

Bat Survey: Preliminary Roost Assessment

Chatburn CE Primary School

Clitheroe

January 2022

Prepared for: LeaHough

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EXECUTIVE SUMMARY

- On 7th January 2022 a Preliminary Roost Assessment was undertaken at Chatburn CE Primary School, Cltheroe.
- The section of the school identified for extension works is considered to negligible suitability for bats.
- The proposals are considered unlikely to have any impact upon bats and further survey work is not considered necessary. Minor, precautionary measures are recommended to reduce to negligible the risk of indirect impact to the main body of the school, which is considered to have moderate suitability for bats.
- The proposals provide the opportunity to enhance the site for bats and recommendations for this have been made.





1. Introduction

1.1 Application Site

- 1.1.1. This report details bat survey work at Chatburn CE Primary School, Sawley Road, Clitheroe, Lancashire, BB7 4AS. National grid reference SD 76449522.
- 1.1.2. LeaHough commissioned Verity Webster Ltd to undertake the bat survey work to inform the planning application.

1.2 Objectives

- 1.2.1 The objectives of the Preliminary Roost Assessment are to determine:
 - The suitability of the building on site to support a bat roost.
 - Whether bats are currently using the building, or have done in the past.
 - The potential status of any roost present.
 - How bats might be using the site and the potential species present.
 - The potential impacts of the proposals on any potential roost present or on bats using the site.
 - The requirement for further survey work and/or mitigation.
 - How any impacts might be avoided, mitigated and/or ameliorated, including advice on European Protected Species Mitigation (EPSM) application if required.
 - The potential for biodiversity net gain on site.
- 1.2.2 The format and content of this report follow that required by the European Protected Species Mitigation (EPSM) licence application where appropriate.

1.3 Proposals

1.3.1 The proposals comprise the extension of the single-storey structure on the northwest elevation.

1.4 Ecologist

- 1.4.1 The Preliminary Roost Assessment was undertaken by Verity Webster. Verity is a licensed bat surveyor (Bat Survey Class Licence WML CL18 (Class 2) Registration number: 2015-13858-CLS-CLS).
- 1.4.2 Verity has worked as an ecological consultant since 2007. She has undertaken preliminary bat assessments and further bat emergence/activity surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes/method statements when necessary.



2. Site Location

- 2.0.1 The survey site is located in the centre of Chatburn village, which is in a rural location. Playing fields extend to the north and northwest and are continuous with open countryside. Open countryside also extend south from approximately 150m to the south beyond the village. Sawley Road runs along the southeast elevation. There are houses with gardens to the northeast southwest and beyond the road to the south.
- 2.0.2 A railway line runs southeast to northeast approximately 100m to the southeast. This provides a habitat corridor through the village.
- 2.0.3 Chatburn Brook weaves through the town from the southeast to the north and lies approximately 180m to the west at the closest point. This too provides a habitat corridor for the movement of wildlife, including bats. Chatburn Book discharges in to the River Ribble which weaves east to west through the landscape approximately 500m to the north.
- 2.0.4 The wider countryside comprises arable land and grazed pasture with scattered plots of woodland and numerous brooks and streams. There is an extensive active quarry approximately 600m to the west. The site is in a very good location for bats.



Figure 1: Ordnance survey map showing the location of the proposed development site.



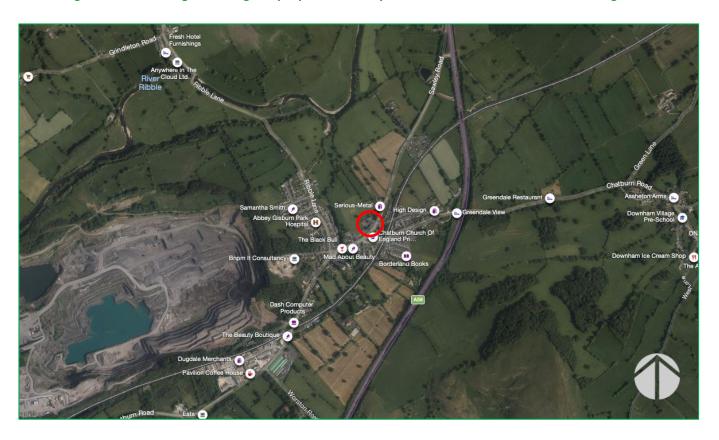
Ordnance survey 1:25000

Key





Figure 2: Aerial image showing the proposed development site and immediate surroundings



From BING Maps 250m

Key
Survey site



3. The Survey Site

- 3.0.1 The survey site comprises a school set within hard standing (playing ground). The school can be divided into two sections; the main body of the building, which is a two-storey brick structure with a pitched, slate roof. This is oriented northeast to southwest along Sawley Road. There is a flat-roof extension that runs northwest from the northern end of the northwest elevation of the main body of the building.
- 3.0.2 The flat-roof extension is composed of a two-storey extension, closest to the main body of the building, and a single-storey section, which is the north-westernmost portion of the school. It is the north-western, single-storey flat-roofed extension that is to be extended upwards to meet the two-storey elevation.
- 3.0.3 The flat-roofed extension is composed of brick with a plastic fascia on the two-storey section and just a small overlap on the roof of the single-storey section. The windows and doors are UPVC.



The northeast elevation of the school – showing the twostorey and single-storey flat-roofed extension



The southwest and northwest elevation of the school – showing the single-storey extension that will be extended upwards.



The northwest elevation of the school – showing how the twostorey flat-roofed extension attaches to the main body of the school



4. Legislation

Full details of relevant legislation and planning policy can be found in Appendix A.

4.1 UK and EU Legislation

- 4.1.1 Key legislation regarding the protection of bats:
 - Wildlife and Countryside Act 1981 (as amended)
 - The Countryside and Rights of Way Act (CROW), 2000
 - The Natural Environment and Rural Communities Act (NERC, 2006)
 - Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations (2017)
- 4.1.2 Under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2018, it is a criminal offence to:
 - Deliberately capture, injure or kill a bat
 - Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
 - Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
 - Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
 - Intentionally or recklessly obstruct access to a bat roost.

4.2 Planning Policy and Legislation

- 4.2.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.
- 4.2.2 The National Planning Policy Framework (NPPF, 2021) encourages Local Planning Authorities to conserve and enhance biodiversity.

Chapter 15, Para 174 of NPPF states: "The planning system should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils....
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".
- 4.2.3 Para 179 states: "Plans should: distinguish between the hierarchy of international, national and locally designated sites;

allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a

strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of

natural capital at a catchment or landscape scale across local authority boundaries."

4.2.4 Para 180 identifies that plans should do the following to protect and enhance biodiversity and



geodiversity:

- a) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- b) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."
- 4.2.5 Para 175 states that "when determining planning applications, local authorities should apply the following principles:
 - a) if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"
- 4.2.6 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.



5. Survey Methodology

5.0.1 The Preliminary Roost Assessment was undertaken in accordance with currently accepted guidance: Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London.

5.1 Desk Study

- 5.1.1 Data sources used to establish background information about bats and their likely presence in the locality:
 - Magic Map, Natural England (2016)
 - Bing Maps (2017)
- 5.1.2 Satellite mapping, Ordnance survey, road map, habitat and designated site data from Magic Map (Natural England, 2014) was used to assess the value of the surrounding habitat for bats in the area at a landscape scale (5km), including any potentially important habitat corridors (linear habitat features), feeding grounds or potential roost opportunities, such as large expanses of woodland. The features and habitats immediately surrounding the site (local area) were also assessed at a finer scale as these influence the likely presence of bats within the survey site.

5.2 Preliminary Roost Assessment

- 5.2.1 An internal and external inspection of the building was undertaken during daylight to determine the suitability for bats and establish, if possible, whether bats are using the building or have been in the past.
- 5.2.2 All accessible parts of the building were inspected to look for bats and signs of the presence of bats, including:
 - Droppings.
 - Feeding remains including moth and butterfly wings.
 - Staining from urine or oils near crevices or holes or on timber (such as roof beams), walls, chimney breasts etc.
 - Scratch marks on walls and timber.
 - Squeaking or chattering calls.
- 5.2.3 The systematic search inside the building included inspection of beams, floors, surfaces of stored materials, loose roof insulation or felt covering, junctions between roof timbers and timbers and the walls, and crevices within brickwork. Potential access into the building was also inspected by searching for holes in insulation and any light penetration into the interior from the outside.
- 5.2.4 The assessment outside the building included inspection of all walls, windows, window sills, fascias, soffits, eaves and tiles, including a search for any crevices under tiles, under lifted lead flashing or lifted roofing felt, missing mortar, gaps in the ridge or gable end of the roofs, crevices in brickwork or under flaking paintwork or render, gaps in cladding or hanging tiles and any other potential bat roost opportunities.
- 5.2.5 Equipment: During the survey, a strong torch with directional beam was used to inspect the buildings.



- 5.2.6 As a result of the preliminary roost assessment, the structure on site was characterised as having 'negligible', 'low', 'medium' or 'high' suitability for bats. It may also be possible to confirm the presence of a roost.
- 5.2.7 Buildings or structures typically characterised as having:
 - Negligible suitability for bats will lack features with any potential to support roosting bats. Modern or newly-built well-sealed structures may fall into this category. Structures that are metal clad with metal internal beams might have negligible potential if there are no favourable roosting spaces. Structures may also be unfavourable due to the level of disrepair, being subject to poor weather conditions.
 - Low suitability for bats will have sub-optimal roost features with limited potential for roosting bats. Features may be used by single bats opportunistically, but do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats.
 - Medium suitability for bats may have few features with potential for bats, that provide enough space, shelter, protection and other suitable conditions, or several features with limited potential for bats. It may also be that a potentially suitable structure is situated in an area with habitat that has an only low potential for foraging and commuting bats.
 - High suitability for bats will support at least one or more features that provide opportunities for roosting bats such that they might be used regularly, for longer periods by larger numbers of bats. These may be external features, such as lifted weatherboard or crevices in brick or stonework, or internal, such as large loft spaces with potential access. Barns, with open doorways and windows with wooden rafters and beams, may fall into this category. If a structure is close to good habitats, such as a waterway, marshland or woodland, this also increases the potential for roosting bats.
 - Confirmed roost presence when it is evident as a result of signs from inspection, such as droppings, or sight of bats, that a roost exists within the building. It is not always possible to ascertain the presence or absence of a roost even if some signs, such as droppings or feeding remains are found.

6. Survey Limitations

- 6.0.1 The survey was undertaken in daylight in early January. At this time of year bats will be hibernating.
- 6.0.2 Evidence of bats on the exterior of a building is unlikely to be present as it may be washed away by the weather. However, evidence of use of the interior of a building by bats (if there is a void) is likely to be present where signs (such as droppings and feeding remains) are protected from the elements.
- 6.0.3 Data from the local biological records centre of known bat roosts and bats recorded in the area was not obtained to inform this assessment. In this case, the inspection alone is considered sufficient to inform any necessary requirements for further survey work and/or mitigation.



7. Findings: Preliminary Roost Assessment

7.1 Suitability of the Locality for Bats

- 7.1.1 At a landscape level, the area surrounding the survey site is very good for bats. Refer to Figure 2.
- 7.1.2 The surrounding countryside is very good for bats. The matrix of habitat, including grassland, woodland and waterways will support a variety bat species such as the widespread common and soprano pipistrelle bat (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively), species that favour open habitats such as Leisler's (*Nyctalus leisleri*) and noctule bat (*Nyctalus noctula*), and species that favour wooded habitat, such as Natterer's bat (*Myotis natterri*), whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*).

The Conservation Status of Bats in the Area

7.1.3 The conservation status of bats in the area is shown in Table 1.

Table 1: The Conservation Status of Bats in the area at a Local, County and Regional Level

Species	Local	County	Regional
Common pipistrelle	Likely to be common in the area. There are records of this species in the area (10km).	Common and widespread Frequently recorded.	Common and widespread Frequently recorded across the Northwest
Soprano pipistrelle	Likely to be present due to the presence of riparian habitat.	Widespread. Frequently recorded.	Common and widespread Frequently recorded across the Northwest
Nathusius's pipistrelle	Likely to be rare in the area.	Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.	Rare across the northwest. A migratory species.
Brown long-eared bat	Likely to be in the area. There is a recent record of this species within 10km of the site.	Common and widespread Frequently recorded.	Common and widespread Frequently recorded across the Northwest.
Natterer's bat	Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.	Scattered distribution in Lancashire.	Widespread and scattered across the Northwest.
Noctule	Present	Widespread and frequently recorded.	Common and widespread. Frequently recorded in the Northwest.
Whiskered bat	Present but likely rare	Present	Widespread.



Brandt's bat	Rare / absent	Present	Widespread.
Alcathoe's bat	Unknown	Unknown	Widespread. Likely under-recorded.
Daubenton's	Presence is likely due to the riparian habitat present.	Widespread, frequently recorded near water.	Widespread
Serotine	Rare / absent	Unknown	Restricted to south and southwest Britain, rarely recorded in the northwest.
Leislers	Rare	Unknown	Rare, but widespread in Britain. Present in the northwest.
Barbastelle	Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.	Unknown	Present south of a line from North Wales to the Wash.

7.2 Preliminary Roost Assessment

- 7.2.1 The building inspection and bat roost assessment was undertaken in daylight on 7th January 2021.
- 7.2.2 The flat-roofed extension of the school is considered to have negligible suitability for bats.
- 7.2.3 The absence of an internal loft void means that potential roost features for bats are restricted to the external structure.
- 7.2.4 Externally the walls and roof structure are in good condition. The fascia on the two-storey extension is generally well-fitted aside from some very small gaps which are filled with cobweb and are too narrow to accommodate roosting bats.



Showing the very narrow gap under the fascia on the two-storey section of the extension.

- 7.2.5 The single-storey extension contains no features that might be utilised by roosting bats. No evidence of bats (droppings or staining) was found during the survey.
- 7.2.6 The main body of the school, with the pitched, slate roof is considered to have moderate suitability for bats, given there are some small crevices under the slates. However, the proposed extension works will not directly impact this part of the structure.
- 7.2.7 Indirect impacts, such as noise and dust are considered to be minimal, especially as the school will still be in process during the works and so these elements will be minimised where possible.
- 7.2.8 Overall, the proposed extension works are considered very unlikely to impact this species group. No



further survey work is recommended. Precautionary measures of work are proposed to reduce to negligible the risk of indirect impacts to any bat roosts in the main body of the school.

8. Appraisal

- 8.0.1 The Preliminary Roost Assessment at Chatburn Primary School was undertaken to determine the suitability of the house for roosting bats and to determine the likely impact of the proposed works on bats.
- 8.0.2 No bats or signs of the presence of bats were found during the external inspection of the building.
- 8.0.3 The two-storey and single-storey extension of the school are considered to have negligible suitability for roosting bats.
- 8.0.4 The proposals to extend the single-storey extension are very unlikely to have any negative impact upon bats or bat roosts in the locality. However, since the main body of the school building is considered to have moderate suitability for bats, precautionary mitigation is recommended during works to minimise to negligible the risk of indirect impacts upon bat roosts in the roof structure of the main body of the building that cannot be ruled out.
- 8.0.5 The proposals provide the opportunity to enhance the site for bats and recommendations for this have been made.

9. Recommendations

Mitigation

- 9.0.1 As a precaution, to minimise the risk of harm to bats that cannot be ruled out in the main body of the building, the following is recommended:
 - Works are undertaken in a short a time as possible and dust and noise are minimised.
 - Any machinery is stored away from the main body of the school building.
 - Any lighting used during works is directed away from the roof of the main body of the building and spillage into the sky is also minimised.



Enhancement

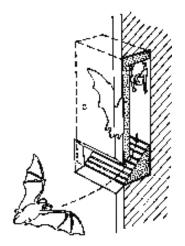
- 9.0.2 The proposals provide the opportunity to enhance the site for bats.
- 9.0.3 It is recommended that:
 - At least two crevice-roost sites for roosting bats are integrated into the newly extended structure.
 - These could be integrated into the building, or attached externally to the walls. There are many alternatives at NHBS.com. Examples are provided below. Bat boxes require no maintenance.
 - Bat boxes should be installed at eaves height on the southwest or northwest elevation.

Bat Boxes

1FE Schwegler bat access panel

This box is durable and does not require cleaning.







Ibstock Enclosed Bat Box 'C'

This box is durable and does not require cleaning.



Beaumaris Woodstone Bat Box

This box is durable and does not require cleaning.

All bat boxes are available from NHBS Ltd



10. References

- BING maps (2016) http://www.bing.com/mapspreview
- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1
- Google maps (Accessed 2022) https://www.google.co.uk/maps
- MAGIC Map (Accessed 2022) http://www.magic.gov.uk/MagicMap.aspx. DEFRA.



APPENDIX A: Wildlife Legislation and Planning Policy

UK AND EU LEGISLATION

10.1. KEY LEGISLATION

- 10.1.1. Key legislation regarding the protection of bats:
 - o Wildlife and Countryside Act 1981 (as amended)
 - o The Countryside and Rights of Way Act (CROW), 2000
 - o The Natural Environment and Rural Communities Act (NERC, 2006)
 - Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales)
 Regulations (2018)

10.2. WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

- 10.2.1. The Wildlife and Countryside Act 1981 is UK legislation.
- 10.2.2. Bats are listed on Schedule 5 of the Wildlife and Countryside Act (WCA) 1981. Under Section 9 of this legislation it is an offence to:
 - Kill, injure or take a bat.
 - Possess, a live or dead bat.
 - Intentionally or recklessly damage or destroy any structure of place which any bat uses as shelter or protection.
 - Intentionally or recklessly disturb a bat whilst it is occupying a structure or place which it uses for shelter or protection.
 - Internationally or recklessly obstruct access to any structure or place which a bat uses as shelter or protection.
 - Sell, offer or expose for sale any live or dead bat.

10.3. COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

10.3.1. Schedule 12 of the Countryside and Rights of Way (CROW) Act 2000, amended by the Wildlife and Countryside Act 1981 by removing the need to prove intent to damage a roost / harm (etc) a bat or other species listed on Schedule 1 by adding the words 'or recklessly' after 'intentionally' into the wording in Section 9 of the WCA 1981. The CROW act also strengthened the penalties for offences to bats and other species listed on Schedule 5.

10.4. CONSERVATION OF HABITATS AND SPECIES and PLANNING REGULATIONS 2017

- 10.4.1. The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales.
- 10.4.2. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law. The regulations came into force on 30 October 1994.
- 10.4.3. The Regulations provide for the designation and protection of European Sites and European



Protected Species, including bats.

- 10.4.4. Under the Regulations, competent authorities (ie any government department or public body) have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.
- 10.4.5. With regard to European Protected Species (including bats), the Regulations make it an office to:
 - Deliberately capture;
 - Kill;
 - Disturb or;
 - Trade in animals listed in Schedule 2, which include all UK bat species.

10.5. European Protected Species (EPS) Licenses and the Three Tests

- 10.5.1. These actions can me made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserve public health and safety). For such a licence to be granted the appropriate authority would have to be satisfied that an application has met the three tests, which are:
 - 1)- The licence may be granted "to preserve public health or public safety or for reasons of overriding public interest, including those of a social or economic nature and beneficial consequences or primary importance for the environment"
 - 2) There must be "no satisfactory alternative"
 - 3)- The proposal "will not be detrimental to the maintenance of the species at a favourable conservation status in its natural range"

10.6. NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006 (PLANNING SYSTEM)

Planning Authorities: A Duty to Conserve Biodiversity

- 10.6.1. Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.
- 10.6.2. Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:
- "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity"

Species of Principal Importance

- 10.6.3. Part 3, Section 41 requires the Secretary of State to ''publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of **principle importance** for the purpose of conserving biodiversity''.
- 10.6.4. This requirement lead to production of a list of species and habitats of Principal Importance. This lists includes all UK bats.



PLANNING POLICY

10.7. NATIONAL PLANNING POLICY FRAMEWORK

- 10.7.1. Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.
- 10.7.2. The National Planning Policy Framework (NPPF, 2021) encourages Local Planning Authorities to conserve and enhance biodiversity.
 - Chapter 15, Para 174 of NPPF states: "The planning system should contribute to and enhance the natural and local environment by:
 - b) **protecting and enhancing valued landscapes, sites of biodiversity** or geological value and soils....
 - e) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".
- 10.7.3. Para 179 states: "Plans should: distinguish between the hierarchy of international, national and locally designated sites;
 - allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a
 - strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of
 - natural capital at a catchment or landscape scale across local authority boundaries."
- 10.7.4. Para 180 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:
 - c) "Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - d) Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."
- 10.7.5. Para 175 states that "when determining planning applications, local authorities should apply the following principles:
 - b) if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"



10.7.6. The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.

10.8. ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

10.8.1. This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.