

LHB Ecology

Preliminary Roost Assessment

Site: The Coach House, Salterns Lane, Bursledon,
Southampton, Hampshire SO31 8DH

Client: Philip Clacy

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Limitations

This report has been prepared exclusively for the use of the above-named client or their agents. Site assessment and reports have been carried out for the client in accordance with written agreement and with the diligence and skills that are typical of an ecological consultant.

The conclusions and subsequent recommendations contained in this report are partly based upon information provided by third parties. Information obtained from third parties has not been independently verified by LHB Ecology.

Any third-party usage of the report will require prior written agreement from LHB Ecology.

Any assessments made are based upon current site condition with the assumption that the site will continue to be used for the current purpose without significant change prior to any development.

Guidelines

This assessment has been designed to meet:

- Bat Conservation Trust (2016): Bat Surveys for Professional Ecologists — Good Practice Guidelines, 3rd edition; and
- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

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1.0 Executive Summary

1.1 Summary

- 1.1.1 LHB Ecology undertook a Preliminary Roost Assessment (PRA) at The Coach House, Salterns Lane, Bursledon, Southampton, Hampshire SO31 8DH (hereinafter referred to as 'the site') on 22nd September 2023.
- 1.1.2 The site comprises a detached dwelling, outbuilding with garden areas and is bounded by residential properties and gardens and a road.
- 1.1.3 **The PRA concludes that building B1 has no suitable external roosting features that bats could roost in. Gaps in the external roof tiles were found to be too small for bats to enter (< 10 mm wide). The internal inspection of the crawl spaces revealed no evidence of bat activity such as droppings. As such, the presence of crevice and void roosts was conclusively ruled out during the survey.**
- 1.1.4 **No further bat surveys are required.**
- 1.1.5 **In the highly unlikely event that a bat is found all works must cease immediately and a suitably qualified ecologist contacted for advice.**

2.0 Introduction and Context

2.1 Background

- 2.1.1 LHB Ecology undertook a Preliminary Roost Assessment (PRA) at The Coach House, Salterns Lane, Bursledon, Southampton, Hampshire SO31 8DH (hereinafter referred to as 'the site') on 22nd September 2023.
- 2.1.2 The PRA is informed by the Bat Conservation Trust publication: *Bat Surveys – Good Practice Guidelines* (Collins, J. 2016).
- 2.1.3 No previous bat surveys have been carried out at this site by LHB Ecology or by any third parties, to the author's knowledge.

2.2 Project Description

- 2.2.1 The proposed development involves external alterations comprising of relocating dormers and fenestration alterations on the dwelling.

2.3 Site Context

- 2.3.1 The site is centred on National Grid Reference SU 4815 0914 and has an area of approximately 0.6 ha. There is one detached dwelling (B1) and an outbuilding that is bounded by residential properties and gardens and a road. A site location plan is provided in section 4.3.
- 2.3.2 The site is situated within the village of Bursledon, Hampshire. The local landscape consists of low-density rural residential areas, with lakes and woodland located within the vicinity of the site. An area of deciduous woodland with an adjacent lake is located approximately 150 m to the southwest of the site. Nearby residential properties have large gardens with scattered mature trees. Good connectivity to and from the site into the wider landscape is present; mostly in the form of mature tree lines, leading to woodland and habitats beyond.

2.4 Scope of the Report

- 2.4.1 This report provides a description of all features present on the building that are suitable for roosting bats and provides an evaluation of those features in the context of the site and surrounding environment. It further documents any physical evidence collected or recorded during the site survey that could indicate the presence of roosting bats. It provides information on constraints to the proposals as a result of roosting bats, and summarises the requirements for any further surveys, to inform subsequent mitigation proposals, achieve planning or other statutory consent, and to comply with wildlife legislation.
- 2.4.2 The aim of the assessment was to determine the presence or evaluate the likelihood of presence of roosting bats, and to gain an understanding of how they could use the building or structure. To achieve this, the following steps have been taken:
- A desk study has been carried out, including the use of freely available resources such as Google Earth and the MAGIC online database.
 - A field survey has been undertaken, including an external and internal inspection of the building.

- An outline of likely impacts on any known roosts has been provided, based on current development proposals.
- Recommendations for further survey and assessment have been made, along with advice on European Protected Species Mitigation Licensing if appropriate.

2.4.3 A survey plan is presented in Appendix 1, the proposed Project Plan is included in Appendix 2 (where available), and a summary of relevant legislation can be found in Appendix 3.

3.0 Methodology

3.1 Desk Study methodology

3.1.1 Existing bat records relating to the site and a surrounding 1 km radius (the study area) were not requested from the local bat group. This is primarily due to the relatively small scale of the proposed development.

3.1.2 A review of the following information sources has also been undertaken to inform the assessment:

- Landscape structure using aerial images from Google Earth
- Designated sites, habitat and species data held on magic.gov.uk
- Information on the surrounding area using OS Opendata 2022

3.2 Site Survey Methodology

3.2.1 The survey was undertaken by Joe Slade BSc (Hons) MRSB, Ecologist (Natural England bat licence number: 2017-32515-CLS-CLS). The survey was undertaken on 22nd September 2023. All buildings that will be impacted by the project proposals (the survey area) were assessed for their potential to support roosting bats. The surveyor searched for features suitable for roosting bats and signs of bat activity. A non-intrusive visual appraisal from the ground was carried out using binoculars, inspecting the external features of the buildings for suitable roosting gaps, and for signs of bat use. An internal inspection of the building was also made, including the living areas of derelict or abandoned buildings and the roof spaces of all buildings, using a torch and ladder. The internal inspection included searching the floor and flat surfaces, window and door frames and surrounding masonry, and a detailed search of numerous features within the roof space was completed.

3.2.2 The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of nesting birds, and the suitability of the site for breeding barn owls *Tyto alba*.

3.3 Suitability Assessment

3.3.1 Buildings, structures or trees were categorised according to their potential suitability to support bat roosts, in line with best practice guidelines (Collins, J. 2016). Features and their likelihood to support roosting bats are summarised in Table 3.3. Roost suitability is classified as high, moderate, low and negligible and further surveys may be required to determine a presence or likely absence of roosting bats or to characterise a confirmed roost prior to development works proceeding.

Table 3.3 Guidelines for assessing the potential suitability of proposed development sites for bats, based on habitat features present and their context within the landscape.

Likelihood of bats being present	Features present on the building and their context
High	Buildings or structures with features which are frequently used by roosting bats e.g. tunnels, cellars and areas of hanging tiles. These may be used by large numbers of bats. Habitat on site and surrounding landscape of high quality for foraging bats e.g. woodland, ponds, rivers and species-rich grassland. There is good habitat connectivity between the site and nearby foraging and roosting resources, comprising mature hedgerows and tree lines. Historical data show roosting sites are present nearby.
Moderate	Buildings or structures with features which are occasionally used by roosting bats e.g. raised roof tiles, hanging tiles, cracks which lead to voids or cavities. These may be unlikely to support large numbers of bats. Habitat on site and surrounding landscape of moderate quality for foraging bats e.g. small areas of woodland and urban greenspaces. Historical data show roosting sites are present nearby.
Low	One or more suitable roost sites or features present, such as raised roof tiles. Limited or no connectivity between the site and proximate foraging or roosting habitat due to an absence of linear features between sites. Nearby artificial lighting which deters bats from roosting in the building, such as from street lighting or commercial signage.
Negligible	Negligible habitat features present on site which are likely to be used by bats.

3.4 Limitations – evaluation of the methodology

3.4.1 It should be noted that whilst every effort has been made to describe the features on site in the context of their suitability for roosting bats, this does not provide a complete characterisation of the site. This survey provides a preliminary view of the likelihood of bats being present. This is based on suitability of the habitats on the site and in the local area, the ecology and biology of bats as currently understood, and the known distribution of bats as recovered during the desk study.

3.4.2 No specific limitations were recorded during the survey, with full access to all areas of the site.

4.0 Results and Evaluation

4.1 Desk Study Results

4.1.1 A summary of desk study results is provided below.

4.1.2 The desk study methodology as outlined in 3.1 has been carried out, and any relevant findings regarding sites, habitats or species are outlined below. The findings of the desk study are incorporated into the Conclusions, Impacts and Recommendations section of this report (5.0).

4.2 Designated sites within 1 km of the site

4.2.1 The MAGIC database search revealed the following statutory designated sites are located within 1 km of the site and are likely to support important bat habitats:

- Solent and Southampton Water Ramsar Site and Special Protection Area (SPA), Solent Maritime Special Area of Conservation (SAC) located approximately 420 m to the southeast of the site.
- Lincegrove and Hackett's Marshes Site of Special Scientific Interest (SSSI) located approximately 390 m to the south of the site.
- Lee-on-The Solent to Itchen Estuary SSSI located approximately 920 m to the southeast of the site.
- Hackett's Marsh Local Nature Reserve (LNR) located approximately 430 m to the southeast of the site.

4.3 Landscape

4.3.1 The MAGIC database search indicated the presence of habitats within 1 km of the site which could support bat roosting, commuting and foraging. Deciduous woodland is located approximately 150 m to the southwest of the site which is connected to extensive woodland including ancient woodland. Coastal habitats including saltmarsh and mudflats are situated approximately 450 m to the southeast of the site. There is very good connectivity between the site and the nearby priority habitats. Scattered trees and woodland could be used by bats to commute between the site and nearby foraging and roosting habitat.

Figure 1 (below) is the reviewed aerial imagery for the site showing the surrounding landscape and the context of the site within the landscape.



Figure 1: Landscape map

4.4 European Protected Species Licencing

4.4.1 The MAGIC database search revealed four granted European protected species mitigation licence (EPSML) for bats are located within a 1 km radius of the development site. Table 4.4 provides the MAGIC database records.

Table 4.4: Granted EPSMLs within a 1 km radius of the site

Granted EPSML reference	Distance from site	Species listed	EPSML start date	EPSML end date	Licenced activity
2017-31720-EPS-MIT	270 m southeast	Common pipistrelle	10/10/2017	30/10/2018	Destruction of a roost
2019-41753-EPS-MIT	300 m northwest	Common pipistrelle	01/08/2019	31/08/2025	Destruction of a roost
2017-28698-EPS-MIT	780 m northwest	Common pipistrelle	19/04/2017	30/04/2019	Destruction of a roost
2014-2574-EPS-MIT	390 m northwest	Common pipistrelle	02/09/2014	30/03/2020	Damage of a roost

4.5 Survey Results

4.5.1 The weather conditions recorded at the time of the survey are shown in Table 4.6.

Table 4.6: Weather conditions during the survey.

Date: 22/09/2023	
Temperature	20°C
Relative Humidity	49%
Cloud Cover	10%
Wind	2 mph
Precipitation	None

4.5.2 Building description

4.5.3 Building B1 (exterior)

B1 is a detached single-storey brick-built building with a pitched, hipped and gabled roof clad in concrete roof tiles, with some areas of ceramic tiling. The roof tiles are raised in places but the gaps were too small for bats to enter (<10 mm wide).

There are areas of timber hanging tiles around the building at first floor level which are in excellent condition with no gaps or missing tiles that bats could roost in. The masonry around the building appears to be in good condition with no gaps that bats could roost in. The doors and windows are timber framed and are in excellent condition with no gaps around the sides.

Dormer windows with pitched roofs are present which have either timber fascias or timber hanging tiles on the cheeks of the dormers. No gaps were present on the dormers in which bats could roost.

B1 – northern elevation (pictured opposite).



B1 – southwestern corner (pictured opposite).



B1 – southern elevation (pictured opposite).



B1 – northeastern corner (pictured opposite).



B1 – hanging tiles (pictured opposite). The picture opposite shows an example of the hanging tiles which are in excellent condition.



B1 – roof tiles (pictured opposite). The picture opposite shows the roof tiles with gaps which are < 10 mm wide and are too small for bats to enter.



B1 – eaves (pictured opposite). The picture opposite shows a close-up of the eaves.



4.5.4 Building B1 (interior)

No loft spaces are present within the roof space but there are small crawl spaces which line the sides of the roof space. The roof structure is lined with sections of mineral wool insulation and a paper roof liner which has gaps in places, exposing the roof tiles from inside the crawl spaces. Bats could enter the crawl spaces through the gaps in the liner.

Numerous cobwebs were present within the crawl spaces indicating an absence of internal flying activity from void dwelling bats. The gable walls were found to be well-sealed with no gaps that bats could use to enter the crawl spaces.

B1 – interior (pictured opposite).



B1 – interior (pictured opposite). Northern gable end.



4.5.5 B1: Evidence of Bats

No live bats or evidence of bat activity was located internally or externally on the survey building.

4.5.6 Nesting Birds and Other Incidental Observations

No evidence of nesting birds was present internally or externally on the building.

5.0 Conclusions, Impacts and Recommendations

5.1 Conclusions and Impact Assessment

- 5.1.1 The PRA concludes that building B1 has no suitable external roosting features that bats could roost in. Gaps in the external roof tiles were found to be too small for bats to enter (< 10 mm wide). The internal inspection of the crawl spaces revealed no evidence of bat activity such as droppings. As such, the presence of crevice and void roosts was conclusively ruled out during the survey.
- 5.1.2 There is good habitat connectivity between the site and nearby bat foraging resources which increases the likelihood of bats roosting in nearby buildings and trees.
- 5.1.3 No bat roosts will be impacted by the proposed development. Bats are protected under the Wildlife and Countryside Act and Conservation Regulations; see Appendix 3 for a summary of legislation protecting bats in the UK.
- 5.1.4 No evidence of bird nesting activity was found. Nesting birds are unlikely to be impacted by the proposed development.

5.2 Recommendations

- 5.2.1 Best practice survey guidelines (Collins, J. 2016) recommend additional surveys for all buildings assessed as having low to high suitability for roosting bats. Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. Appropriate justification for this assessment is provided below and in Table 3.3 of this report. Those known to support roosting bats may require further survey to inform a EPSML application, depending on the proposed works and assessment of impacts, and the species present/likely to be present.

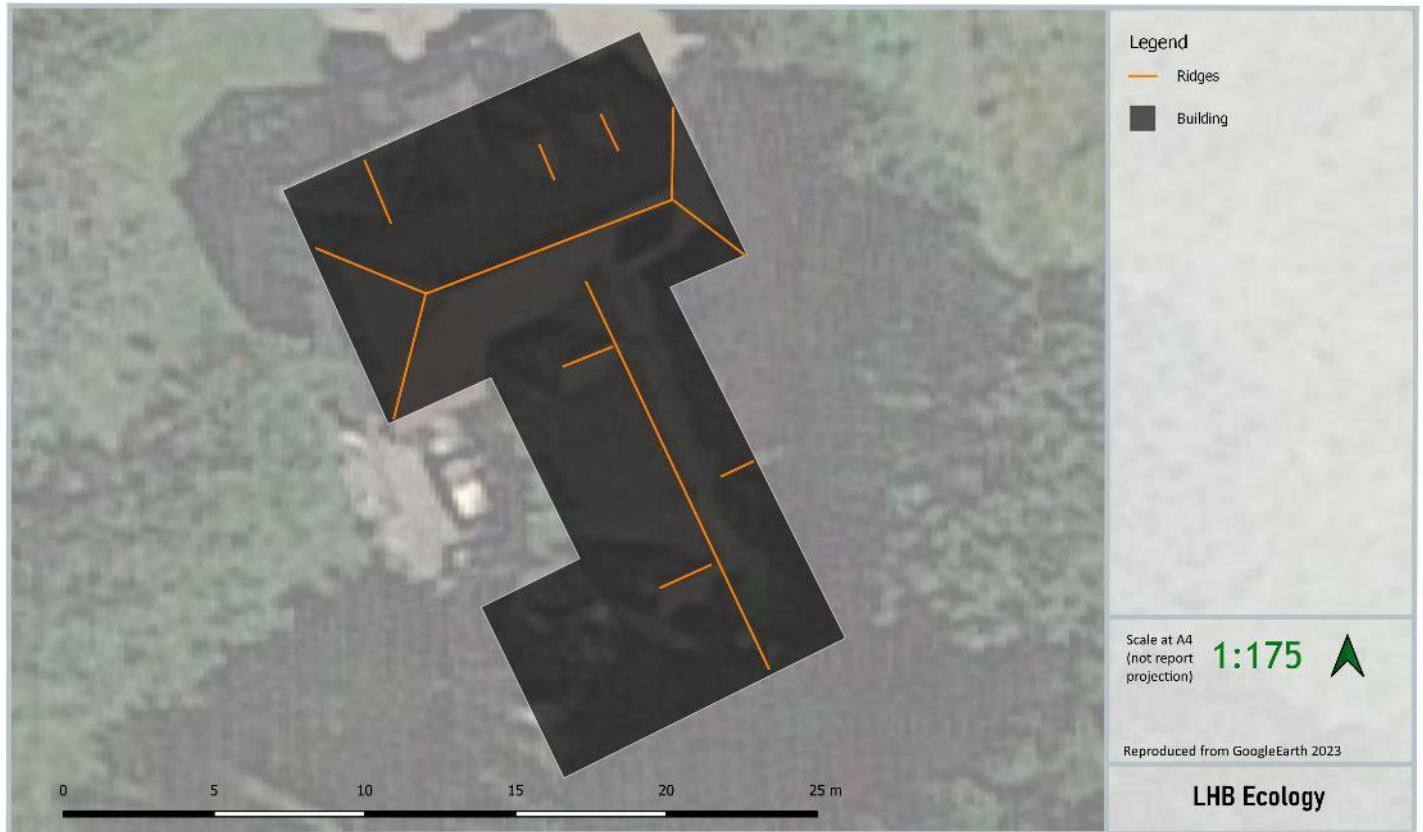
Ecological Receptor	Recommendations
Bats	The building B1 has “negligible habitat value” (Collins, 2016) for supporting roosting bats based on the absence of suitable external roosting features and no evidence of bat activity was found during the survey. No further surveys are required. In the highly unlikely event that a bat is found all works must cease immediately and a suitably qualified ecologist contacted for advice.
Nesting birds	No further surveys.
<i>Enhancements</i> The site can be enhanced to support roosting bats. The installation of a woodcrete bat box on the building or mature tree will provide additional roosting habitat and link to nearby foraging resources. Bat boxes must be placed 3 – 5m	

high, facing south or southwest with a clear flight path to the entrance of the bat box. The bat box must be positioned away from artificial sources of light.

6.0 Bibliography

- BS 42020, Biodiversity – Code of practice for planning and development (2013) <http://www.eobiodiversity.org/pdfs/BS42020.pdf>
- BS 42020, Biodiversity – Code of practice for planning and development (2013) <http://www.bsigroup.com/LocalFiles/en-GB/biodiversity/BS-42020-Smart-Guide.pdf>
- [http://www.cieem.net/data/files/Publications/EclA Guidelines Terrestrial Freshwater and Coastal Jan 2016.pdf](http://www.cieem.net/data/files/Publications/EclA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf)
- Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists —Good Practice Guidelines, 3rd edition, Bat Conservation Trust, London. <https://www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-3rd-edition>
- HMSO: Wildlife and Countryside Act 1981 (as amended) <http://jncc.defra.gov.uk/page-1377>
- Google Earth (2023)
- JNCC (2004) Bat Workers Manual, 3rd Edition. <http://jncc.defra.gov.uk/page-2861>
- MAGIC database (2023) <http://www.magic.gov.uk/MagicMap.aspx>
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. English Nature, Peterborough. [http://roost.bats.org.uk/sites/default/files/publications/EnglishNature BatMitigationGuidelines 2004.pdf](http://roost.bats.org.uk/sites/default/files/publications/EnglishNature_BatMitigationGuidelines_2004.pdf)
- National Planning Policy Framework, 2021 <https://www.gov.uk/guidance/national-planning-policy-framework>

Appendix 1 – Preliminary Roost Assessment Survey Map



North Elevation

South Elevation

West Elevation

East Elevation

Project: The Coach House
Old Bursledon SO31 8DH

Drawing Status: PRELIMINARY

Scale @ A3: 1:100

Drawn By: G.Aymes

Date: 5th August 2023

Sheet No: 007

Revision: A

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Important Notes:

- Dimensions NOT to be scaled – please consult Project Aymes if in doubt.
- Dimensions displayed in metric unless specified otherwise.

Appendix 3 – Legislation

Legal protection

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000) and Nature Conservation (Scotland) Act 2004.

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. all bats)
- Deliberate disturbance of bat species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

Significance for developments:

Works which are liable to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require a European protected species mitigation licence. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

Significance for developments:

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

NATIONAL PLANNING POLICY (ENGLAND)

National Planning Policy Framework

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as UK Biodiversity Action Plan priority species) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; opportunities to incorporate biodiversity in and around developments are encouraged; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act (Section 42 in Wales) requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity.' This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

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