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Daytime Bat Risk Assessment

Northumberland Arms, West Thirston

September 2022



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Contents

Summary	5
1. Introduction.....	6
Site Location.....	6
Site Description	6
Objectives of the Study	6
Development Proposals.....	6
2. Methodology	7
Scope of Study.....	7
Desk Study	7
Field Survey.....	7
Habitats/Protected Species.....	7
Limitations to Survey.....	8
Assessment Methodology.....	9
3. Results	10
Desk Study	10
Designated Sites.....	10
European Protected Species Licensing.....	10
Local Bat Group.....	10
General Land Use.....	10
Data Search.....	10
Local Records Centre.....	10
Field Survey.....	11
Protected Species.....	11
Additional Species Groups	14
Birds.....	14
Other Protected Species.....	14
4. Site Assessment	15
Assessment of Survey Findings	15
Bats.....	15
Nesting Birds.....	15
Other Protected Species.....	15
Designated Sites.....	15
5. Impact Assessment.....	16
6. Recommendations	17
Further Survey.....	17
Mitigation Strategy	17
Compensation Scheme.....	17
Appendix 1 – Bat Suitability and Survey Effort.....	19
Appendix 2 – Policy and Legislation	21
Appendix 3 – Figures	26

Tables

Table 1: Daytime Survey Conditions	8
Table 2: Granted Natural England European Protected Species Licences within 2km	10
Table 3: Records from LRC Data Search.....	11
Table 4: Bat Risk Assessment Results.....	11
Table 5: Guidelines for assessing the potential suitability of proposed development sites for bats	19
Table 6: Survey effort and timing depending on suitability of the structure or tree (Tables 7.1-7.3 in the BCT Guidelines.....	20

Summary

OS Ecology Ltd were commissioned by BH Planning and Design on behalf of the Northumberland Pub Company in August 2022 to undertake a daytime bat risk assessment of the Northumberland Arms, where it is proposed to build a small extension to the rear of the pub.

Summary Table	
Impacts on Designated Sites	No impacts on sites designated for bats are predicted from the development.
Survey Findings	<p>The Northumberland Arms contains features suitable for roosting bats; these include gaps under ridge tiles and slates. Some gaps are present between fascia and the wall at the southern aspect although these are of low suitability. Based on the features available and the surrounding habitats that include woodland and the River Coquet, the Northumberland Arms is considered to be of high suitability for roosting bats.</p> <p>A small outbuilding to the rear of the pub contains features within the roof structure, suitable for low numbers of crevice dwelling bats. The outbuilding is considered to be of low suitability for roosting bats.</p>
Nesting Birds	No evidence of use by nesting birds was recorded, but the building offers limited opportunities.
Impacts based on survey to date	<ul style="list-style-type: none"> • Potential disturbance and harm to roosting bats, should they be present at the time of the works. • Potential destruction of bat roosts through the connection of a new extension to the existing roof. • Potential harm and/or disturbance to nesting birds, should works be undertaken in the breeding bird season (March to August inclusive).
Further Survey	<p>As detailed within the Bat Conservation Trust Bat Surveys, Good Practice Guidelines¹, the following additional surveys are recommended to ensure a robust assessment of bat activity at the site. The recommendation for further survey takes into consideration the potential low impacts of the proposed works:</p> <ul style="list-style-type: none"> • Two dusk surveys of the Northumberland Arms (between May to September with at least one survey between May and August) and a single survey of the outbuilding (between May and August).

¹ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

1. Introduction

Site Location

- 1.1 The site is located in Felton at approximate central grid reference of NU 18479 00201. The site location is illustrated within figure 1 in the appendices.

Site Description

- 1.2 The site comprises a Grade II Listed pub in West Thirston, Northumberland.

Objectives of the Study

- 1.3 The objectives of this report are:
- To identify and describe any potential ecological receptors that may be present on site or within an identified zone of influence.
 - To identify and assess whether proposals may impact on the identified receptors.
 - To identify potential mitigation, compensation or enhancement measures if required.
 - To identify and detail further surveys if required.

Development Proposals

- 1.4 The proposals are for the following:
- A ground floor rear extension to form a covered goods reception area and a first floor rear extension to form a bedroom and store room.
 - Refurbishment of an existing outbuilding to provide a plant/boiler room, locker room, cleaners store room and a W.C.
 - A new roof to cover the temporary roof at the rear of the building, and a new wall and access door.

2. Methodology

Scope of Study

- 2.1 The site was surveyed to identify whether the following were present for legislative and planning purposes:
- Habitats of conservation value
 - Priority Habitats
 - Protected and Priority Species
- 2.2 The ecological characteristics of the site were reviewed to identify the scope of the assessment, with the zone of influence determined through professional judgement.
- 2.3 The survey area comprised the "site" defined within figure 2 (Appendix 3) and where access was available an approximate 50m buffer².
- 2.4 Access permitting, all potential bat roosting sites within the survey area were assessed.

Desk Study

- 2.5 Desk study was undertaken to assess the nature of the surrounding habitats and included:
- Assessment of aerial imagery and Ordnance Survey mapping.
 - A search of the MAGIC website³ for designated sites and European protected species within 2km of the survey area.
 - Data searches submitted to the Local Record Centre.

Field Survey

Habitats/Protected Species

- 2.6 During the preliminary survey the site was checked for evidence of protected species and habitats were assessed for their potential to support such species. For this site, the development site comprises a built structure and as such the assessment focussed on the risk of bats being present within the structure.

² The survey buffer may be increased depending on the species present and their identified core sustenance zones.

³ Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)

Bats

- 2.7 Survey effort has been based on that provided by the Bat Conservation Trust Good Practice Survey Guidelines⁴.
- 2.8 Structures and trees within the site and adjacent to the site, were inspected⁵, where access was available, for potential roosting features (PRFs) and to record any field signs, including bats, if present⁶.
- 2.9 Assessment follows the Bat Conservation Trust Guidelines⁷, which classifies the suitability (negligible, low, moderate or high) of the potential roosting, foraging and commuting habitats within the site. Full details of the classifications are provided within the table in Appendix 1.
- 2.10 Survey was undertaken by Gemma Cone an experienced bat surveyor who holds a Class 2 Natural England survey licence (2016-22634-CLS-CLS).
- 2.11 The following equipment was utilised during survey:
- High power LED torch.
 - Explorer Premium Digital Endoscope.
 - Zeiss 8x30 binoculars.
 - Digital camera.

- 2.12 The survey was undertaken on the 25th August 2022 in the following weather conditions:

Table 1: Daytime Survey Conditions				
Date	Temperature	Cloud Cover	Precipitation	Wind Conditions
25.08.22	18°C	80%	None	F1

Limitations to Survey

- 2.13 There were no limitations to the survey.

⁴ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

⁵ It should be noted that assessment relates entirely on the structure or tree's suitability to support bats and or other protected species. Assessment must in no way be taken as an assessment of the structure's integrity or safety.

⁶ If bats are recorded during appropriate measures are undertaken to limit any potential disturbance

⁷ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

Assessment Methodology

- 2.14 Guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) is utilised to provide habitat valuations.
- 2.15 The level of value of specific ecological receptors is assigned using a geographic frame of reference. For, example international value being most important (SACs, SPAs and pSPAs), then national (SSSIs), regional, county (LWS), district (LNR), local and lastly, within the immediate zone of influence of the site only (low).
- 2.16 In terms of species, for example breeding birds, should the population within the site constitute greater than 1% of the geographic population, it would be considered significant at that level. In addition, presence of designated sites, scarce species and or quality⁸/diversity of habitats are used to guide that valuation
- 2.17 Assessment methods for bats have been undertaken with reference to Wray et al. (2007)⁹, which correlates with the geographic frame of reference. Within which they define the relative rarity of each species based on the known distribution¹⁰ at the time and the value of the roost type, assuming that roosts such as feeding perches are of lower value that maternity roosts or sites that have a high level of fidelity.

⁸ Quality can be subjective and vary in different geographic areas. Reasoned professional judgement is therefore used to inform the assessment.

⁹ Wray et al (2007) Valuing Bats in Ecological Impact Assessment. In Practice. Based on a presentation at the Mammal Society – Specific Issues with Bats

¹⁰ It should be noted that there are regular changes to our understanding of distribution as further studies are undertaken.

3. Results

Desk Study

Designated Sites

3.1 A search of the Multi Agency Geographic Information for the Countryside (MAGIC) Website¹¹ indicated that bats are listed on the citation for the River Coquet and Coquet Valley Woodlands which lies within 2km of the site.

European Protected Species Licensing

3.2 The MAGIC website identified the following granted Natura England European Protected Species licenses within 2km of the site¹².

Table 2: Granted Natural England European Protected Species Licences within 2km

Licence Reference	Species	Licensed Work	License Period
EPSM2010-2120	Soprano pipistrelle	Destruction of a resting place	2010 - 2011

Local Bat Group

3.3 Data from ERIC NE is awaited.

General Land Use

3.4 A review of aerial imagery and Ordnance Survey mapping highlighted that the general land use in the surrounding area is dominated by the village of West Thirston to the south and Felton village to the north. The River Coquet is approximately 50m north of the site.

Data Search

Local Records Centre

3.5 The table below summarises the records of bat species provided by the local records centre (LRC). The full data search results can be provided on request.

¹¹ Multi Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk (Accessed August 2022)

¹² The dataset published by Natural England was last updated in January 2022

Table 3: Records from LRC Data Search			
Taxon	Species	No. of Records within Search Area	Records of Particular Note
Bats	Brown long-eared bat	13	11 roost records within 1km
	Common pipistrelle	23	-
	Daubenton's bat	3	-
	Natterer's bat	3	-
	Noctule	16	-
	Soprano pipistrelle	34	10 roost records within 2km
	Whiskered/Brandt's	1	-

Field Survey

Protected Species

Bats

3.6 The results of the bat risk assessment of the structures on site is provided below. A figure is provided within the appendices showing building locations.

Table 4: Bat Risk Assessment Results		
Building 1: The Northumberland Arms		
Suitability: High		
<i>Building Description and Summary of Potential Roost Features</i>		
<p>The Grade II Listed building is of stone construction with a complex of pitched slate roofs and stone ridge tiles. A single storey extension is present to the west. Multiple gaps are present under and between the ridge tiles and under missing and slipped slates. The soffits appear generally well-sealed at the northern aspect. The stone walls are in good condition with a small number of gaps that may lead to internal cavities within the walls. Coping stones are present at the gable ends; these have some gaps between and under them, providing crevices.</p> <p>Within the area of the proposed extension the walls are generally in good condition, with a small gap present between the wall and the fascia; this did not extend in far and no field evidence was present.</p> <p>Internally, 3 roof voids are present; these are lined with felt and appear well-sealed. The voids are approximately 2m in high at the apex and uncluttered. Some gaps are present in the stone walls although no field evidence of bats was recorded.</p>		
Building Type	Single detached building with an extension to the west.	
No. of Storeys	Two	
Roof Type	Pitched (several pitches present)	
Roof Material	Slate	
Ridge Tiles	Stone	

Coping Tiles	Present at the gable ends
Chimney	Brick chimneys, appear well-sealed
Skylights/Velux	None
Roof Condition	Poor condition – multiple gaps between ridge tiles and missing slates
Other Roof Features	Lead flashing present between valleys at the south of the building and along the front of the roof at the north
Soffits	Well-sealed to north, not present to the south
Fascias	Some gaps between wall and wooden fascia along the southern aspect
Bargeboards	None
Wall - Material and Condition	Generally good, some gaps in stonework
Lintels and Sills – Material and Condition	Stone lintels, all appear well-sealed
Windows – Material and Condition	Wooden frames, appear well-sealed
Doors – Material and Condition	Wooden doors, appear well-sealed
Other Wall Features	None
Loft Height	Approx. 2m
Internal Lining	Felt lining, good condition
Support System	Traditional construction
Internal Gable -Wall Material and Condition	Stone walls, some gaps present leading into crevices within the walls
Ridge Beams	Gaps between ridge beam and roof present – cobwebbed
Loft Env. Conditions (light, draughtiness)	Warm, dry, dark
Other Features	None
Loft Survey Conditions	Good – rockwool insulation present, some storage boxes



Maternity Roost Assessment

Features suitable for maternity roosts are present within the roof structure and the internal roof voids. Surrounding habitats (the river and woodland) offer high foraging and commuting suitability for bats.

Hibernation Assessment

The wide stone walls will offer some hibernation potential, although the risk is decreased due to the heating of the building in the winter.

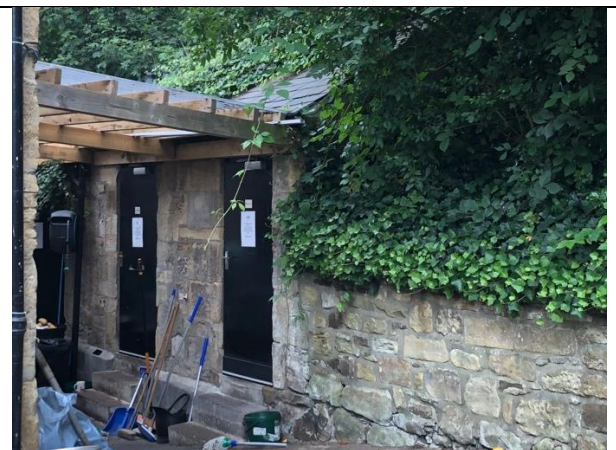
Building 2: The Outbuilding

Suitability: Low

Building Description and Summary of Potential Roost Features

A detached stone building used for storage. It has a pitched slate roof that is largely obscured by ivy and vegetation.

Building Type	Single building
No. of Storeys	One
Roof Type	Pitched
Roof Material	Slate
Ridge Tiles	Assumed stone (obscured by ivy)
Coping Tiles	Obscured by ivy
Gable Ends	Obscured by ivy
Chimney	None
Skylights/Velux	None
Roof Condition	Appears in good condition
Other Roof Features	None
Soffits	Obscured by ivy
Wall - Material and Condition	Stone walls, appear in good condition
Lintels and Sills – Material and Condition	None
Windows – Material and Condition	None
Doors – Material and Condition	Wooden – appear well-sealed
Other Wall Features	None



Maternity Roost Assessment

Based on the features available, limited to a low number of crevices the risk of a maternity roost is low.

Hibernation Assessment

Based on the features available for roosting bats, the risk of hibernation use is low.

3.7 Habitats surrounding the building include trees to the rear of the building with connectivity to patches of woodland along the River Coquet approximately 50m from

the site. This includes an area of Ancient Woodland approximately 250m south-west of the site. The river and woodland will provide high suitability foraging and commuting suitability for bats.



Additional Species Groups

Birds

3.8 No evidence of nesting birds was recorded, however the building contains opportunities for nesting birds, such as swallows and house martins.

Other Protected Species

3.9 It is considered that other protected species are likely absent.

4. Site Assessment

Assessment of Survey Findings

4.1 The assessment is based on survey effort undertaken to date.

Bats

4.2 The Northumberland Arms building contains multiple features suitable for crevice dwelling bats. Based on the surrounding habitats offering high suitability foraging and commuting potential there is also a risk of a maternity roost being present, therefore the building is of high suitability for roosting bats.

4.3 The outbuilding offers limited opportunities for low numbers of crevice dwelling bats and is considered to be of low suitability for roosting bats.

Nesting Birds

4.4 The site provides opportunities for nesting birds, although no evidence was recorded during the survey.

Other Protected Species

4.5 Other protected species are considered likely absent.

Designated Sites

4.6 There are no designated sites for bats within 2km of the site.

5. Impact Assessment

5.1 The following impacts are based on the survey work to date and the understanding that the Client wishes to undertake the following:

- A ground floor rear extension to form a covered goods reception area and a first floor rear extension to form a bedroom and store room.
- Refurbishment of an existing outbuilding to provide a plant/boiler room, locker room, cleaners store room and a W.C.
- A new roof to cover the temporary roof at the rear of the building, and a new wall and access door.

5.2 As a result of the assessment completed and the nature of the proposed works, the likely impacts, without appropriate avoidance measures, mitigation and/or compensation scheme, are:

- Potential disturbance and harm to roosting bats, should they be present at the time of the works.
- Potential destruction of bat roosts through the connection of a new extension to the existing roof.
- Potential harm and/or disturbance to nesting birds, should works be undertaken in the breeding bird season (March to August inclusive).

6. Recommendations

Further Survey

6.1 As detailed within the Bat Conservation Trust Bat Surveys, Good Practice Guidelines¹³, the following additional surveys are recommended to ensure a robust assessment of bat activity at the site. The recommendation for further survey takes into consideration the potential low impacts of the proposed works:

- Two dusk surveys of the Northumberland Arms (between May to September with at least one survey between May and August) and a single survey of the outbuilding (between May and August). Avoidance Measures.

6.2 The following measures should be incorporated into the design of the scheme to avoid impacts on wildlife:

- External lighting that may affect the site's suitability for bats will be avoided. If required this will be limited to low level, avoiding use of high intensity security lighting. The final lighting strategy will be determined by the results of the bat activity survey work detailed above.
- Alternatives to timber treatments that are injurious to mammals will be sought and used on site (see http://www.jncc.gov.uk/pdf/batwork_manualpt4.pdf).
- Works will not be undertaken during the nesting bird season (March to August inclusive) unless the site is checked by an appropriately experienced ecologist and nests are confirmed to be absent.

Mitigation Strategy

6.3 A detailed mitigation strategy cannot be produced until further survey work, highlighted above is completed, however elements of this strategy may include:

- Application for a mitigation licence should bats be present and affected by the proposals.
- Removal of key features around potential bat roosting features by hand.
- Supervision of the removal of key features by a suitably qualified ecologist.

Compensation Scheme

6.4 A detailed compensation scheme cannot be completed until the further survey work, highlighted above is completed however elements of this strategy could include:

¹³ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

- The incorporation of opportunities for roosting bats and nesting birds within the development.

Appendix 1 – Bat Suitability and Survey Effort

Classifications of suitability are based on those provided within the Bat Conservation Trust Good Practice Survey Guidelines¹⁴, with the table below taken from page 35 of the guidelines (table 4.1).

Table 5: Guidelines for assessing the potential suitability of proposed development sites for bats
(based on the presence of habitat features within the landscape, to be applied using professional judgement)

Suitability	Description	
	Roosting Habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site, likely to be used by roosting bats	Negligible habitat features on site, likely to be used by commuting and foraging bats
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically.</p> <p>However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e unlikely to be suitable for maternity or hibernation^b.</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential^c.</p>	<p>Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but isolated, i.e not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat	<p>Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourse and grazed parkland.</p>

¹⁴ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

		Site is close to and connected to known roosts.
<p>a. For example in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.</p> <p>b. Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2015). This phenomenon requires some research in the UK but ecologists should be aware of potential for larger numbers of this species to be present during the autumn and winter in larger buildings in highly urbanised environments.</p> <p>c. The system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015)</p>		

The classification of the suitability relates to the level of further survey recommended.

Table 6: Survey effort and timing depending on suitability of the structure or tree (Tables 7.1-7.3 in the BCT Guidelines)			
	Low roost suitability	Moderate roost suitability	High roost suitability
Survey Effort	One survey visit One dusk emergence or dawn re-entry survey	Two separate visits One dusk emergence and a separate dawn re-entry survey	Three separate visits At least one dusk emergence and a separate dawn re-entry survey. The third can be either dusk or dawn.
Timings	May-August (structures) No further survey (trees)	May to September. At least one must be in the optimum period (May to August)	May to September. two must be in the optimum period (May to August)
If bats are recorded	If bats emerge during surveys, the survey schedule will be adjusted to increase the survey effort so that enough information can be collected to characterise the roost and provide data should a Natural England Licence be required.		

Appendix 2 – Policy and Legislation

Planning Policy

National Planning Policy Framework (NPPF)¹⁵

The revised National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. Planning law requires that applications for planning permission be determined in accordance with the development plan. The key paragraphs from the relating to the natural environment are detailed below.

Ecologically Relevant Paragraphs of the NPPF	
Paragraph	Statement
8	Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives): a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure; b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities’ health, social and cultural well-being; and c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy
174	Planning policies and decisions 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 (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; 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; e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate
175	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
179	To protect and enhance biodiversity and geodiversity, plans should: 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

¹⁵ National Planning Policy Framework July 2021

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf)

Ecologically Relevant Paragraphs of the NPPF	
Paragraph	Statement
	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 pursue opportunities for securing measurable net gains for biodiversity.
180	When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons ⁶³ and a suitable compensation strategy exists; and d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.
181	The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites ⁶⁴ ; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites
182	The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Government Circular ODPM 06/2005 Biodiversity and Geological Conservation¹⁶ (England only)

This Circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.

Part IV - Conservation of Species protected by Law details that the presence of a protected species is a material consideration when considering a development proposal that may result in harm to the species or its habitat and that planning authorities must have regard to species protected under the Habitat Regulations.

It goes on to say that: *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*

¹⁶ODPM Circular 06/2005 Office of the Deputy Prime Minister Eland House, Bressenden Place, London SW1E 5DU
Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System

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.

Natural Environment and Rural Communities (NERC) Act 2006^{17 18}

Section 40 – To conserve biodiversity

Section 40 puts a duty on public authorities to conserve biodiversity when undertaking its duties and functions,

Section 41 – Biodiversity list and Action

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 principal importance for the purpose of conserving biodiversity. They must also take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section or promote the taking by others of such steps.*

The 2007 lists were superseded by the UK Post-2010 Biodiversity Framework.

UK Priority Habitats (excl. marine habitats)¹⁹	
UK BAP broad habitat	UK BAP priority habitat
Rivers and Streams	Rivers
Standing Open Waters and Canals	Oligotrophic and Dystrophic Lakes
	Ponds
	Mesotrophic Lakes
	Eutrophic Standing Waters
	Aquifer Fed Naturally Fluctuating Water Bodies
Arable and Horticultural	Arable Field Margins
Boundary and Linear Features	Hedgerows
Broadleaved, Mixed and Yew Woodland	Traditional Orchards
	Wood-Pasture and Parkland
	Upland Oakwood
	Lowland Beech and Yew Woodland
	Upland Mixed Ashwoods
	Wet Woodland
	Lowland Mixed Deciduous Woodland
	Upland Birchwoods
Coniferous Woodland	Native Pine Woodlands
Acid Grassland	Lowland Dry Acid Grassland
Calcareous Grassland	Lowland Calcareous Grassland

¹⁷ <https://www.legislation.gov.uk/ukpga/2006/16/section/40>

¹⁸ <https://www.legislation.gov.uk/ukpga/2006/16/section/41>

¹⁹ <http://jncc.defra.gov.uk/page-5706>

	Upland Calcareous Grassland
Neutral Grassland	Lowland Meadows
	Upland Hay Meadows
Improved Grassland	Coastal and Floodplain Grazing Marsh
Dwarf Shrub Heath	Lowland Heathland
	Upland Heathland
Fen, Marsh and Swamp	Upland Flushes, Fens and Swamps
	Purple Moor Grass and Rush Pastures
	Lowland Fens
	Reedbeds
Bogs	Lowland Raised Bog
	Blanket Bog
Montane Habitats	Mountain Heaths and Willow Scrub
Inland Rock	Inland Rock Outcrop and Scree Habitats
	Calaminarian Grasslands
	Open Mosaic Habitats on Previously Developed Land
	Limestone Pavements
Supralittoral Rock	Maritime Cliff and Slopes
Supralittoral Sediment	Coastal Vegetated Shingle
	Machair
	Coastal Sand Dunes

Protected Species Legislation

European Protected Species

European Protected Species (EPS) are species of plants and animals (other than birds) protected by law throughout the European Union. They are listed in Annexes II and IV of the European Habitats Directive and receive full protection under The Conservation of Species and Habitats Regulations 2017 (as amended). This make it an offence to:

- deliberately capture, injure or kill any European Protected Species (EPS)
- to deliberately disturb any European Protected Species (EPS);
- to damage or destroy a breeding site or place of rest or shelter used by any European Protected Species (EPS).

The Wildlife and Countryside Act 1981 (as amended) adds further protection by making it an offence to intentionally or recklessly²⁰ disturb an EPS while it is occupying a structure or place which it uses for shelter or protection, or to obstruct access to any structure or place the species uses for shelter or protection.

European Protected Species relevant to the UK
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²⁰ Under the Countryside and Rights of Way Act 2000 (CROW Act) extended the protection to cover reckless damage or disturbance

Animals		Plants	
All bat species	Great Crested Newt	Shore dock	Creeping marshwort
Large blue butterfly	Otter	Killarney fern	Slender naiad
Wild cat	Smooth snake	Early gentian	Fen Orchid
Dolphins, porpoises and whales (all species)	Sturgeon fish	Lady's slipper	Floating-leaved water plantain
Dormouse	Natterjack toad	Yellow marsh saxifrage	
Sand lizard	Pool Frog		
Fisher's Estuarine Moth	Snail, Lesser Whirlpool Ram's-horn		
Marine turtles			

Appendix 3 – Figures



