be produced providing the planning authority with detailed information upon which they can base a decision.



5. MAPS AND IMAGES

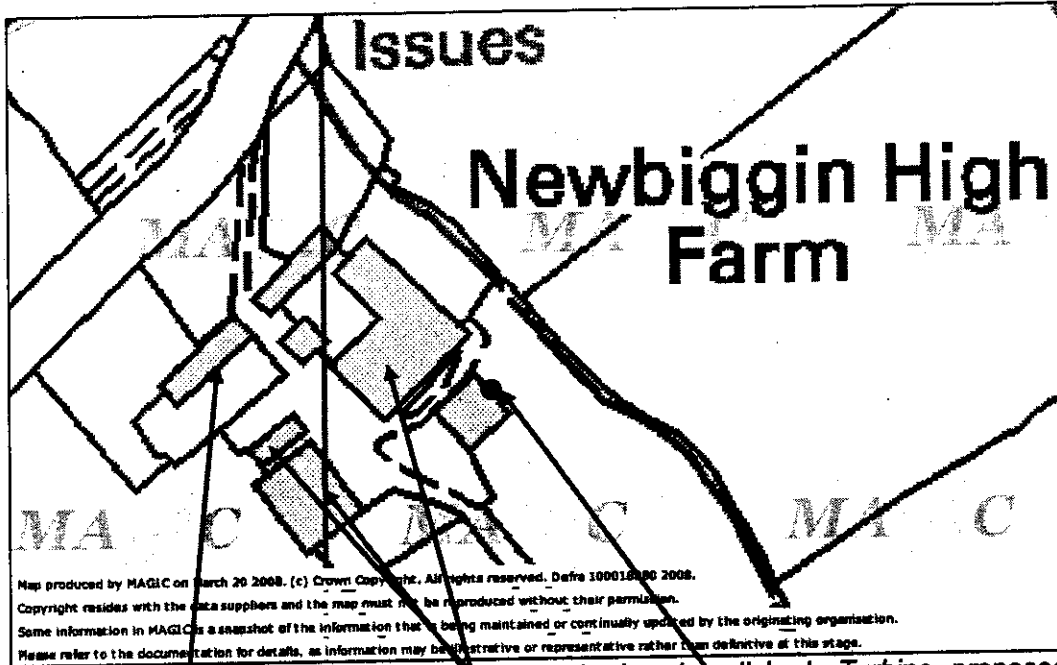


Map 1. Site in relation to surrounding landscape



Map 2. Site

NYMNP
28 MAR 2008



Map 3. Farmhouse roost location, barns to be demolished, Turbine proposed location,



Image 1. Barn, turbine to be mounted to rear

NYMNP
28 MAR 2008

Naturally Wild Consultants Ltd. Fee Proposal

Unit 6, Chapel Barn Yard, Wylie, Wiltshire, BA12 0NY, 01985 248 469

We are pleased to submit the following fee proposal on your instructions ~

Client	Agate Design	About this fee proposal The VES fee* provides a detailed report on the ecology of a given site and flags up any ecological issues that may or may not need further survey data.
Ref.	ET-08-002	
Date	20-03-2008	

Activity	Qty ecologist days	£ daily rate	Sub total
Desk Top Survey*			
*Visual Encounter/Scoping Survey(VES)			
Amphibian/Reptile Survey/Trapping			
Bat Survey	2 x Senior Bat specialist 2 x Assistant Ecologists	375 225	750.00 450.00
On Site Monitoring/Supervision			
Destructive Search			
Exclusion Fencing			
Refugia/Materials			
Translocation			
Phase 1/2 Habitat Survey			
Mitigation Planning			
DEFRA Negotiations			
DEFRA License Application			
Other	Report	inc	
		Total	1200.00
		VAT	210
		Grand Total	1410

NYM/NPA
 28 MAR 2008

Terms: Fees are invoiced incrementally in relation to ecologist's activity on a monthly basis. Due to the nature of ecological work, time frames and proposed days consultancy are subject to natural environmental constraints. Clients will be regularly advised of alterations in work schedules. Payment due 14 days from date of invoice unless previously agreed. Instructions quoting this fee proposal form legally binding agreement to pay fees advised.