Preliminary Ecological Appraisal for Broadwell Farm, Broadwell

May 2022

Status: For planning



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Quality Standards

This report is certified BS 42020:2013 'Biodiversity – code of practice for planning and development' compliant and has been prepared in accordance with The Chartered Institute of Ecology and Environmental Management's (CIEEM) Technical Guidance Series '*Ecological Report Writing*' and Code of Professional Conduct.

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Non-technical summary

The Landscape Partnership was commissioned by Robinson & Hall LLP to undertake a Preliminary Ecological Appraisal comprising a desk study, Phase 1 Habitat Survey and an assessment of the potential of site features to support bats, together with an assessment of impacts at Broadwell Farm, Broadwell.

The objectives of the appraisal were to identify the habitats and species present or potentially present and evaluate their importance, assess the impact of the development proposal and describe any measures necessary to avoid impacts, reduce impacts or compensate for impacts so that there is no net harm to ecological features.

The survey involved classifying and recording habitat types and features of ecological interest and identified the potential for protected species to be present by assessing habitat suitability for those species. The survey was undertaken by appropriately qualified and experienced personnel.

The site comprises a single storey barn, with a pitched roof that was in a poor state of repair. Collectively the habitats within the proposed development site are assessed as being of value at the **Site Only** level.

Based on the habitat types present, it is considered that the site has potential to support the following protected species or groups of species: breeding birds.

The proposed development is to re-roof the barn.

In the absence of mitigation, the proposed development could give rise to the following impacts; potential destruction of birds' nests and potential harm to bats post re-roofing, which would give rise to a **Minor Adverse** impact upon breeding birds and bats. Mitigation has been proposed, including re-roofing the barn outside the nesting bird season, or following a nest check by a competent person and use of bitumen underfelt as opposed to breathable membrane to line the roof. This mitigation would reduce the impacts of the development proposals upon the habitats and species present, to give rise to an overall **Neutral** impact.

No further surveys are considered necessary.

Calculations of Biodiversity Net Gain are not thought to be required in the Council's Local Plan given the nature of the proposals.

1 Introduction

1.1 Commission

1.1.1 The Landscape Partnership was commissioned by Robinson & Hall LLP to carry out a Preliminary Ecological Appraisal (PEA), comprising a desk study, Phase 1 Habitat Survey and an assessment of the potential of site features to support bats, together with an assessment of impacts.

1.2 Legislation and policy background

- 1.2.1 There is a range of protection given to sites and species. Sites may be designated for local, national, or global importance for nature conservation. Species may be protected by varying levels of national regulation.
- 1.2.2 The Local Planning Authority has a policy to protect features of nature conservation value within its Local Plan. Other regulators have policies relating to the consents issued by them.
- 1.2.3 Further information is given in Appendix 1.
- 1.2.4 Assessment was undertaken against current legislation and planning policy, and in accordance with standard guidance. Further information is given in Section 2 and Appendix 2.

1.3 Site location and context

- 1.3.1 The site is located to the south-east of the village of Broadwell, in Gloucestershire and within the parish of the same name. Broadwell village is approximately 4.2km south of Moreton in the Marsh. Access is off Broadwell Road to the north of the site. The site consisted of a barn that was situated within Broadwell Farm. The barn was immediately surrounded by hardstanding, as well as other barns as part of the farm and a grassland field.
- 1.3.2 The wider landscape consisted of arable land and pasture surrounded by hedgerows, with pockets of woodland. The River Evenlode is located approximately 1.5km east of the site.
- 1.3.3 The Ordnance Survey Grid Reference for the approximate centre of the proposed development site is SP 20641 27440. A plan showing the site is provided at Figure 01.

1.4 Acknowledgements

Permissions to gain access to land

1.4.1 Permission to gain access to the land for survey is gratefully acknowledged.

Surveyor Competencies

Survey(s) undertaken	Surveyor(s)	Experience (years)	Licences Held
Phase 1 habitat survey Bats: Preliminary	Emily Costello MCIEEM	8+	Great crested newt Class Licence CL08 (Level 1) Bat Survey Class Licence CL18 (Level 2) FISC Level 3
Roost Assessment: Buildings	Jessica Grundy	1+	-

Other contributors

- 1.4.2 We acknowledge the input of:
 - Gloucestershire Centre for Environmental Records for provision of data.

1.5 Description of the project

1.5.1 It is proposed to re-roof the roof of the barn, including installing new batons, roofing felt and tiles.

1.6 Objectives of this appraisal

- 1.6.1 The purpose of this appraisal is to inform a planning application for the proposed development, as described above. Detailed objectives are to:
 - identify the habitats and species present or potentially present and evaluate their importance;
 - identify any ecological constraints to development;
 - assess the impact of the development proposal;
 - identify any opportunities available for integrating ecological features within the development;
 - describe any measures necessary to avoid impacts, reduce impacts or compensate for impacts so that there is no net harm to ecological features;
 - propose ecological enhancements;
 - identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA).

1.7 Previous ecological studies

1.7.1 There are no known previous ecological studies of the site from the last five years.

1.8 Duration of appraisal validity

- 1.8.1 The assessment, conclusions and recommendations in this appraisal are based on the studies undertaken, as set out in this report, and the stated limitations. This appraisal is based on the project as described and any changes to the project would need the appraisal to be reviewed. Unless otherwise stated, the assessment, conclusions and recommendations given assume that the site habitats will continue to be used for their current purpose without significant changes until development takes place. However, changes in use or management may occur between the time of the survey and proposals being implemented. Ecological features may change naturally at any time; for example, species may be lost from existing sites or colonise new areas. Our knowledge of the ecology of the site enables us to provide an estimate of the duration of the validity of the surveys carried out and hence the applicability of this appraisal, so that any future need for review and update of this appraisal, or the surveys described within it, and the date by which such updates would become necessary, can be identified.
- 1.8.2 The table below sets out a guide to duration of validity of each element of each information source. If the proposed development is delayed beyond the stated timescale, updated surveys or further investigations may be required. Provided a planning application is made and validated prior to the end of the period stated below there would not normally be a requirement for further update survey except as indicated in Section 4.6.

Information source	Date undertaken	Guideline duration of validity from date undertaken	Notes
Desk study	23 rd May 2022	2 years	Further data may become available.
Phase 1 habitat survey	19 th May 2022	2 years	The habitats on site may change especially if management changes.
Great Crested Newt Habitat Suitability Index survey	19 th May 2022	2 years	Pond condition and suitably for great crested newts may change especially if management of nearby habitats changes.
Preliminary bat roost inspection: Buildings	19 th May 2022	2 years	Storm damage, maintenance, neglect or other factors can change bat roost potential of buildings.

2 Methodology

2.1 Desk study methodology

- 2.1.1 Gloucestershire Centre for Environmental Records was asked to provide records of protected, rare and/or priority species and details of statutory and non-statutory designated sites, within a 1km radius of the centre of the site at SP 20641 27440. The data were received on 23rd May 2022.
- 2.1.2 The Magic website¹ was used to identify European sites within a 5km radius and national sites within a 1km radius. The Magic website was accessed on 18th May 2022.
- 2.1.3 Aerial photographs and OS maps were used to gain initial information about the site and the surrounding area. This gives an indication of the types of habitat and species likely to be present and the setting of the site within the landscape.
- 2.1.4 Water bodies within 100m of the site were identified from the relevant 1:25,000 Ordnance Survey map sheet, to establish the need for protected species scoping surveys, such as great crested newt Habitat Suitability Index surveys. Consideration was also given to the green infrastructure of the local area.
- 2.1.5 The potential for protected, rare and/or priority species to be present on site has been considered in this assessment, taking into account the nature of the site and the habitat requirements of the species in question. Absence of records does not constitute absence of a species. Habitats on the site may be suitable for supporting other protected species that have not previously been recorded within the search area. Conversely, presence of a protected species in the search area does not imply its presence on-site. Records of alien species, non-localised records (e.g. tetrad records) and records dated before 1995 have not been described in detail but are taken into account when considering likely species presence or absence.
- 2.1.6 The data supplied by the Records Centre were considered in the assessment of potential impacts below.

Limitations to desk study methodology

- 2.1.7 In accordance with BS42020 and advice from most Local Biological Record Centres, species lists are not appended to this report but are available to the Local Planning Authority on request.
- 2.1.8 Availability of records will vary in different locations, as many depend on the presence of local experts and survey effort within the local area. An absence of a record does not necessarily indicate the absence of that species.

2.2 Phase 1 habitat survey methodology

- 2.2.1 The standard Phase 1 (baseline) habitat survey methodology² was followed. Phase 1 habitat survey is a standardised system for surveying, classifying and mapping wildlife habitats, including urban areas. All habitats present and areas or features of ecological interest within such habitats were recorded and mapped. The survey methodology facilitates a rapid assessment of habitats and it is not necessary to identify every plant species on site. Where given, scientific names of plant species follow Stace ed. 4³.
- 2.2.2 The survey visit was also used to identify potential for protected, rare and/or priority species, for example bats, mammals, amphibians and reptiles, to occur on, or in the vicinity of, the proposed development site. Although the survey methodology is not intended for species survey, any protected, rare and/or priority species which were seen during the survey were noted.
- 2.2.3 The survey was undertaken on 19^{th} May 2022 and the weather conditions were overcast (90% cloud cover), with little breeze (Beaufort 0-1) and a temperature of 15° C.

¹ MAGIC: https://magic.defra.gov.uk/MagicMap.aspx.

² JNCC (2010) *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit.* Reprinted by JNCC, Peterborough.

³ Stace, C (2019) *New Flora of the British Isles.* C&M Floristics. 4th Edition.

Limitations to Phase 1 habitat survey

2.2.4 There were no significant limitations to the Phase 1 habitat survey.

2.3 Preliminary bat roost assessment methodology: Buildings

Rationale

- 2.3.1 Bat surveys are usually needed for the building types where bats are likely to be present, which include the following types⁴.
 - Agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams.
 - Buildings with weatherboarding and/or hanging tiles which are within 200m of woodland or water.
 - Pre-1960 detached buildings and structures within 200m of woodland or water.
 - Pre-1914 buildings within 400m of woodland or water.
 - Pre-1914 buildings with gable ends or slate roofs, regardless of location.
 - Buildings located within or immediately adjacent to woodland or immediately adjacent to water.
 - Dutch barns or livestock buildings with a single-skin roof and board-and-gap or Yorkshire boarding if, following a preliminary roost assessment, the site appears particularly suited to bats.
 - Churches and listed buildings.
- 2.3.2 This list is a guide and may be varied where professional and local knowledge can be used to justify variations. The building met the criterion 'Agricultural buildings' and so was selected for survey.

Methodology

- 2.3.3 The standard Preliminary Roost Assessment (PRA) methodology for structures⁵ was followed. This aims to determine the actual or potential presence of bats, by inspecting for potential roost features, and determines any need for further survey and/or mitigation. In many situations, it is not possible to inspect all locations where bats may be present and an absence of bat evidence is not adequate evidence that bats are not present.
- 2.3.4 The barn was inspected internally and externally. A search was made for direct evidence of bat presence. A systematic search pattern was used in order to avoid missing parts of the building or built structure, although some may not have been visible from accessible parts of the building. During the survey, a search was made for live or dead bats, droppings, urine splashes, fur-oil staining and clean, cobweb-free gaps around potential entrance points and crevice roost sites. The sound of bats was listened for. Feeding remains such as moth wings were also searched for, particularly internally. Potential access points and roosting sites were recorded even if there was no direct evidence of use by bats. The inspection was thorough and a consistent search effort was applied to all accessible parts of the buildings. Sometimes bats leave no visible signs of their presence in or outside a building, and rain can remove external signs.
- 2.3.5 In barns, features given particular attention, where present, included:
 - gaps between ridge tiles and roof tiles, usually where the mortar had fallen out or the tiles were broken or lifted;
 - the ridge area of the roof, particularly between the ridge beam and roofing material;
 - lifted lead flashing associated with roof valleys, ridges and hips, or where lead flashing replaces tiles;
 - spaces between external weatherboarding/cladding and the timber frame or wall;
 - gaps behind window frames, lintels and doorways, including the main doors;
 - mortise and tenon joints between truss beams and braces and the principal support columns;
 - cracks and crevices in timber;

⁴ Collins, J. (ed.) (2016) Bat surveys for professional ecologists: good practice guidelines, Third Edition, Bat Conservation Trust.

⁵ Collins, J. (ed.) (2016) Bat surveys for professional ecologists: good practice quidelines, Third Edition, Bat Conservation Trust.

- gaps between stones or bricks, especially where purlins enter the wall and by the wall plate;
- surfaces such as the floor, ledges, windows, sills or walls, machinery or stored materials within the barn which might have bat droppings or urine stains.
- 2.3.6 Close inspection of cavities and behind timbers was aided by use of a powerful torch (Cluson clulite). The roof was inspected from ground level only.
- 2.3.7 The assessment was undertaken during the same site visit as the Phase 1 Habitat Survey.

Limitations to preliminary bat roost assessment: buildings

2.3.8 There were no significant limitations to the survey.

2.4 Assessment methodology

- 2.4.1 The assessment was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's Professional Guidance Series⁶.
- 2.4.2 More details of the assessment methodology are provided in Appendix 2, but, in summary, the impact assessment process involves:
 - identifying and characterising impacts;
 - incorporating measures to avoid and mitigate (reduce) these impacts;
 - assessing the significance of any residual effects after mitigation;
 - identifying appropriate compensation measures to offset significant residual effects; and
 - identifying opportunities for ecological enhancement.
- 2.4.3 The hierarchical process of avoiding, mitigating and compensating for ecological impacts is explained further below.
- In Ecological Impact Assessment (EcIA) it is only essential to assess and report significant *residual* effects (i.e. those that remain after mitigation measures have been taken into account). However, it is considered good practice for the EcIA to make clear both the potential significant effects without mitigation and the residual significant effects following mitigation, particularly where the mitigation proposed is experimental, unproven or controversial. Alternatively, it should demonstrate the importance of securing the measures proposed through planning conditions or obligations.
- 2.4.5 Assessment of the potential impacts of the proposed development takes into account both onsite impacts and those that may occur to adjacent and more distant ecological features. Impacts can be positive or negative. Negative impacts can include:
 - direct loss of wildlife habitats;
 - fragmentation and isolation of habitats through loss of connectivity;
 - disturbance to species from noise, light or other visual stimuli;
 - · changes to key habitat features; and
 - changes to the local hydrology, water quality, nutrient status and/or air quality.
- 2.4.6 Negative and positive impacts on ecological features are characterised based on predicted changes as a result of the proposed activities. In order to characterise the impacts on each feature, the following parameters are considered:
 - the magnitude of the impact:
 - the spatial extent over which the impact would occur;
 - the temporal duration of the impact and whether it relates to the construction or operational phase of the development;
 - the timing and frequency of the impact; and
 - whether the impact is reversible and over what time frame.

⁶ CIEEM (2016) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal,* Second Edition. Chartered Institute of Ecology and Environmental Management, Winchester.

2.4.7 Both short-term (i.e. impacts occurring during the site clearance and construction phases) and long-term impacts are considered.

Conservation status

- 2.4.8 The extent to which the proposed development may have an effect upon ecological features should be determined in the light of its expected influence on the integrity of the site or ecosystem. The integrity of protected sites is considered specifically in the light of the site's conservation objectives. Beyond the boundaries of designated sites with specific nature conservation designations and clear conservation objectives, the concept of 'conservation status' is used. Conservation status should be evaluated for a study area at a defined level of ecological value. The extent of the area used in the assessment relates to the geographical level at which the feature is considered important.
- 2.4.9 For habitats, conservation status is determined by the sum of the influences acting on the habitats and their typical species that may affect their long-term distribution, structure and functions, as well as the long-term survival of its typical species within a given geographical area. For species, conservation status is determined by the sum of influences acting on the species concerned and inter-relationships that may affect the long-term distribution and abundance of its populations within a given geographical area.

Confidence in predictions

- 2.4.10 It is important to consider the likelihood that a change or activity will occur as predicted and also the degree of confidence in the assessment of the impact on ecological structure and function.
 - **Certain** probability estimated at above 95%
 - **Probable** probability estimated above 50% but below 95%
 - **Possible** probability estimated above 5% but below 50%
 - **Unlikely** probability estimated as less than 5%

Cumulative impacts

2.4.11 Consideration is also given to the potential for the development proposal to give rise to significant negative impact in combination with other proposed developments in the local area.

Overall assessment

2.4.12 An overall assessment of value and impact is provided. This is based upon the highest level or value of any of the features or species present, or likely to be present on the site. Similarly, the overall assessment of impact is the impact of greatest significance.

2.5 Mitigation hierarchy

2.5.1 The following principles underpin EcIA and have been followed, where applicable, in this assessment.

•	Avoidance	Seek options that avoid harm to ecological features (for example, by
		locating the proposed development on an alternative site or
		safeguarding on-site features within the site layout design).

Mitigation
 Adverse effects should be avoided or minimised through mitigation measures, either through the design of the project or subsequent measures that can be guaranteed – for example, through a condition or planning obligation.

• **Compensation** Where there are significant residual adverse ecological effects despite the mitigation proposed, these should be offset by appropriate compensatory measures.

• **Enhancement** Seek to provide net benefits for biodiversity over and above requirements for avoidance, mitigation or compensation.

3 Results

3.1 Desk study results

European sites

3.1.1 There were no European sites in the search area.

Sites of national importance

- 3.1.2 There were no sites of national importance in the search area.
- 3.1.3 The site is located within the Cotswold Area of Outstanding Natural Beauty but this is not an ecological designation.

Sites of local importance

- 3.1.4 There were no sites of local importance in the search area.
- 3.1.5 A summary sheet produced by Gloucestershire Centre for Environmental Records is provided in Appendix 3.

Protected, rare and/or priority species

3.1.6 A number of species records were returned for the search area. Records for protected, rare and/or priority species from within the search area are summarised below. In accordance with BS42020 and advice from most Local Biological Record Centres, species lists are not appended but are available to the Local Planning Authority on request.

Veteran trees

3.1.7 No veteran tree records were returned.

Plants

3.1.8 No protected, rare and/or priority plant species records were returned

Invertebrates

- 3.1.9 No protected, rare and/or priority invertebrate species records were returned.
- 3.1.10 Stag beetle is relatively uncommon in this part of the country⁷, and no records for this species were returned.

Amphibians including great crested newts

- 3.1.11 No protected, rare and/or priority amphibian species records were returned.
- 3.1.12 A search on MAGIC maps for great crested newts (GCN) *Triturus cristatus* survey licence returns and mitigation licenses⁸ revealed that none were found within a 1km radius of the site boundary. A pond survey result undertaken between 2017-2019 found that GCN were absent in a pond approximately 790m north-west of the site.

Reptiles

3.1.13 No protected, rare and/or priority reptile species records were returned.

Birds

- 3.1.14 There were many bird records for the area. The majority, including barn owl *Tyto alba*, swift *Apus apus*, house martin *Delichon urbicum*, starling *Sturnus vulgaris*, house sparrow *Passer domesticus*, bullfinch *Pyrrhula pyrrhula*, red kite *Milvus milvus*, dunnock *Prunella modularis*, song thrush *Turdus philomelos*, mistle thrush *Turdus viscivorus*, skylark *Alauda arvensis*, greenfinch *Chloris chloris* and yellowhammer *Emberiza citrinella* were recorded from the semi-natural habitats within the local area.
- 3.1.15 A spotted flycatcher *Muscicapa striata* record was returned from approximately 100m from the site boundary. No bird records were returned from the site itself.

⁷ https://ptes.org/wp-content/uploads/2018/06/SoBSB_2018.pdf

⁸ MAGIC: https://magic.defra.gov.uk/MagicMap.aspx. [Date Accessed 18th May 2022]

Dormouse

- 3.1.16 No dormouse *Muscardinus avellanarius* records were returned.
- 3.1.17 A search on MAGIC maps for dormouse survey licence returns and mitigation licenses⁹ revealed that none were found within a 2km radius of the site boundary.

Terrestrial Mammals including badgers

3.1.18 No protected, rare and/or priority terrestrial mammal species records were returned.

Aquatic Mammals including water voles and otters

3.1.19 No protected, rare and/or priority aquatic mammal species records were returned.

Bats

- 3.1.20 A small number of bat records were returned with the data search. A roost, approximately 100m north-east of the site, contained common pipistrelle Pipistrellus pipistrellus, brown long-eared Plecotus auritus and Natterer's bats Myotis nattereri.
- 3.1.21 A search on MAGIC maps for bat mitigation licenses¹⁰ revealed that common pipistrelle, soprano pipistrelle Pipistrellus pygmaeus, brown long-eared bat, barbastelle Barbastella barbastellus and Natterer's bats were present within the local area. The closest mitigation licence was approximately 100m north-east of the site.
- 3.2 Phase 1 habitat survey results
- 3.2.1 One Phase 1 habitat categories were identified during the Phase 1 habitat survey and is shown on Figure 01. This habitat is described below.

Management, setting and green infrastructure

- 3.2.2 The site consisted of a barn. The barn itself was in good condition; however, the southern pitched roof and wooden support beams were in a poor state of repair.
- 3.2.3 The site was immediately surrounded by barns and housing associated with Broadwell Farm, with Broadwell Road adjacent to the northern site boundary. The wider landscape consisted of arable land and pasture surrounded by hedgerows, with pockets of woodland. The River Evenlode is located approximately 1.5km east of the site.

J3.6 Building

3.2.4 The site consisted of a small barn that was thought to be constructed in the 1600s. A full building description can be found in Section 3.3 below.

3.3 **Preliminary bat roost assessment results: Building**

Building 1 - Barn

- 3.3.1 This barn was of single-storey height and the southern roof pitch and the purlin were in a poor state of repair.
- 3.3.2 The barn was constructed from brickwork. The brickwork was in good condition, with occasional surface holes. None of these holes extended into the cavity wall and were therefore not considered suitable for bats.
- 3.3.3 The pitched roof was covered in flat tiles. Internally these tiles were cemented directly onto the batons, which did not create any crevice for roosting bats. Tiles were missing, and given the construction of the roof, where tiles were missing there was a hole in the roof. Pieces of glass, thought to have been installed after the barn was constructed, were present within the roof. These pieces of glass were broken and missing.
- 3.3.4 The purlin on the southern pitch appeared to be more modern than the northern pitched purlin, as it had the appearance of being machine made. The purlin on the southern pitch was rotten underneath the glass panes. The were no gaps where the purlins are connected to the brickwork.

⁹ MAGIC: https://magic.defra.gov.uk/MagicMap.aspx. [Date Accessed 18th May 2022]

¹⁰ MAGIC: https://magic.defra.gov.uk/MagicMap.aspx. [Date Accessed 18th May 2022]

None of the purlins or rafters provided roosting opportunities for bats, given the lack of crevices and cracks within them.

- 3.3.5 This holes in the roof provided bat access points into the barn; however, there was a lack of roosting opportunities for bats given the construction of the roof and condition of purlin. If bats had been present, there would be evidence such as droppings on the loft floor because there were no crevices for droppings to be contained within, out of sight.
- 3.3.6 No bats or evidence of bats were recorded during the site visit.

4 Evaluation of conservation status and impact assessment

4.1 Assessment rationale

4.1.1 The assessment is based on the ecological data presented within this report. Future changes in the wildlife present on site are beyond the scope of this report, unless specifically stated.

4.2 Evaluation of conservation status and assessment of designated sites

4.2.1 The ecological value of the site is considered below and evaluated using the methodology set out in Appendix 2 and in accordance with species legislation and planning policy, as outlined in Appendix 1.

European Sites

4.2.2 There are no European sites within the search area. The impact of the proposed development upon European sites is therefore assessed as **Neutral**.

Sites of national importance

- 4.2.3 There are no sites of national importance in the search area. The impact of the proposed development upon nationally designated sites is therefore assessed as **Neutral**.
- 4.2.4 Sites of Special Scientific Interest (SSSI) Impact Risk Zones are used to assess the need for the LPA to consult Natural England on planning applications at varying distances from SSSIs. In accordance with the SSSI Impact Risk Zones User Guidance¹¹ consultation with Natural England would be required for the proposed development site for:
 - Infrastructure: Airports, helipads and other aviation proposals
- 4.2.5 The proposed development does not fall within these categories and therefore does not require the LPA to consult Natural England.
- 4.2.6 The impact of the proposed development upon sites of national importance is considered to be **Neutral**, due to the distance of the proposed development from the designated sites, the reasons for the sites' designation and the character of the development within its local context.

Sites of local importance

- 4.2.7 There were no sites of local importance within the search area.
- 4.2.8 The impact of the proposed development upon sites of local importance is considered to be **Neutral**, due to the distance of the proposed development from the locally important sites, the reasons for the sites' designation and the character of the development within its local context.
- 4.3 Evaluation of conservation status and assessment of habitats and green infrastructure

Habitats

- 4.3.1 There were no habitats of ecological importance within the site boundary. The barn provided some value to nesting birds; however, no nests were recorded within the barn during the survey.
- 4.3.2 The value of the habitats within the site are considered to be **Negligible** and the impact of the development is considered to be **Neutral**.

Green infrastructure

4.3.3 There was a lack of green infrastructure within the site.

¹¹ Magic Maps www.magic.defra.gov.uk/MagicMap.aspx

4.4 Evaluation of conservation status and assessment of species

Veteran trees

4.4.1 There are no veteran trees present on the site and the value of the proposed development site for these is therefore **Negligible.** The impact of the proposed development upon veteran trees is **Neutral.**

Plants

4.4.2 The character of the habitats recorded at the site and the plant records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority plants. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Invertebrates

4.4.3 The character of the habitats recorded at the site and the invertebrate records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority invertebrates. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Amphibians including great crested newts

- There were no suitable terrestrial habitats within the site and there was a lack of ponds within 100m of the site boundary.
- 4.4.5 The absence of ponds on site and within 100m of the site, suggests that there is no reasonable likelihood of great crested newts being present. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Reptiles

- 4.4.6 There were no suitable habitats for reptile species within the site. There was also a lack of suitable commuting opportunities for reptiles to colonise from suitable habitats within the local area.
- 4.4.7 The character of the habitats recorded at the site and the reptile records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority reptiles. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral.**

Birds

Breeding birds

- 4.4.8 The barn provided suitable nesting opportunities for breeding birds; however, no evidence of nests were recorded during the site visit. The value of the site for this group is considered to be **Lower** at the **Site Only**. The impact of the development is therefore considered to be **Neutral**.
- 4.4.9 To avoid an offence being committed the works should be carried out outside the nesting bird season (nesting bird season is March to August, inclusive) or following a nesting bird check by a competent person.

Wintering birds

4.4.10 There are no habitats present on site which might support significant populations of wintering birds, although the site does offer some limited foraging potential for small numbers of common species. The site is considered to be of **Negligible** value for this group.

Dormice

- 4.4.11 There were no dormouse records returned for the site, and the habitats present offer an inadequate resource for this species.
- 4.4.12 The site is therefore considered to be of **Negligible** value for this species and the impact of the proposed development is **Neutral**.

Aquatic mammals including water voles and otters

- 4.4.13 There were no waterbodies or watercourses that provided suitable habitat for water voles and otters within the site or within close proximity to the site boundary. Furthermore, there was a lack of suitable terrestrial habitat within the site for this group.
- 4.4.14 The character of the habitats recorded at the site and the mammal records returned for the local area, suggests that the site has no potential to support protected, rare and/or priority aquatic mammals. The value of the proposed development site for this group is **Negligible** and the impact of the proposed development is **Neutral**.

Terrestrial mammals including badgers

4.4.15 There were no badger records returned for the local area, and the habitats present on site are unsuitable for sett construction or foraging activity. The site is therefore considered to be of **Negligible** value for this species and the impact of the proposed development is **Neutral.**

Bats

Roosting potential - trees

4.4.16 There were no trees within the site boundary. The site is therefore considered to be of **Negligible** value for this group and the impact of the proposals is **Neutral**.

Roosting potential - buildings

4.4.17 The barn did not offer roosting opportunities for bats given the construction type of the roof and lack of roosting opportunities within the purlins and rafters. The barn was assessed as providing **Negligible** bat roost potential. The impact of the development upon roosting bats is therefore considered to be **Neutral**. Mitigation measures have been suggested within Section 5 to safeguards bats following the re-roofing.

Foraging/commuting potential

4.4.18 There was a lack of vegetation within the site that provided suitable foraging and commuting opportunities. The value of the site for this group is considered to be **Negligible**. The impact is therefore considered to be **Neutral**. Mitigation measures have been suggested within Section 5 to ensure the site remains the same for bats following the re-roofing.

4.5 Cumulative impacts

4.5.1 There are no known cumulative impacts.

4.6 Proposals for further survey or investigation

Surveys

4.6.1 No further survey or investigation is required.

Biodiversity Net Gain calculations

- 4.6.2 Some Local Planning Authorities require calculations of Biodiversity Net Gain using the national standard Defra metric, although a small proportion of those councils prefer a different metric. The areas of habitats are given various values, and a calculation of those values and habitat area provides the number of biodiversity units a development site has, before development and for the proposals. An appeal decision in October 2020¹² made it clear that where a Local Plan requires Net Gain measured using a metric, but does not quantity the amount of Net Gain, there is no need to meet the 10% Net Gain requirements of the Environment Bill as it is not yet law.
- 4.6.3 Cotswold District Council has a Local Plan¹³ policy EN8 Biodiversity and Geodiversity: Features, Habitats and Species that states 'Development will be permitted that conserves and enhances biodiversity and geodiversity, providing net gains where possible'. The proposed does not alter the building footprint and has a baseline Metric score of zero. It is not considered necessary that a biodiversity net gain calculation is required, due to the nature of the development.

 $^{^{12}}$ Planning Inspectorate (14th October 2020) Appeal Ref: APP/Y0435/W/20/3251121 Land at Brickhill Street, South Caldecotte, Milton Keynes MK17 9FE

 $^{^{13}}$ Cotswold District Local Plan 2011-2031. Adopted 3 August 2018.

5 Mitigation and avoidance measures

5.1 Avoidance measures

5.1.1 The following impact avoidance measures have been identified and will be delivered.

Breeding birds

• The re-roofing should take place outside the bird breeding season of March to August inclusive, to prevent disturbance to birds, or if re-roofed during that period, only after a survey has shown that no active nests are present.

Bats

 The materials used in roof repair will not include breathable membrane because bats' claws get permanently caught in the membrane and the bats die of dehydration.
 Traditional bitumen felt and/or sarking will be used as an alternative.

5.2 Proposed mitigation for known impacts

5.2.1 No mitigation is needed for the following ecological features, because no significant impacts have been identified: European sites and nationally important designated sites; locally important sites; rare plants; invertebrates; amphibians such as great crested newts; reptiles; breeding birds; terrestrial mammals including dormice and badgers; aquatic mammals including otters and water voles and bats.

5.3 Compensation for ecological impacts

5.3.1 No compensatory habitat creation or management is proposed.

5.4 Species licensing

- 5.4.1 No species licence is necessary.
- 5.4.2 It is not considered necessary to enter the NatureSpace District Licensing scheme for great crested newts given the lack of ponds within the site and within 100m of the site boundary and the very limited terrestrial habitat within the site itself, as well as the nature of the proposals.

6 Recommendations

6.1 Recommended conditions

- 6.1.1 It is recommended that the following conditions, based on model conditions in Appendix D of BS42020:2013, are applied to the planning permission.
- 6.1.2 The re-roofing should not take place between 1st March and 31st August inclusive, unless a competent ecologist has undertaken a careful, detailed check of barn for active birds' nests immediately before the re-roofing and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the local planning authority.

7 Conclusions

- 7.1.1 The purpose of this report was to inform a planning application for the proposed development.
- 7.1.2 The overall value of the site to wildlife is considered to be **Lower** at the **Site only** scale.
- 7.1.3 A summary of assessments of value and the impact of the proposed development without mitigation, and the residual significant effects following mitigation, is provided in the table below.

Feature	Level of value	Scale	Unmitigated impact	Confidence level	Mitigated impact
European Sites	Very High	European	Neutral	Certain	-
Sites of national importance	High	National	Neutral	Certain	-
Sites of local importance	Medium	County			
Habitats	Negligible	-	-	-	-
Veteran trees	Negligible	•	-	-	-
Plants	Negligible	-	-	-	-
Invertebrates	Negligible	-	-	-	-
Amphibians including great crested newts	Negligible	-	-	-	-
Reptiles	Negligible	-	-	-	-
Breeding birds	Lower	Site Only	Neutral	Certain	-
Wintering birds	Negligible	•	-	-	-
Dormice	Negligible	•	-	-	-
Aquatic mammals including water voles and otters	Negligible	1	-	-	-
Terrestrial mammals including badgers	Negligible	-	-	-	-
Bats: roosting in trees	Negligible	1	-	-	-
Bats: roosting in buildings	Negligible	1	-	-	-
Bats: foraging/commuting	Negligible	-	-	-	-

- 7.1.4 No further surveys are considered necessary at this stage.
- 7.1.5 The overall impact of the proposals is considered to be **Neutral**.

Figures





B22049 - Broadwell Farm, Broadwell

Phase 1 Habitat Survey

Figure 01

Scale: NTS

May 2022



Legislative and policy context

There is a number of pieces of legislation, regulations and policies specific to ecology which underpin this assessment. These may be applicable at a National or Local level. References to legislation are given as a summary for information and should not be construed as legal advice.

Birds Directive

The European Community Council Directive on the Conservation of Wild Birds (79/409/EEC), normally known as the Birds Directive, sets out general rules for the conservation of all naturally occurring wild birds, their nests, eggs and habitats. It was superseded by the 'new' Birds Directive (2009/147/EC) which generally updated the previous directive.

Since the end of the Brexit transition period on 31st December 2020 the Birds Directive no longer is part of the UK legal system.

Habitats Directive

The European Community Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC), normally known as the Habitats Directive, aims to protect the European Union's biodiversity. It requires member states to provide strict protection for specified flora and fauna (i.e. European Protected Species) and the registration and regulation of Special Areas of Conservation.

Since the end of the Brexit transition period on 31st December 2020 the Habitats Directive no longer is part of the UK legal system.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 generally follow the Birds Directive and Habitats Directive but unlike the Directives there is no role for the European Union; the UK Government has taken that role following the end of the Brexit transition period on 31st December 2020. For clarity, the following paragraphs consider the case in England only, with Natural England given as the appropriate nature conservation body. In Wales, the Countryside Council for Wales is the appropriate nature conservation body.

Special Protection Areas and Special Areas of Conservation are defined in the regulations as forming a national network of 'European sites'. The Regulations regulate the management of land within European sites, requiring land managers to have the consent of Natural England before carrying out management. Byelaws may also be made to prevent damaging activities and if necessary land can be compulsorily purchased to achieve satisfactory management.

The Regulations define competent authorities as public bodies or statutory undertakers. Competent authorities are required to make an appropriate assessment of any plan or project they intend to permit or carry out, if the plan or project is likely to have a significant effect upon a European site. The permission may only be given if the plan or project is ascertained to have no adverse effect upon the integrity of the European site. If the competent authority wishes to permit a plan or project despite a negative assessment, imperative reasons of over-riding public interest must be demonstrated, and there should be no alternative to the scheme. The permissions process in that case would involve the Secretary of State. In practice, there will be very few cases where a plan or project is permitted despite a negative assessment. This means that a planning application has to be assessed by the Local Planning Authority, based on information provided by the applicant, and the assessment must either decide that it is likely to have no significant effect on a European site or ascertain that there is no adverse effect upon the integrity of the European site.

Government policy is for Ramsar sites (wetlands of global importance) to be treated as if they were European sites within the planning process.

Appropriate Assessment

Appropriate Assessment is required in certain instances under the Conservation of Habitats and Species Regulations 2017. Regulation 63 says that:

- 63.— (1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which-
 - (a) is likely to have a significant effect on a European site or a European offshore marine site

(either alone or in combination with other plans or projects), and

- (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.
- (2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required.
- (3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies.
- (4) It must also, if it considers it appropriate, take the opinion of the general public, and if it does so, it must take such steps for that purpose as it considers appropriate.
- (5) In the light of the conclusions of the assessment, and subject to regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).
- (6) In considering whether a plan or project will adversely affect the integrity of the site, the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given.

Regulation 70 provides that Regulations 63 and 64 apply in relation to the grant of planning permission. Regulation 70(3) specifically addresses outline applications, saying that:

"Where [Regulations 63 and 64] apply, outline planning permission must not be granted unless the competent authority is satisfied (whether by reason of the conditions and limitations to which the outline planning permission is to be made subject, or otherwise) that no development likely adversely to affect the integrity of a European site or a European offshore marine site could be carried out under the permission, whether before or after obtaining approval of any reserved matters."

The tests under the Habitats Regulations are very strict. To exclude a likely significant effect under Regulation 63(1)(a) or to exclude an adverse effect on integrity under Regulation 63(5) a competent authority must be certain beyond a reasonable scientific doubt as to the absence of such effects.

Although not provided for under the Habitats Regulations, Government policy under paragraph 176(b) of the NPPF is for Ramsar sites (wetlands of global importance) to be treated as if they were European sites within the planning process.

The competent authority is typically the local planning authority, or an Inspector / Secretary of State for appeals. The appropriate assessment contains the information the council requires for the purposes of its assessment under the Habitat Regulations.

The Habitats Regulations also are applicable to local authority land use plans and policies. If a policy or plan is likely to have a significant effect upon a European site, the permission may only be given if the policy or plan is ascertained to have no adverse effect upon the integrity of the European site. This approach gives rise to a hierarchy of plans each with related appropriate assessments. For example, the appropriate assessment of a Regional Spatial Strategy will affect policies within a Core Strategy, which will then need its own appropriate assessment, and so on.

European Protected Species

European Protected Species of animals are given protection from deliberate capture, injury, killing, disturbance or egg taking/capture. Their breeding sites or resting places are also protected from damage or destruction, which does not have to be deliberate. A number of species are listed as European Protected Species, with those most likely to be considered in planning applications being bats, dormouse, great crested newt and otter. Natural England may give a licence for actions that are otherwise illegal, subject to them being satisfied

on the three tests of no alternative, over-riding public interest, and maintenance of the species in favourable condition.

European Protected Species of plant are also listed and given protection. These species are generally very rare and unlikely to be present in proposed development sites.

Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 has been amended many times, including by the Countryside and Rights of Way Act 2000. It contains provisions for the notification and regulation of Sites of Special Scientific Interest, and for protected species.

The Regulations regulate the management of land within Sites of Special Scientific Interest, requiring land managers to have the consent of Natural England before carrying out management.

All public bodies are defined as 'S28G' bodies, which have a duty to further the nature conservation of Sites of Special Scientific Interest in the undertaking of their functions. In practice, this prevents planning applications being permitted if they would harm Sites of Special Scientific Interest, as it would be a breach of that duty.

The Act makes it an offence intentionally to kill, injure, or take any wild bird, take, damage or destroy the nest of any wild bird, while that nest is in use or being built, or take or destroy an egg of any wild bird. Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young.

The Act makes it an offence intentionally to kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. Some species have lesser protection under this Act, for example white-clawed crayfish, common frog and toads are only protected from sale, and reptile species, other than smooth snake and sand lizard, are protected from intentional killing or injury, but they are not protected from disturbance and their habitat is not protected. It is also an offence intentionally to pick, uproot or destroy any wild plant listed in Schedule 8.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) dated July 2021 replaces previous Government Policy in relation to nature conservation and planning expressed in the previous version of the NPPF dated February 2019.

Chapter 15 paragraph 174(d) of the NPPF says that the planning system should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity.

Paragraphs 175 and 176 relate to policy for designated sites of biodiversity or landscape importance. Local Plan policies should distinguish between the hierarchy of international, national and locally designated sites and allocate land with the least environmental or amenity value and maintain and enhance networks of habitats and green infrastructure. Further policy is within paragraph 179, where Local Planning Authorities should within their Local Plans aim to protect and enhance biodiversity by:

- Identifying, mapping and safeguarding 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
- Promoting 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.

When determining planning applications Local Planning Authorities should apply the following principles (paragraph 180):

• If significant harm to biodiversity resulting from a development cannot be avoided (through locating it on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused,

- 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;
- 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 and a suitable compensation strategy exists; and
- 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.

Paragraph 181 adds protection to candidate sites of European or International importance (Special Protection Areas, Special Areas of Conservation and Ramsar sites) and also to those sites identified or required as compensatory measures for adverse effects on habitats sites, potential SPA, possible SAC listed or proposed Ramsar sites.

Paragraph 182 clarifies that 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, i.e. a European 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 'Biodiversity and Geological Conservation – Statutory Obligations and their Impact Within the Planning System' referenced ODPM 06/2005 has not been replaced and remains valid. It sets out the legislation regarding designated and undesignated sites and protected species and describes how the planning system should take account of that legislation. It does however pre-date the NERC Act 2006 (see below), which includes a level of protection for a further list of habitats and species regardless of whether they are on designated sites or elsewhere.

Natural Environment and Rural Communities (NERC) Act 2006

This Act includes a list of habitats and species of principal importance in England. Local Authorities are required to consider the needs of these habitats and species when making decisions, such as on planning application.

Local Planning Authority's planning policy

The Local Planning Authority will have policies relating to biodiversity conservation.

Species Legislation

The following table provides an overview of legislation with regard to species.

	Legislation				
Protected Species	Wildlife & Countryside Act, 1981	The Conservation of Habitats and Species Regulations, 2017	Natural Environment & Rural Communities (NERC) Act, 2006	Protection of Badgers Act, 1992	
Plants (certain 'rare' species)	√	√ 14	√		
Invertebrates (certain 'rare' species)	✓	√ 15	✓		
White-clawed crayfish	✓		✓		
Great crested newt, natterjack toad, pool frog	√	✓	✓		
Other amphibians	√ 16		✓		
Sand lizard, smooth snake	√	√ 17	✓		
Other reptiles	√ 18		✓		
Breeding birds	✓	✓	✓		
Wintering birds (certain 'rare' species)	✓	✓	✓		
Bats	✓	✓	✓		
Dormouse	√	√	√		
Water vole	✓		✓		
Otter	✓	✓	✓		
Badger				✓	

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¹⁴ Nine species present in the UK, with very specialised habitat requirements, are European Protected Species.

¹⁵ Fisher's estuarine moth, large blue butterfly and lesser whirlpool ram's-horn snail are European Protected Species.

¹⁶ The four other native amphibian species (smooth and palmate newts, common frog and common toad) are only protected against trade under this act.

¹⁷ Smooth snake and sand lizard are European Protected Species.

¹⁸ The four other native reptile species (common lizard, slow worm, grass snake and adder) are protected against intentional killing, injury and trade under this act.

Assessment Methodology: Valuing Ecological Features and Impact Assessment

The three-stage assessment method for determining ecological value is based upon assessment matrices published in the Handbook of Biodiversity Methods¹⁹. It has been updated to comply with recent changes to planning policy and legislation. The three-stage process allows the value of ecological sites, habitats and populations, and the magnitude of the impact, to be cross-tabulated to identify impact significance.

Valuing ecological sites, habitats and populations: scale and level of value

Scale	Level of value	Sites, habitats and populations		
Greater than national	Very High	Statutory sites designated under international conventions or related national legislation, in particular: • Wetlands of International Importance (Ramsar sites), • Special Areas of Conservation, • Special Protection Areas		
National	High	 Special Protection Areas. Statutory sites designated under national legislation, for example: Sites of Special Scientific Interest (England, Wales, Scotland), National Nature Reserves (UK). Significant viable areas of habitats, or populations or assemblages of species principal importance for the conservation of biodiversity in England and Wale (Section 41 species and habitats)²⁰ of such size and quality as might qualify f SSSI designation. Populations or assemblages of red-listed, rare or legally protected species, as might qualify for SSSI designation, for example: species of conservation concern, Red Data Book (RDB) species, birds of conservation concern (Red List species), nationally rare and nationally scarce species, legally protected species. 		
County	Medium	Statutory sites of lower conservation value designated under national legislation, for example Local Nature Reserves (UK). Non-statutory sites designated under local legislation, for example: County Wildlife Sites, Local Wildlife Sites, Roadside Nature Reserves (protected road verges). Viable areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats) ²¹ of such size and quality as might qualify for designation at the county level. Other non-designated sites which meet the criteria for designation at this level.		

¹⁹ Hill, D., Fasham, M., Tucker, G., Shewry, M., Shaw, P. (eds.) (2005) *Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring*, Cambridge University Press.

²⁰ Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

²¹ Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

District/ Borough ²²	Lower	Sites meeting criteria for metropolitan designations. Undesignated sites or features not meeting criteria for county designation, but that are considered to enrich appreciably the habitat resource within the local district or borough, for example: • ancient woodland, • diverse, ecological valuable and cohesive hedgerow networks, • significant clusters or groups of ponds, • veteran or ancient trees. Viable areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats) ²³ not qualifying for designation at the county level.	
Parish	Lower	Areas of habitat considered to enrich appreciably the ecological resource within the context of the local parish. Small areas of habitat or populations of species of principal importance for the conservation of biodiversity in England and Wales (Section 41 species and habitats) ²⁴ .	
Site only	Negligible	Ecological feature or resource not meeting any of the above criteria.	

Note: there is much overlap in designations and lists of important species, and many sites, habitats and species appear on several. Where a site, habitat or species has multiple designations or levels of protection, normally the highest level would be the level at which impacts are assessed.

²² Including metropolitan boroughs.

²³ Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

²⁴ Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx. Listed under S41 of the Natural Environment and Rural Communities Act 2006 http://www.naturalengland.org.uk/ ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx.

Definitions of impact magnitude

Magnitude (negative or positive)	Definition/trigger
	Loss or severe degradation affecting over 75% of a site feature, habitat or population.
Severe	Adverse change to, or reduced condition of, over 90% of a site feature, habitat or population, for example through disturbance or trampling.
	Loss or severe degradation affecting over 25% of a site feature, habitat or population.
Major	Adverse change to, or reduced condition of, over 50% of a site feature, habitat or population, for example through disturbance or trampling.
	For benefits, an impact equivalent in nature conservation terms to a gain of over 50% in a site feature, habitat or population.
	Loss or severe degradation affecting over 5% of a site feature, habitat or population.
Moderate	Adverse change to, or reduced condition of, over 10% of a site feature, habitat or population, for example through disturbance or trampling.
	For benefits, an impact equivalent in nature conservation terms to a gain of 10-50% in a site feature, habitat or population
	Loss or severe degradation affecting up to 5% of a site feature, habitat or population.
Minor	Adverse change to, or reduced condition of, 1-10% of a site feature, habitat or population, for example through disturbance or trampling.
	For benefits, an impact equivalent in nature conservation terms to a gain of up to 10% in a site feature, habitat or population.
	No loss of or severe degradation to a site feature, habitat or population.
Insignificant	Adverse change to, or reduced condition of, less than 1% of a site feature, habitat or population.
	No benefit to a site feature, habitat or population.

Impact significance

	Magnitude of impact							
Value of site, habitat or population	Severe Negative	Major Negative	Moderate Negative	Minor Negative	Insignificant	Minor Positive	Medium Positive	Major Positive
Very High	Severe Adverse	Severe Adverse	Major Adverse	Major Adverse	Neutral*	Major Beneficial	Major Beneficial	Major Beneficial
National (High)	Severe Adverse	Major Adverse	Major Adverse	Moderate Adverse	Neutral*	Moderate Beneficial	Major Beneficial	Major Beneficial
County/Metropolitan (Medium)	Major Adverse	Major Adverse	Moderate Adverse	Moderate Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Major Beneficial
District/Borough (Lower)	Major Adverse	Moderate Adverse	Moderate Adverse	Minor Adverse	Neutral	Minor Beneficial	Moderate Beneficial	Moderate Beneficial
Parish (Lower)	Moderate Adverse	Moderate Adverse	Minor Adverse	Minor Adverse	Neutral	Minor Beneficial	Minor Beneficial	Moderate Beneficial
Minimal/negligible	Neutral	Neutral	Neutral	Neutral	Neutral	Minor Beneficial	Minor Beneficial	Moderate Beneficial

Where the impact significance falls below Minor Adverse, the term 'Neutral' is used.

^{*}In some circumstances, some 'insignificant' impacts might fail legislative or policy tests and the impact would be greater than Neutral.



Location Name: Grid Ref: Search Area:

Broadwell Farm, Broadwell

SP 20641 27440

1km

Sites of conservation importance recorded within, or overlapping, the area of search

SPA, Ramsar

None present

SAC

None present

SSSIs

None present

Local Wildlife Sites [LWS]

None present

National Nature Reserve, Local Nature Reserve

None present

GWT Nature Reserve

None present

Conservation Road Verge

None present

Unconfirmed Sites [Potential LWS quality and toad patrol location]

None present