

# earthworks environmental design

9 Poorsland Barn, Slaidburn, Clitheroe. Lancashire. BB7 3AE

01200 446859 M: 07709 225783 [earthworksuk@yahoo.co.uk](mailto:earthworksuk@yahoo.co.uk)

## FAO: Mr J. Riley

Wighton, Jagger, Shaw Architects Ltd  
14 – 15 Regent Parade  
Harrogate  
North Yorkshire  
HG1 5AW

25 May 2011

Ref: B 943

Dear Mr Riley

### Protected Species Survey: The Eaves, Pendleton Road, Wiswell, Clitheroe, Lancashire BB7 9BZ

You have requested a protected species survey on behalf of your client Mr B. Allison, as a condition of a planning application to Ribbles Valley Borough Council (RVBC) for demolition of a detached house and cattery / kennel premises prior to re-development of the site.

The local authority requires an appraisal of the impact of the proposed development on all protected species in accordance with PPS9, in addition to mitigation procedures designed to protect bats and their roosts and ensure there are *'no adverse effects on the favourable conservation status of a bat population'*.

A scoping survey and daylight inspection was undertaken on Tuesday 10 May; this was followed by an evening emergence survey on Thursday 19 May 2011.

The key conclusions of the attached survey report are as follows:

#### There is no evidence of bat roosting activity associated with this property.

The proposed scheme is unlikely to cause disturbance to roosting bats or result in the loss of a nursery roost or hibernaculum, or cause injury or death of a European Protected Species (EPS).

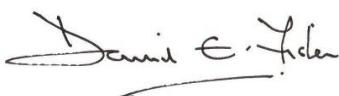
Additionally, there is no evidence of barn owl nesting activity.

Your attention is drawn to the mitigation guidelines at the end of the report; it is the developer's responsibility to ensure that procedures are in place to mitigate for the 'potential' impact on bats and wild birds during the proposed building works.

Please note, I do not supply a copy of the report to the local planning authority, therefore it is your responsibility to forward a copy to RVBC in support of the planning application.

Finally, I attach further information on 'protected species and the planning process' with some brief notes regarding 'bats and the law' (Appendix A).

Yours sincerely



David Fisher  
(EED)

# PROTECTED SPECIES SURVEY

Property at: The Eaves, Pendleton Road, Wiswell, Clitheroe, Lancashire, BB7 9BZ (NGR: SD751381)

## 1 Survey methodology

- 1.0 A daylight scoping survey and site inspection was carried out on Tuesday 10 May 2011 between 09.45 and 11.15. The weather at the time of the survey was mild, dry and bright (maximum temperature: 17°C; cloud cover: lightly overcast 7/8 octas; wind: light to moderate SW wind) providing optimal survey conditions for a building and site inspection.
- 1.1 An evening (dusk) emergence survey was also carried out on Thursday 19 May 2011 between 20.30 and 22.45. The weather during this survey was mild, dry and clear (temperature range: 14°C - 11°C; cloud cover: light cloud 2/8 octas). Sunset time: 21.12 (Preston). The survey was carried out approximately 40 minutes before sunset and continued for more than 90 minutes after sunset.
- 1.2 The aim of a bat survey is to make an assessment of the potential value of the site for European Protected Species and to establish whether bats (chiroptera) or other protected species have been active within those areas of property that will be affected by the proposed work. The survey included an internal and external assessment of the barn including the first floor loft areas above the shippon in addition to an adjacent 'Nissen hut' nearby.
- 1.3 A desk study and local data search has been undertaken to support the survey findings; the search includes bat records from within 1km of the property using local, regional and national databases.
- 1.4 The survey methodology follows the monitoring guidelines recommended by the Bat Conservation Trust (*BCT – Bat Surveys, Good Practice Guidelines, 2007*), Natural England (*Survey Objectives, Methods and Standards as outlined in the Bat Mitigation Guidelines, 2004*), and *Survey and Monitoring Methods, Ch 3, (Bat Worker's Manual, JNCC, 2004)*.
- 1.5 Non-intrusive survey methods were used to assess the use of the property by bats. The search was made using high-powered lamps (Clu-lite 1,000,000 candle power), close-focussing binoculars (Leica Trinovid) and digital camera (Kodak MD41) and 900mm flexible endoscope (ProVision 300) to view all likely areas of the buildings for the presence of bats, ie. droppings and urine spots, grease stains or feeding remains such as discarded moth and butterfly wings, beetle elytra and other insect fragments typically found near regularly used feeding perches.
- 1.6 Evening emergence and dawn re-entry activity was monitored using ultrasonic bat detectors. Three types of device were used to record echolocation calls: (1) Batbox Duet - (heterodyne and frequency division) and (2) Anabat SD2 CF detector with a PDA – (HP iPAQ hx2490 pocket PC using Anabat software); headphones were used throughout the survey; (3) Pettersson D230 (heterodyne and frequency division) with Edirol R-09HR digital recorder.
- 1.7 Two surveyors were positioned along the south and west sides of the cattery; a third surveyor was located within the garden of the house to observe the south, east and west elevations of the house.
- 1.8 Recommended survey methods were used to assess the use of the building by barn owls and other nesting birds including searches for evidence such as droppings, pellets, discarded prey items, feathers and nest debris. Barn owl guidelines are those recommended by Natural England, *Barn Owls on Site – A guide for developers and planners, March 2002*.

## 2 Personnel

- 2.0 Both surveys were carried out by David Fisher (Earthworks Environmental Design) - an experienced ecological consultant with more than 25 years experience of bat ecology, mitigation schemes and field survey work and a Natural England bat licence holder since 1990; current Natural England licence No: 20103384, (Conservation, Science and Education).
- 2.1 The evening emergence survey was undertaken by Gemma Howard and Theresa Stewart, both are qualified and experienced full time ecologists with considerable experience in bat survey techniques.

### **3 Description of the property**

- 3.0 The detached bungalow has stone and block cavity wall construction; the pitched slate roof has two dormer windows and several Velux windows (figures 1 to 3). Internally there are no enclosed roof voids and the rooms are open to the eaves.
- 3.1 The cattery and kennel buildings occupy two former agricultural units; the buildings comprise two linked single story buildings with L-shaped plan (figures 6 and 7). The kennel (building 'A') has a poured concrete wall construction with internal block work; the pitched steel-framed roof is clad with a box section alloy roof laid over the original corrugated cement asbestos sheet roof and there is an enclosed void above the suspended ceilings (figure 8). The void is cold dry and draughty. Externally the building has uPVC fascia soffits and all windows and doors are double-glazed.
- 3.2 The cattery (Building 'B') has rendered block work wall construction with pitched roof (steel and timber frame roof). The roof is clad with cement asbestos sheets and there is an enclosed roof void above the suspended ceilings; the void is not insulated and is relatively cold, dry and well-ventilated (figure 9). Externally the gable apex wall is partly clad with corrugated cement asbestos sheeting.
- 3.3 Between these units are two smaller lean-to structures with block work walls; these structures have box alloy mono-pitch roofs and are linked to the main buildings by a clear laminate sheet roof.
- 3.4 Additionally there is a single story timber building with pitched roof (figure 10); this is currently used as a reception area. The building has a timber frame, tongue and groove walling and bitumen felt roof.

### **4 Site location and habitat description**

- 4.0 The property is located at SD751381 between the villages of Wiswell and Pendleton at an elevation of 140m.
- 4.1 The site is surrounded by open countryside with extensive grazing land and permanent pasture nearby. The property occupies gently rising ground rising to acid moorland at 315m (Jeppe Knave) approximately 1km to the east of the site.
- 4.2 There are no extensive woodlands or areas of open water within 200m of the building; the surrounding landscape is open to the prevailing west wind and the site provides sub-optimal feeding, foraging and commuting habitat for bats.
- 4.3 The nearest standing open water is 0.75km west of the site at Barrow Lodge (Pendle View Fishery).
- 4.4 The nearest large woodland is 1.3km south of the site at Deer Park Wood; there is moderate connectivity to other habitats within the wider landscape.
- 4.5 There are no designated nature conservation sites immediately adjacent to the property – ie. Sites of Special Scientific Interest (SSSI), Biological Heritage Sites (BHS), National Nature Reserves (NNR's), Local Nature reserves (LNR's) or Regionally Important Geological and Geo-morphological Sites (RIGS).

### **5 Proposed development**

- 5.0 It is understood the proposed scheme requires demolition of the existing buildings prior to redevelopment of the site as a single residence.

#### 4.0 Existing building (images)



Fig 1: The Eaves (rear elevation)



Fig 2: Front (east) elevation.



Fig 3:



Fig 4:



Fig 5: rear (west) elevation

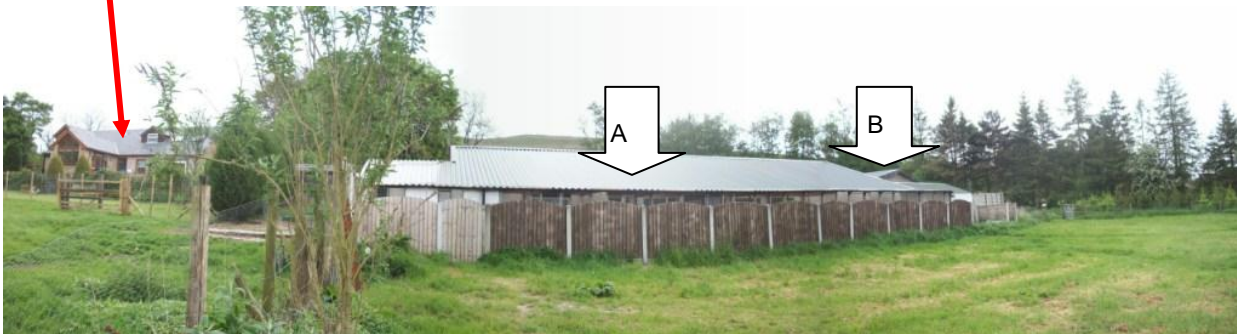


Fig 6: Rear view of kennels (A) and cattery (B) at SW elevation; the view also shows 'The Eaves' (house) on far left.

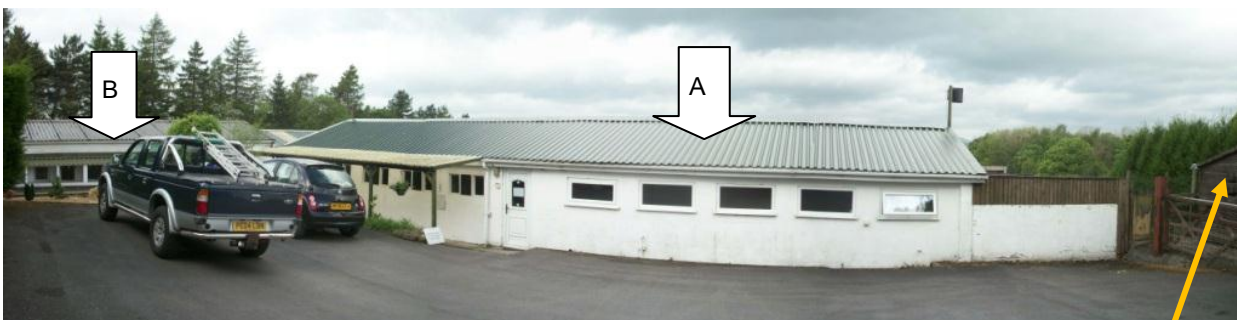


Fig 7: Front view of kennels and cattery (NE elevation)



Fig 8: roof void building 'A'



Fig 9: roof void building 'B'



Fig 10: reception / office

## 5 Desk study and data search (SD73 and SD74)

5.0 A targeted desk study was undertaken to identify the presence of protected species (bats) including notable species records for the area.

5.1 NBN Gateway (10km squares SD73 and SD74) uses mammal datasets (*Terrestrial mammals - Chiroptera*) provided by the Bat Conservation Trust (*National Bat Monitoring Programme – Colony Counts Survey and Daubenton’s Bat Waterway Survey*), Natural England’s Bat Sites Inventory for England, Mammal Records for Britain (Mammal Atlas 1993 with additions), and some local and regional biological record centres.

5.2 Based on species records gathered from additional sources, the following species are known to be present within the district where suitable habitat exists:

Daubenton’s bat	( <i>Myotis daubentonii</i> )
Natterer’s bat	( <i>M. nattereri</i> )
Whiskered	( <i>M. mystacinus</i> )
Brandt’s bat	( <i>M. brandtii</i> )
Brown long-eared bat	( <i>Plecotus auritus</i> )
Common pipistrelle	( <i>Pipistrellus pipistrellus</i> )
Soprano pipistrelle	( <i>P. pygmaeus</i> )
Noctule bat	( <i>Nyctalus noctula</i> )

5.3 Previous (protected species) surveys have not been carried out at this property.

5.4 There are no records of roosting bats within 0.5km of the site. The nearest pipistrelle roost site within a residential property is 0.7km SW of the site at SD 746376 in Wiswell Village (see below).

5.5 Existing local records of bats within 1.5km of the site are shown below.

Species:	Site:	Grid reference:	Date	Comment/recorder
Pipistrellus sp.	Wiswell	SD 746376	25.06.08	Maternity roost
Pipistrellus sp.	Barrow	SD 736379	18.06.06	Maternity roost
Pipistrellus sp.	Oak Hill, Whalley	SD736368	16.06.09	Maternity roost
P. pipistrellus	Wiswell	SD747372	09.07.08	Day roost / emergence activity
P. pipistrellus	Wiswell	SD746373	Feb 2008	Day roost
Plecotus auritus	Wiswell	SD748373	10.06.10	Feeding and perching signs only
Plecotus auritus	Pendleton	SD758395	21.10.08	Feeding and perching signs only
Plecotus auritus	Wiswell Hall Farm	SD745373	14.03.11	Feeding and perching signs only

5.6 The following sources were consulted during the preparation of this report:

1. National Biodiversity Network (NBN) database, (terrestrial mammals - chiroptera)
2. Bat Conservation Trust (BCT)
3. East Lancashire Bat Group
4. Lancashire Biodiversity Partnership
5. Biological Heritage Sites Partnership (LCC, NE and LWT)
6. EED dataset (Lancashire bat records 2000 - 2011)
7. Magicmap interactive map
8. Natureonthemap (Natural England)
9. Multimap
10. Google Maps
11. MARIO - Maps and related information online (Lancashire County Council).

## 6 Constraints

- 6.0 Non-intrusive survey methods were used to assess the use of the property by bats.
- 6.1 The survey methodology is designed to determine the likely presence of bats within the buildings and does not necessarily prove absence.
- 6.2 National Biodiversity Network records do not confirm presence or absence of a species or habitat.
- 6.3 Absence of records does not imply that a bat species is not present within the recording area.

## 7 Survey results

- 7.0 There is no evidence of roosting bats at this property.
- 7.1 All external areas of the house were closely inspected for signs of access and roosting by bats; none were found. Similarly, all areas of the cattery / kennels were inspected in daylight to search for the presence of bat droppings and other indicative signs of bat activity – none were found.
- 7.2 An evening bat emergence survey (19 May 2011) did not find any evidence of roost emergence or flight activity associated with the property. Three qualified and experienced ecologists surveyed the site – although several bat species were recorded in flight within the boundary of the site, there was no evidence of roosting, feeding or perching activity associated with the buildings.
- 7.3 Three bat species were recorded in flight during the evening survey:
  - (1) A number of solitary common pipistrelles (*Pipistrellus pipistrellus*) were recorded feeding and foraging within the garden of the house and over adjacent ground close to the cattery throughout the evening; none were seen emerging or swarming close to the buildings.
  - (2) A myotis bat was recorded throughout the survey period by two surveyors; the actual species was not confirmed.
  - (3) A single noctule bat was also recorded flying over the site.
- 7.4 There were no obvious concentrations of foraging or feeding activity over the property and there was no evidence of any commuting routes or flight corridors across the site.
- 7.5 The maximum number of bats seen at any one time was two bats seen flying over the garden on the west side of the house; activity was largely confined to sheltered tree lines, hedgerows and the boundary of the site.



## 8 Evaluation and interpretation of results

- 8.0 There is no evidence of bat roosting activity within any of the buildings. A daylight inspection of the property failed to find any signs of access or roosting activity by bats. Additionally, an evening emergence survey at the site also failed to find any roosting, perching or feeding activity within the buildings.
- 8.1 The overall value of habitat features within the local landscape is 'moderate' <sup>1</sup>; the location of the property however provides sub-optimal feeding, foraging and commuting habitat for bats;
- 8.2 There are mature hedgerows along Pendleton Lane and a number of small woodlands and plantations nearby providing a 'moderate' level of connectivity to other habitats within the wider district for feeding, foraging and commuting bats. Habitat utilisation was found to be relatively poor at this site.
- 8.3 There are no records of roosting bats at this location or at other properties within 0.5km of the site.
- 8.4 Although several bat species are known to be present within the wider district, the density and frequency of bat activity at the site appears to be relatively low; this was found to be the case during the evening emergence survey.
- 8.5 There are no designated nature conservation sites immediately adjacent to the property - ie. Sites of Special Scientific Interest (SSSI), Biological Heritage Sites (BHS), National Nature Reserves (NNR's), Local Nature reserves (LNR's) or Regionally Important Geological and Geomorphological Sites (RIGS).
- 8.6 The conservation significance of these buildings for bats is 'low' as defined by Natural England (*Guidelines for Proportionate Mitigation, BMG, 2004, A.J. Mitchell-Jones*) <sup>2</sup>.
- 8.7 The potential of these buildings to support a regular or significant day roost, maternity roost, hibernation roost or transitory / mating roost is also relatively 'low'.
- 8.8 The scale of impact of the development at site level on local bat populations is likely to be low<sup>3</sup>.
- 8.9 There is no evidence of roosting or nesting barn owls within the property.

<sup>1</sup> Guidance for assessing the value of habitat features – (BCT 2007, Bat Surveys, Good Practice Guidelines, p21)

<sup>2</sup> Guidelines for proportionate Mitigation, (Bat Mitigation Guidelines, 2004).

<sup>3</sup> The scale of main impacts at site level on bat populations – Table 6.1. p37 - (BMG, 2004)

## 9 Main summary and recommendations

**There is no evidence** of bat roosting, feeding or perching within any part of the property.

The proposed building alterations **are unlikely to cause significant disturbance** to roosting bats or result in the loss of a nursery bat roost, resting place or hibernaculum or cause injury or death of a European Protected Species – Bats.

The work should proceed with reasonable caution and vigilance for the unexpected presence of solitary roosting bats. In the unlikely event that bats are exposed or vulnerable to harm, stop work in that area immediately and seek further advice by contacting Earthworks Environmental Design or the BCT helpline.

As the developer you should be mindful of your responsibilities towards protected species. An outline mitigation plan is provided for your guidance; mitigation refers to the practices adopted to reduce or remove the risk of disturbance, injury or death of a protected species.

There is no risk of disturbance to barn owls or other protected species at this property.

## 10 Impacts and Mitigation

- 10.0 Although the risk of disturbing isolated roosting bats during demolition works cannot be entirely eliminated, the scale of impact of the proposed development at site level on local bat populations is likely to be negligible or very low.
- 10.1 Developers must be able to demonstrate that adequate and proportionate measures (mitigation) have been taken to ensure that bats and their roosts are not disturbed, damaged or destroyed during the proposed demolition operations.
- 10.2 Mitigation (see Table 1 below) refers to the practices adopted to reduce or remove the risk of disturbance, injury or death of a protected species or damage to a roost. The Bat Mitigation Guidelines define mitigation as “...measures to protect the bat population from damaging activities and reduce or remove the impact of development”.

ACTION:	METHOD:
1. Timing constraints	None.
2. Highest risk areas	<p>Although it is unlikely that roosting bats will be disturbed during the proposed development, there will always remain a <u>low risk</u> of exposing solitary bats during building and demolition operations, therefore the risk of disturbance to solitary bats cannot be entirely eliminated.</p> <p>The pipistrelle bats are crevice-roosting species that are most frequently found roosting beneath weather boarding and other wall claddings or roofing materials at any time of year regardless of weather, season or time of day.</p> <p>The areas of highest risk <u>at this site</u> are (a) on the house roof where there is timber cladding to the dormer windows; also beneath roofing materials such as roofing slates, ridge tiles, verge tiles and roofing felt. (b) beneath the cement asbestos sheeting used as cladding on the gable apex (east) wall of the cattery. (c) between the box alloy roofing materials and the original cement asbestos roofs where a small cavity is likely to exist.</p>
3. Accidental exposure of bats	<p>Stop work immediately if bats are exposed and are likely to be disturbed; eg. if you find live or dead bats or expose obvious accumulations of bat droppings under roofing materials.</p> <p>In the unlikely event of bats being exposed or vulnerable to harm at this property, all work in that area must stop immediately. Cover the exposed bats to reduce further risk of harm and seek further advice by calling the Bat Conservation Trust (BCT) helpline on 0845 1300 228.</p>
4. Avoid handling bats	Contractors should avoid handling bats but where there is no alternative, use gloves or a small container to move them to a dark and quiet area, preferably without causing them to fly in daylight.
5. Legal protection	<p>All contractors and project managers should be made aware of the legal protection afforded all species of bat in the UK and procedures should be in place to mitigate for the potential impact on bats before any building or demolition work is undertaken..</p> <p>The onus lies with the applicant to satisfy herself that no offence will be committed if the development goes ahead, regardless of whether planning permission has been granted.</p>
6. Further advice	If you require further advice on bats during the proposed building operations or if you find an injured or resting bat, call BCT immediately; they will normally contact a qualified bat worker in the local area who will visit the site and provide further advice free of charge.
7. Pre-development inspection	Not required.
8. Post-development monitoring	Not required

Table 1: MITIGATION NOTES



## **Wildlife legislation – Bats and the law**

All bat species in the UK receive full protection under the Wildlife and Countryside Act 1981 (amended by the Environment Protection Act 1990). The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. All species of bats are listed on Schedule 5 of the 1981 Act, which makes it an offence to:

- *intentionally kill, injure or take any wild bat.*
- *intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.*
- *intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for shelter or protection.*

The protected status afforded to bats means planning authorities may require extra information (in the form of surveys, impact assessments and mitigation proposals) before determining planning applications for sites used by bats. Planning authorities may refuse planning permission solely on grounds of the predicted impact on protected species such as bats. Recent case law has underlined the importance of obtaining survey information prior to the determination of planning consent<sup>1</sup>.

*“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by a development proposal, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.”<sup>2</sup>*

All British bat species are included in Schedule 2 of the Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, (also known as Habitats Regulations) which defines ‘European Protected Species’ (EPS).

<sup>1</sup> Bat Mitigation Guidelines, AJ Mitchell Jones, Joint Nature Conservation Committee, (2004) ISBN 1 86107 558 8

<sup>2</sup> Planning Policy Statement (PPS9) (2005) , Biodiversity and Geological Conservation. ODPM.

### **13.0 Protected species (Bats) and the planning process<sup>1</sup>**

For development proposals requiring planning permission, the presence of bats, and therefore the need for a bat survey, is an important ‘material planning consideration’. Adequate surveys are therefore required to establish the presence or absence of bats, to enable a prediction of the likely impact of the proposed development on them and their breeding sites or resting places and, if necessary, to design mitigation and compensation. Similarly, adequate survey information must accompany an application for a Habitats Regulations licence (also known as a Mitigation Licence) required to ensure that a proposed development is able to proceed lawfully.

The term ‘development’ [used in these guidelines] includes all activities requiring consent under relevant planning legislation and / or demolition operations requiring building control approval under the Building Act 1984.

Natural England (Formerly English Nature) states that development in relation to bats *“covers a wide range of operations that have the potential to impact negatively on bats and bat populations. Typical examples would be the construction, modification, restoration or conversion of buildings and structures, as well as infrastructure, landfill or mineral extraction projects and demolition operations”*.

<sup>1</sup> 2.2.3 - Planning for development, Bat Surveys, Good Practice Guidelines, BCT (2007). (Mitchell-Jones, 2004)

### **14.0 Other references and contacts:**

Bats, development and planning in England, (Specialist support series) - Bat Conservation Trust, 5<sup>th</sup> Floor, Quadrant house, 250 Kennington Lane, London, SE11 5RD, 0845 1300 228

Clarification of the legal duty of Local planning Authorities’ to European Protected species: High Court Judgment June 2009: (Wooley v Cheshire East Borough Council) - Bat Conservation Trust.

Defra Circular 01/2005 (to accompany PPS 9) - Department for Environment, Food and Rural Affairs. [www.defra.gov.uk](http://www.defra.gov.uk)

Natural England, 1 East Parade, Sheffield, S1 2ET, Enquiry Service: 0845 600 3078 [enquiries@naturalengland.org.uk](mailto:enquiries@naturalengland.org.uk)

National Planning Policy - PPS 9, Biodiversity and Geological Conservation, ODPM Circular 06/2005