

Ecological Assessment: Land at Brook House Farm, Yarpole, Leominster HR6 0BB

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Client:
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1. SUMMARY

On 15 July 2021 an Ecological Assessment was carried out of a proposed development site known as 'Land at Brook House Farm', Yarpole, Leominster HR6 0BB.

The Ecological Assessment comprised a Desk Study and an Extended UK Habitat Survey.

Historical biodiversity records were purchased from the Herefordshire Biological Records Centre.

Dr. R. M. Jones, experienced field biologist, surveyor, Natural England licensed bat worker (Licence number 2015-11179-CLS-CLS) and Natural England licensed newt worker (Licence number 2016-19615-CLS-CLS) carried out the assessment/survey.

The Ecological Assessment was requested by Border Oak Design & Construction Limited, on behalf of Border Oak Design & Construction Limited, in anticipation of making a planning application for the construction of dwellings on Land at Brook House Farm.

1.1 Proposed Development

There is a proposal to construct dwellings on Land at Brook House Farm.

Access to the dwellings will utilise an existing shared ownership/usage driveway, that passes through the Brook House Farm yard and building complex.

Although the proposed development may require the removal of some boundary vegetation, there is/are opportunities within the scheme design for the planting of new trees, shrubs and hedges.

1.2 Desk Study

There is one designated wildlife site within 2km of Land at Brook House Farm; Fishpool Valley Site of Special Scientific Interest.

Given the scale and nature of the proposed development, it is not anticipated that the development would have a negative impact on the conservation status of the Fishpool Valley Special Scientific Interest.

There are records of [REDACTED] Bat, Bird, Dormouse, Great crested newt, Hedgehog, Otter, plants and Reptile within 2km of Land at Brook House Farm.

It appears that there are no records of protected flora or fauna directly on the proposed development site. However, there are records of bat and Hedgehog within the Brook House Farm yard and building complex at the immediate north and west.

With the adoption of appropriate mitigation, compensation and enhancement measures; it is not considered that development of Land at Brook House Farm will adversely affect the conservation status of protected species recorded within the locality.

1.3 Habitat

The Land at Brook House Farm site has been previously subject to ecology surveys by Star Ecology, to inform previous proposed developments. The most recent survey was carried out on 4 December 2018. The previous surveys recorded Land at Brook House Farm as being a Brown Rat (*Rattus norvegicus*) infested former farm yard and building complex of low ecological value.

Since 4 December 2018, the Land at Brook House Farm proposed development site has been cleared, and the land now consists of areas of hardstanding and stock-piled concrete and soil. Ruderal and ephemeral weeds are present throughout.

The proposed development site is of very low/negligible ecological value.

However:

- the proposed development site may be used by bats for commuting and/or foraging;
- Hedgehog may use the proposed development site for breeding/nesting, commuting and/or foraging;
- Small Breeding Birds may use vegetation bounding the proposed development site for nesting purposes.

1.4 Mitigation

Mitigation is recommended for:

- Bat (external lighting)
- Hedgehog
- Small Breeding Bird

1.5 Biodiversity Enhancement

The proposed development should include the retention, protection and enhancement of boundary hedges and trees.

Enhancement measures for wildlife are recommended.

2. INTRODUCTION

Star Ecology was commissioned by Border Oak Design & Construction Limited, on behalf of Border Oak Design & Construction Limited, to conduct an Ecological Assessment of a proposed development site known as 'Land at Brook House Farm', Yarpole, Leominster HR6 0BB.

From this point forward the proposed development site 'Land at Brook House Farm' is referred to as 'The Site'.

Dr. R. M. Jones, experienced field biologist, surveyor, Natural England licensed bat worker (Licence number 2015-11179-CLS-CLS) and Natural England licensed newt worker (Licence number 2016-19615-CLS-CLS) carried out the assessment/survey.

The Ecological Assessment was requested in anticipation of making a planning application for the construction of dwellings on The Site. The Ecological Assessment comprised a Desk Study and an Extended UK Habitat Survey.

2.1 Report Status

This report has been produced to inform proposed development plans and a proposed planning application. The report includes recommendations for mitigation and biodiversity enhancement.

Following the finalisation of development plans; the report may be upgraded/revised to confirm mitigation measures and/or to confirm (if possible) the likely post-development biodiversity net gain.

2.2 Site Description

The Site is approximately 0.63 hectares in size and forms the south and east areas of the Brook House Farm yard and building complex. The Brook House Farm yard and building complex is within the south of the village of Yarpole.

The Site is neighboured by:

- a current development site of domestic properties at the north and (north) east;
- an area of common nettle (*Urtica dioica*) dominated tall ruderal vegetation and an improved grassland field at the (south) east;
- a minor watercourse/brook and an improved grassland field at the south; and,
- the Brook House Farm house and previously converted holiday-let barns and yard areas within part of the Brook House Farm yard and building complex at the immediate north and west.

The landscape surrounding The Site consists of properties forming the village of Yarpole, isolated properties, intensively managed agricultural fields and small parcels of mixed-tree species woodland. Agricultural fields are predominantly bounded by hedgerows, many of which appear to be unmanaged and contain mature trees.

Map 1. Location of The Site.

Map 2. Location of The Site and surrounding habitat types.

Please note: the aerial photograph of habitat types is a 'screenshot' from Google Maps.

Map 1. Location of The Site (indicated by a red cross).



Map 2. Location of The Site (indicated by a red cross) and surrounding habitat types.



2.3 Proposed Development

It is understood that there is a proposal to construct dwellings on The Site.

Access to the dwellings will utilise an existing shared ownership/usage driveway.

Although the proposed development may require the removal of some boundary vegetation, there is/are opportunities within the scheme design for the planting of new trees, shrubs and hedges.

Further details on the proposed development may be obtained from Border Oak Design & Construction Limited.

3. DESK STUDY

3.1 Method

A data search was commissioned from Herefordshire Biological Records Centre (HBRC) for records of priority/protected species within a 2km radius of The Site.

Designated wildlife sites within 2km of The Site were identified using the Multi-Agency Geographic Information Centre (MAGIC) (<http://magic.gov.uk>).

3.2 Results

HBRC provided records to Star Ecology on 30 June 2021.

A graphical representation of biodiversity records obtained from HBRC is contained in Appendix 1.

3.2.1 Designated Wildlife Sites

Fishpool Valley Site of Special Scientific Interest, a 33.11 hectare area of mixed broadleaved and Yew (*Taxus* sp.) woodland, is situated approximately 1.8km northwest of The Site.

3.2.2 Badger

Legislation

Badgers (*Meles meles*) and their setts are protected by the Protection of Badgers Act 1992.

Under this legislation it is illegal to:

- wilfully kill, injure or take, or attempt to kill, injure or take, a Badger;
- cruelly ill-treating a Badger, digging for Badgers, using Badger tongs, using a firearm other than the type specified under the exceptions within the Act;
- interfere with a Badger sett by damaging, destroying, obstructing, causing a dog to enter a sett, disturbing an occupied sett - either by intent or by negligence;
- sell or offer for sale a live Badger, having possession or control of a live Badger;
- mark, attach a ring, tag, or other marking device to a Badger.

A Natural England Badger Disturbance Licence may be required for development works affecting Badgers.

Record



3.2.3 Bat

Legislation

All bat species (*Rhinolophidae* and *Vespertilionidae*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a bat;

- deliberately disturb bats. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of a bat;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead bat, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection.

A bat resting place may be a structure a bat uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not bats are in occupation, as they may be re-used by bats.

All species of bat are priority species in the UK Biodiversity Action Plan (HM Government 1994 et seq.) and are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

A European Protected Species (EPS) Development Licence from Natural England may be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against bats.

Records

HBRC has 86 records of bat within 2km of The Site. These records are detailed in Table 1. The earliest record was collected in year 1989; the most recent in year 2018. Records have been collected from 22 different National Grid Reference (NGR) locations. Two records have a 1m precision, ten records have a 10m precision, 71 records have a 100m precision and three records have a 1km precision.

It does not appear that there are records of bat on The Site. However, there are records of unidentified bat, Brown Long-eared, Common pipistrelle, Long-eared bat species, Noctule, Soprano Pipistrelle, unidentified *Myotis* bat species and Whiskered bats within the Brook House Farm yard and building complex at the immediate north and west of The Site.

Table 1. Records of bat within 2km.

Bat species or Group	Scientific name	Number of records	Most recent year recorded	Earliest year recorded	Closest approximate position to the Building	Year of collection of the closest record
Lesser horseshoe	<i>Rhinolophus hipposideros</i>	1	1994	1994	1.67km northwest	1994
Natterer's	<i>Myotis nattereri</i>	2	2018	2018	150m north	2018
Unidentified Pipistrelle species	<i>Pipistrellus sp.</i>	2	2017	2017	650m south	2017
Whiskered	<i>Myotis mystacinus</i>	2	2005	2005	50m north	2005
Noctule	<i>Nyctalus noctula</i>	6	2007	2011	50m north	2005
Unidentified Myotis species	<i>Myotis sp.</i>	6	2005	2018	50m north	2007
Bats	<i>Chiroptera</i>	9	1989	2017	50m north	2005
Brown Long-Eared	<i>Plecotus auritus</i>	9	2003	2011	50m north	2005
Unidentified Long-eared species	<i>Plecotus sp.</i>	9	2005	2017	30m north	2007
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	12	2005	2018	50m north	2007
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	28	1994	2018	50m north	2005

3.2.4 Bird

HBRC has 3637 records of 82 species of Bird within 2km of The Site. The earliest record was collected in year 1977; the most recent in year 2017. Records have been collected from 41 different (NGR) locations.

Of the records of bird recorded within 2km of The Site, 11 are fully protected under the Wildlife and Countryside Act 1981.

These species are:

- Barn Owl (*Tyto alba*)
- Brambling (*Fringilla montifringilla*)
- Common Crossbill (*Loxia curvirostra*)
- Fieldfare (*Turdus pilaris*)
- Goshawk (*Accipiter gentilis*)
- Hobby (*Falco subbuteo*)
- Hoopoe (*Upupa epops*)
- Kingfisher (*Alcedo atthis*)
- Peregrine (*Falco peregrinus*)
- Red Kite (*Milvus milvus*)
- Redwing (*Turdus iliacus*)

3.2.5 Dormouse

Legislation and policy

The Common or Hazel Dormouse (*Muscardinus avellanarius*) is protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill a Dormouse;
- deliberately disturb Dormice. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Dormouse;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Dormouse, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Dormouse while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which a Dormouse uses for shelter or protection.

A Dormouse resting place may be a structure a Dormouse uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not Dormice are in occupation, as they may be re-used by Dormice.

All species of Dormouse are priority species in the UK Biodiversity Action Plan (HM Government 1994 et seq.) and are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

A European Protected Species (EPS) Development Licence from Natural England may be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against Dormice.

Record

HBRC has one record of Dormouse within 2km of The Site.

The record was collected in year 1991 approximately 1.41km southwest of The Site.

3.2.6 Great crested newt

Legislation

Great crested newt (*Triturus cristatus*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill a Great crested newt;
- deliberately disturb Great crested newt. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Great crested newt;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Great crested newt, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Great crested newt while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which a Great crested newt uses for shelter or protection.

A European Protected Species (EPS) Development Licence from Natural England will be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against Great crested newt.

Records

HBRC has nine records of Great crested newt within 2km of The Site.

The earliest record was collected in year 1984; the most recent in year 2000.

The closest record of Great crested newt to The Site is approximately 1.65km northwest.

3.2.7 Hedgehog

Legislation and policy

(European) Hedgehog (*Erinaceus europaeus*) are:

- listed on Appendix III of the Bern Convention;
- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981;
- are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006;
- listed as a Priority Species for conservation action under the United Kingdom Biodiversity Action Plan.

Records

HBRC has five records of Hedgehog within 2km of The Site. The earliest record was collected in year 2000; the most recent in year 2005. There is a record of Hedgehog within the Brook House Farm yard and building complex at the immediate west of The Site.

3.2.8 Otter

Legislation

Otter (*Lutra lutra*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill an Otter;
- deliberately disturb Otter. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of an Otter;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Otter, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Otter while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which an Otter uses for shelter or protection.

A European Protected Species (EPS) Development Licence from Natural England will be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against Otter.

Records

HBRC has two records of Otter recorded within 2km of The Site, both collected in year 2009. The closest record of Otter to The Site is approximately 1.64km northwest.

3.2.9 Plants

HBRC has 55 records of 30 species of plants within 2km of The Site. The earliest record was collected in year 1978; the most recent in year 2008.

3.2.10 Reptile

Legislation and policy

Four reptile species, Adder (*Vipera berus*), Grass snake (*Natrix helvetica*), Slow-worm (*Anguis fragilis*) and Viviparous (or Common) Lizard (*Lacerta vivipara*), have protection under the Wildlife and Countryside Act 1981.

Their inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 gives 'partial protection' (i.e. only parts of section 9 apply). In addition to restrictions with respect

to trade (prohibition of sale and advertising for sale, etc.) they are also protected from intentional killing or injury.
Natural Environment and Rural Communities Act 2006 lists all reptile species as a species of principle importance.
Reptiles are listed as priority species under the UK Biodiversity Action Plan.

Records

HBRC has 13 records of Adder within 2km of The Site.
The earliest record was collected in year 1870; the most recent in year 2017.
The closest record of Adder to The Site is approximately 1.59km northwest.

HBRC has five records of Grass snake within 2km of The Site.
The earliest record was collected in year 1977; the most recent in year 2017.
The closest record of Grass snake to The Site is approximately 1.47km northwest.

HBRC has two records of Lizard within 2km of The Site.
The earliest record was collected in year 2006; the most recent in year 2008.
The closest record of Lizard to The Site is approximately 1.76km north.

HBRC has one record of Slow-worm within 2km of The Site.
The record was collected in year 2008 approximately 1.76km north of The Site.

3.3 Conclusions

There is one designated wildlife site, Fishpool Valley Site of Special Scientific Interest is located within 2km of The Site.

It is not considered that HBRC holds records for wildlife directly on The Site.
However, there are records of bat and Hedgehog within the Brook House Farm yard and building complex at the immediate north and west of The Site.

Records indicate that there may be protected species, particularly [REDACTED] Bat, Bird and Hedgehog, within the vicinity of The Site.

Development of The Site will need to be carried out in a manner that will not negatively impact the status of protected fauna and flora within the vicinity of The Site.

4. EXTENDED UK HABITAT SURVEY

An Extended UK Habitat Survey (Butcher et al., 2020) of The Site, and the field in which it is situated, was carried out on 15 July 2021.

The Extended UK Habitat Survey was carried out by Dr. R. M. Jones, experienced field biologist and surveyor.

4.1 Survey Objectives

- a) To determine if The Site contains flora of significant ecological value.
- b) To determine if The Site contains fauna of significant value and/or Protected Species.

4.2 Method

To fulfil the brief of undertaking an ecological assessment of The Site an Extended UK Habitat Survey was conducted (Butcher et al., 2020).

This is a recently devised technique for classifying and mapping habitats.

The aim is to provide a record of habitats that are likely to be ecologically important.

Where appropriate, the extent of each habitat type was mapped, and details of relative plant species abundance within homogenous areas were recorded.

If appropriate, species abundance was measured on the DAFOR scale (Dominant, Abundant, Frequent, Occasional and Rare).

In order to allow efficient reporting of the boundaries on or immediately adjacent to The Site; where appropriate boundaries (such as hedges, fences and walls) were recorded and described individually.

In order to allow efficient reporting of trees on or immediately adjacent to The Site; where appropriate individual trees were recorded and described individually.

Please note:

A separate and thorough Tree Survey and/or Arboricultural Assessment (such as a tree survey to BS5837:2012 "Trees in relation to design, demolition and construction. Recommendations") or similar was not carried out by Star Ecology.

During the Extended UK Habitat Survey the presence, or potential presence, of protected species, such as [REDACTED] reptiles, was recorded on The Site.

Surveyor accessible land within approximately 50m of The Site was also surveyed. Incidental records of birds present on The Site were made throughout the survey.

Where appropriate, Target Note descriptions were recorded for features of nature conservation importance and/or extra-ordinary features of The Site. These include areas of valued vegetation and places that might support notable animal species.

4.3 Limitations

It is not considered that there are any significant limitations to the survey.

4.4 Results

4.4.1 Climate Conditions

The survey was carried out in dry and bright conditions with little or no breeze.

4.4.2 Habitat types

Appendix 2 contains an Extended UK Habitat Survey Map.

Appendix 3 contains a photographic record of the survey.

The Site has been previously subject to ecology surveys by Star Ecology, to inform previous proposed developments. The most recent survey was carried out on 4 December 2018. The previous surveys recorded The Site as being a Brown Rat (*Rattus norvegicus*) infested former farm yard and building complex of low ecological value.

Since the survey visit of 4 December 2018, former agricultural buildings on The Site have been demolished, areas of concrete hardstanding have been removed and the various mounds of rubbish have been cleared.

The Site is a previously developed area of land that fulfils the UK Habitat classification category of u1b6 'other developed land'.

The Site is the site of a former agricultural stackyard and part of a (former) agricultural field, and the following habitats are present:

- intact concrete yard and former building floor slabs
- areas of compacted aggregate (including crushed rubble)
- mounds of concrete rubble
- mounds of soil
- mounds of mixed soil and aggregate
- areas of common tall herbs (16)
- areas ruderal/ephemeral vegetation (17)

Tall herb, ruderal and ephemeral plants present include:

- Bramble (*Rubus fruticosus* agg.)
- Broad-leaved Dock (*Rumex obtusifolius*)
- Cleavers (*Galium aparine*)
- Common Nettle (*Urtica dioica*)
- Cow Parsley (*Anthriscus sylvestris*)
- Creeping Buttercup (*Ranunculus repens*)
- Creeping thistle (*Cirsium arvense*)
- Curly Dock (*Rumex crispus*)
- Daisy (*Bellis perennis*)
- Greater Plantain (*Plantago major*)
- Groundsel (*Senecio vulgaris*)
- Hedge Bindweed (*Calystegia sepium*)
- Hemlock (*Conium maculatum*)
- Knotgrass (*Polygonum aviculare*)
- Lesser Burdock (*Arctium minus*)
- Perennial Sow-thistle (*Sonchus arvensis*)
- Pineapple-weed (*Matricaria discoidea*)
- Red Campion (*Silene dioica*)
- Rosebay Willowherb (*Chamerion angustifolium*)
- Smooth Sow-thistle (*Sonchus oleraceus*)
- Spear thistle (*Cirsium vulgare*)
- Yarrow (*Achillea millefolium*)

Two short lengths of defunct species poor hedge grow along parts of the east boundary. The north section appears to be annually trimmed, however the south section does not appear to be managed. Hedge plant species include Blackthorn (*Prunus spinosa*) (O), Elder (*Sambucus nigra*) (O), Goat willow (*Salix caprea*) (R), Hawthorn (*Crataegus monogyna*) (F), Hazel (*Corylus avellana*) (O), Holly (*Ilex aquifolium*) (R).

A minor watercourse/brook flows northwest-to-southeast at the immediate south of The Site.

Timber-post and timber-board fences are situated between The Site and the Brook House Farm (domestic) garden and the domestic garden of the adjacent barn conversion.

Livestock-proof timber-post and pig-netting wire fences are present along some boundaries of The Site.

4.4.3 Fauna

4.4.3.1 Badger

Legislation

Badgers (*Meles meles*) and their setts are protected by the Protection of Badgers Act 1992.

Under this legislation it is illegal to:

- wilfully kill, injure or take, or attempt to kill, injure or take, a Badger;
- cruelly ill-treating a Badger, digging for Badgers, using Badger tongs, using a firearm other than the type specified under the exceptions within the Act;
- interfere with a Badger sett by damaging, destroying, obstructing, causing a dog to enter a sett, disturbing an occupied sett – either by intent or by negligence;
- sell or offer for sale a live Badger, having possession or control of a live Badger;
- mark, attach a ring, tag, or other marking device to a Badger.

A Natural England Badger Disturbance Licence may be required for development works affecting Badgers.



4.4.3.2 Bat

Legislation

All bat species (*Rhinolophidae* and *Vespertilionidae*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to

rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;

- damage or destroy a breeding site or resting place of a bat;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead bat, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection.

A bat resting place may be a structure a bat uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not bats are in occupation, as they may be re-used by bats.

All species of bat are priority species in the UK Biodiversity Action Plan (HM Government 1994 et seq.) and are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

A European Protected Species (EPS) Development Licence from Natural England may be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against bats.

Relevant factors

There are records of bats within 2km of The Site including records of bats within the Brook House Farm yard and building complex at the immediate north and west (Desk Study – Section 3).

There is no bat roosting habitat on The Site. However, bats may use The Site for foraging and/or commuting purposes.

4.4.3.3 Dormouse

Legislation

The Common or Hazel Dormouse (*Muscardinus avellanarius*) is protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill a Dormouse;
- deliberately disturb Dormice. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Dormouse;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Dormouse, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Dormouse while it is occupying a structure or place which it uses for shelter or protection.

- Intentionally or recklessly obstruct access to any structure or place which a Dormouse uses for shelter or protection.

A Dormouse resting place may be a structure a Dormouse uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not Dormice are in occupation, as they may be re-used by Dormice.

All species of Dormouse are priority species in the UK Biodiversity Action Plan (HM Government 1994 et seq.) and are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

A European Protected Species (EPS) Development Licence from Natural England may be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against Dormice.

Relevant factors

There is a record of Dormouse within 2km of The Site (Desk Study – Section 3).

The Site and its boundaries do not provide habitat suitable for use by Dormouse.

No evidence of Dormouse was found on The Site or along its boundaries.

Considering the location and habitat of The Site and the surrounding habitat; it is not considered likely that Dormouse would reside on The Site or within its immediate environs.

4.4.3.4 Great crested newt

Legislation

Great crested newt (*Triturus cristatus*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill a Great crested newt;
- deliberately disturb Great crested newt. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Great crested newt;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Great crested newt, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Great crested newt while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which a Great crested newt uses for shelter or protection.

A European Protected Species (EPS) Development Licence from Natural England will be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against Great crested newt.

Consideration

There are records of Great crested newt within 2km of The Site (Desk Study – Section 3).

There is one mapped pond within 250m of The Site. The pond is located at approximate NGR 346763, 264738 and is approximately 120m northwest. On the date of survey, the pond was surrounded by mature Willow (*Salix* sp.) trees and was

completely dry. The pond does not provide potential Great crested newt breeding habitat.

The next nearest mapped pond to The Site is approximately 370m north, and is too far from The Site to be of significant concern.

It is not considered likely that development of The Site will affect Great crested newt. Considering the scale and location of the proposed development; no further Great crested newt survey is considered necessary to inform the proposed development.

4.4.3.5 Hedgehog

Legislation and policy

(European) Hedgehog (*Erinaceus europaeus*) are:

- listed on Appendix III of the Bern Convention;
- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981;
- are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006;
- listed as a Priority Species for conservation action under the United Kingdom Biodiversity Action Plan.

Relevant factors

There are records of Hedgehog within 2km of The Site including a record within the Brook House Farm yard and building complex at the immediate west (Desk Study – Section 3).

The Site contains areas of habitat suitable for Hedgehog to use for breeding/nesting. Furthermore, Hedgehog may traverse and/or forage on The Site.

4.4.3.6 Otter

Legalisation

Otter (*Lutra lutra*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill an Otter;
- deliberately disturb Otter. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of an Otter;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Otter, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Otter while it is occupying a structure or place which it uses for shelter or protection.
- Intentionally or recklessly obstruct access to any structure or place which an Otter uses for shelter or protection.

A European Protected Species (EPS) Development Licence from Natural England will be required for development works triggering Conservation of Habitats and Species Regulations 2017 (as amended) offences against Otter.

Consideration

There are records of Otter within 2km of The Site (Desk Study – Section 3).

Both banks of approximately 100m of the minor watercourse/brook at the immediate south of The Site were surveyed for the presence of Otter prints, spraints, potential resting places and holts.

No evidence of Otter was found. It is not considered that Otter provide a constraint on the proposed development.

4.4.3.7 Polecat

Legislation and policy

(European) Polecat (*Mustela putorius*) are:

- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981;
- protected from trapping or capture under Schedule 6 of the Conservation of Habitats and Species Regulations 2017;
- are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006;
- listed as a Priority Species for conservation action under the United Kingdom Biodiversity Action Plan.

Relevant factors

There is no record of Polecat within 2km of The Site (Desk Study – Section 3).

It is not considered that The Site provides suitable habitat for Polecat to use for nesting or breeding purposes. It is not considered that Polecat provide a constraint on the proposed development.

4.4.3.8 Reptile

Legislation

Four reptile species, Adder (*Vipera berus*), Grass snake (*Natrix natrix*), Slow-worm (*Anguis fragilis*) and Viviparous (or Common) Lizard (*Lacerta vivipara*), have protection under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000.

Their inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) gives 'partial protection' (i.e. only parts of section 9 apply). In addition to restrictions with respect to trade (prohibition of sale and advertising for sale, etc.) they are also protected from intentional killing or injury.

Natural Environment and Rural Communities Act 2006 lists all reptile species as a species of principle importance.

Reptiles are listed as priority species under the UK Biodiversity Action Plan.

Relevant factors

There are records of Adder, Grass snake, Lizard and Slow-worm within 2km of The Site (Desk Study – Section 3).

Considering the habitat of The Site and its immediate environs; it is not considered likely that reptiles would reside on The Site. It is not considered that reptiles provide a constraint on the proposed development.

4.4.3.9 Small Breeding Birds

Legislation

Nesting birds are protected by the Wildlife and Countryside Act 1981.

Under the Wildlife and Countryside Act 1981, all birds are protected while breeding.

It is an offence, with certain exceptions to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird.

Consideration

Vegetation bounding The Site provides Small Breeding Bird nesting habitat.

4.4.3.10 Water vole

Legislation

Water vole (*Arvicola amphibius*) are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000).

Under this legislation, it is illegal to:

- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;
- intentionally or recklessly disturb Water voles whilst occupying a structure or place used for that purpose;
- intentionally kill, injure or take Water voles;
- possess or control live or dead Water voles or derivatives;
- sell Water voles or offer or expose for sale or transport for sale;
- publish or cause to be published any advertisement which conveys the buying or selling of Water voles.

A Natural England Licence may be required for development works affecting Water vole.

Consideration

There is no record of Water vole within 2km of The Site (Desk Study – Section 3).

Both banks of 100m of the minor watercourse/brook at the immediate south of The Site were surveyed for the presence of Water vole prints, latrines, burrows, grazed 'lawns' alongside aquatic margins, and feeding stations.

No evidence of Water vole was found. It is not considered that Water vole provide a constraint on the proposed development.

4.4.3.11 Other fauna

No evidence of other notable fauna was found.

4.5 Conclusion

The flora of The Site has a very low/negligible ecological value.

However:

- The Site and its boundaries may be used by bats for commuting and/or foraging purposes.
- Hedgehog may use The Site for breeding/nesting, commuting and/or foraging.
- vegetation bounding The Site provides Small Breeding Bird nesting habitat.

5. ECOLOGICAL ASSESSMENT CONCLUSIONS

5.1 Desk Study (Section 3)

There is one designated wildlife sites within 2km of The Site; Fishpool Valley Site of Special Scientific Interest.

Considering the scale and nature of the proposed development; it is not considered that Fishpool Valley Site of Special Scientific Interest will be negatively affected by the proposed development.

It does not appear that there are records of protected flora or fauna directly on The Site; however, there are records of [REDACTED] Bat, Bird, Great crested newt, Hedgehog, Plant, Polecat and Reptile within 2km of The Site, including records of bat and Hedgehog within the Brook House farm yard and building complex at the immediate north and west.

Considering the habitat of The Site and the nature and scale of the proposed development: with the adoption of appropriate mitigation measures; it is not envisaged that the proposed development would negatively affect the conservation status of protected fauna or flora recorded within its vicinity.



Bat:

There are records of bat within 2km of The Site, including records within the Brook House Farm yard and building complex at the immediate west.

It is not envisaged that development of The Site would negatively affect the conservation status of the bat (species) identified within the Desk Study.

The Site and its boundaries may be used by bats for commuting and/or foraging purposes.

Mitigation for bat is contained in Section 6.1.

Bird:

There are records of birds within 2km of The Site.

Vegetation bounding The Site offers nesting opportunity for Small Breeding Birds.

Mitigation for Small Breeding Birds is contained in Section 6.2.

Dormouse:

There is a record of Dormouse within 2km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of Dormouse identified within the Desk Study.

Great crested newt:

There are records of Great crested newt within 2km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of Great crested newt identified within the Desk Study.

Otter:

There are records of Otter within 2km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of the Otter identified within the Desk Study.

Hedgehog:

There are records of Hedgehog within 2km of The Site.

The Site and its boundaries may be used by Hedgehog for breeding/nesting, commuting and/or foraging purposes.

Mitigation for Hedgehog is contained in Section 6.3.

Plants:

There are records of plants within 2km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of the plants identified within the Desk Study.

Reptile:

There are records of Adder, Grass snake, Lizard and Slow-worm within 2km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of reptiles identified within the Desk Study.

5.2 Extended UK Habitat Survey (Section 4)

The flora of The Site has a very low/negligible ecological value.

However:

- The Site may be used by bats for commuting and/or foraging. It is recommended that a bat-sensitive external lighting scheme be designed. Mitigation for bats is contained in Section 6.1.
- The Site may be used by Hedgehog for breeding/nesting, commuting and/or foraging purposes. Should the proposed development be carried out mitigation for Hedgehog should be adhered to. Mitigation for Hedgehog is contained in Section 6.3.
- Vegetation bounding and in the vicinity of The Site provides nesting resources for Small Breeding Birds. Should the proposed development be carried out mitigation for Small Breeding Birds should be adhered to. Mitigation for Small Breeding Birds is contained in Section 6.2.

5.3 Future ecological value of The Site

The proposed development should include the retention, protection and enhancement of boundary hedges and trees.

The ecological value of The Site post-development may be enhanced by:

- the installation of purpose-made bird nesting features;
- the installation of purpose-made bat roosting features;
- sympathetic design for Hedgehog;
- the installation of purpose-made Hedgehog nesting features; and,
- the planting of hedges and/or the planting of trees.

Recommendations for biodiversity enhancement are contained in Section 7.

6. MITIGATION

6.1 Bat

External Lighting

In order to avoid any unnecessary disturbance to bats in the future, any external lighting to be installed should:

- use Light emitting diodes (LED) luminaries
- have a warm white spectrum <2700° Kelvin (degrees colour temperature)
- have peak wavelengths higher than 550nm
- be set on motion-sensors
- use short duration (e.g. one minute) timers
- not be in the vicinity of, or shine towards, bat roost openings
- not shine towards (the) roof structure(s)
- not be in the vicinity of, or shine towards, boundary vegetation

6.2 Small Breeding Bird

6.2.1 Legislation

Nesting birds are protected by the Wildlife and Countryside Act 1981.

Under the Wildlife and Countryside Act 1981, all birds are protected while breeding.

It is an offence, with certain exceptions to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird.

6.2.2 Mitigation

Vegetation clearance may only be carried out when no nesting birds are present i.e. between 1st October and 1st March.

Should it be required that vegetation clearance takes place within the bird breeding season, a survey should be carried out by a suitably qualified ecologist to ascertain whether breeding birds are present or not; should no breeding birds be present, it may be possible for vegetation clearance work to commence.

6.3 Hedgehog

6.3.1 Legislation and Protection

(European) Hedgehog (*Erinaceus europaeus*) are:

- listed on Appendix III of the Bern Convention;
- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981;
- are Species of Principal Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006;
- listed as a Priority Species for conservation action under the United Kingdom Biodiversity Action Plan.

6.3.2 Mitigation – Vegetation, piles of debris *et cetera*

The contact details and availability of Hedgehog welfare and protection service in the locale should be obtained prior to the commencement of clearance work.

Hedgehog nests may be constructed in and around areas of overgrown/scrub vegetation, under brash piles and/or rubble piles *et cetera*.

Hedgehogs are particularly vulnerable to disturbance between May and October when litters of hoglets are born and during the winter months when they may be hibernating.

Where Hedgehog are known to be present on or within the vicinity of the development site, or there is risk of them being present on the development site: the removal of vegetation, piles of debris *et cetera* should be carried out between March and October (i.e. when Hedgehog are active).

To decrease the risk of disturbing Hedgehogs that may reside within vegetation, piles of debris *et cetera*, wherever possible the material to be removed should be (carefully) inspected by hand for the presence of Hedgehog.

Where no Hedgehog are found:

- clearance work may commence with care and caution and site operatives should maintain vigilance for Hedgehog.
- Should Hedgehog be inadvertently found, work should immediately cease and the instructions below followed.

Where Hedgehog are found:

- between 1st November and 1st March:
- hibernating Hedgehog should be left undisturbed until they naturally awaken and vacate the vegetation, piles of debris *et cetera*. (Development delays will be inevitable until Hedgehog vacate on their own accord).
- between 1st March and 1st November:
- should non-breeding Hedgehog be found; the animal(s) may be carefully removed out of (imminent) harm's way and moved to another suitable place of rest and shelter.
- should a breeding nest (with sow and hoglets) be found, and *not* disturbed; the nest and Hedgehogs within it should be left for a period of approximately 28 days, after which the juvenile Hedgehogs should become independent and the nest should be vacant.

should a breeding nest (with sow and hoglets) be found and, inadvertently, disturbed: there is a possibility that the sow may abandon the nest risking the survival of the hoglets. Should this be case, professional guidance should be immediately sought to protect the welfare of the Hedgehog and their long-term survival.

6.3.3 Mitigation – Excavations and ground-works

Excavated footings, post-holes, pipe trenches etc. will need to be filled on the same day as they are opened.

Should the time between excavation and filling of foundations or trenches need to be extended, due to unforeseen circumstances, it will be necessary to prevent any chance of Hedgehog, or other wildlife, becoming trapped in excavations.

This may be achieved by:

Covers:

Covering the excavations with ply-board sheeting or similar, ensuring a good seal between the bottom edge of the board and firm ground substrate.

Ramps:

Should it not be possible to cover all excavations, wooden boards (or similar) will be placed extending from the bottom of excavations to the surrounding surface. Should Hedgehog, or small mammals, become trapped in excavations, these 'ramps' may potentially allow Hedgehog, and small mammals, a method of escaping on their own accord.

Each morning; excavations should be inspected for the presence of Hedgehog.

Should Hedgehog be present, they should be removed from the excavation and, if they are healthy, released within suitable habitat, away from the development site.

7. BIODIVERSITY ENHANCEMENT

7.1 Planning Policy

7.1.1 National Planning Policy Framework

Paragraph 174 of the National Planning Policy Framework (2021) states:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) ... protecting and enhancing ... sites of biodiversity ... value ...
- d) ... minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks ..."

Paragraph 179 of the National Planning Policy Framework (2021) states:

"To protect and enhance biodiversity ... plans should:

- a) ... safeguard components of local wildlife-rich habitats and wider ecological networks ...
- 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"

Paragraph 180 of the National Planning Policy Framework (2021) states:

- d) ... 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."

7.1.2 Natural Environment and Rural Communities Act (2006)

Section 40 of the Natural Environment and Rural Communities Act (2006) states:

"Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity".

Section 40(3) of Natural Environment and Rural Communities Act (2006):

"conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat".

7.2 Small Breeding Bird

In order to encourage wildlife to reside on The Site, or within its immediate surrounds, in the future it is recommended that a minimum number of:

- two Swift nest boxes (e.g. Schwegler No. 16 Swift Box)
- three House Martin nest boxes (e.g. Schwegler House Martin Nest 9A)
- two Wren nest boxes (e.g. Schwegler Number 1ZA woodcrete nest);
- one generic bird species nest box (e.g. Schwegler 1B Bird Nest Box);
- one generic bird species open-fronted nest box (e.g. Schwegler 2H woodcrete open fronted nest box); and,
- one predator protected nest box (e.g. Schwegler 3SV with Predator Protection Bird Nest Box)

(or similar alternatives) be installed on The Site, or within its immediate vicinity, post-development.

Boxes should be installed at a minimum of 3m from the ground and in locations subject to low future disturbance.

7.3 Bat

In order to encourage wildlife to reside on The Site, or within its immediate surrounds, in the future it is recommended that a minimum number of:

- one Schwegler 1FR Bat Tube or one Wienerberger EcoSurv Bat Box (or similar alternatives) are built into an exterior wall(s) of any proposed new buildings; or,
- one Schwegler 2FN Bat Box and one Schwegler 2F Bat Box (or similar alternatives) are installed on The Site, or within its immediate vicinity, post-development.

Boxes should be installed at a minimum of 4m from the ground and in locations subject to low future disturbance.

In addition or alternatively to purpose-made bat boxes, custom bat roosting provision (such as 'Bat Lofts', 'Eaves Boxes', 'Exterior Common Rafter Bat Crevices', 'Loft Boxes', 'Rafter Boxes', 'Raise Ridge Tiles' and/or 'Soffit Box Bat Roosts') may be installed and/or created within the structural fabric of proposed buildings.

7.4 Hedgehog

Gates proposed to be installed within the development should have a minimum ground clearance of 100mm.

Every 4-6m, ground level holes, a minimum of 100mm high (vertical) and 100mm wide (horizontal), should be created within proposed boundary fencing to be installed.

A minimum of:

- one purpose-made Hedgehog hibernation nest box/refuge (e.g. Schwegler Hedgehog Dome); or,
- one purpose-made Hedgehog summer/breeding nest box/refuge (e.g. Hogitat Hedgehog Home)

should be installed within The Site, post-development.

7.5 Wildlife Hedge and/or Tree Planting

Wherever possible, hedgerows within or bounding The Site should be retained and all existing (mature) trees should be retained.

New hedgerows may be planted and/or existing hedgerows supplementary planted. Recommendations are provided in Section 7.5.1.

Open spaces to be created within the proposed development may be planted within fruit trees.

Recommendations are provided in Section 7.5.2.

7.5.1 Hedgerow/shrub planting

Open spaces may be planted with shrubs to provide shelter and foraging areas for wildlife.

Ideally, a minimum of four species of shrub should be planted.

Native species of local provenance are preferred.

Ideally, potted stock should be in non-peat compost.

Favourable native plant species that may be incorporated in hedgerow boundaries and/or shrubberies include:

Common English Name	Scientific Name
Blackthorn	<i>Prunus spinosa</i>
Common Beech	<i>Fagus sylvatica</i>
Dogwood	<i>Cornus sanguinea</i>
Field Maple	<i>Acer campestre</i>
Field Rose	<i>Rosa arvensis</i>
Guelder Rose	<i>Viburnum Opulus</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus Avellana</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Oak	<i>Quercus robur/ petraea</i>
Rowan	<i>Sorbus aucuparia</i>
Spindle	<i>Euonymus europaeus</i>
Wayfaring Tree	<i>Viburnum lantana</i>

7.5.2 Standard/Fruit Trees

New native tree planting within (public) open spaces and/or along (retained) boundaries may encourage wildlife to forage on The Site. Trees may be half-standard or standard size. Standard trees provide instant habitat for birds and insects. Species should be those that provide a good mast crop (i.e. seeds), and ideally a mixture of species should be planted.

Tree stakes should be low (maximum 0.60 metres above ground), at an angle to avoid roots, and removed in year three.

The fecundity of trees should be monitored and dead and/or damaged plants suitably replaced.

Ideally, a minimum of three tree species should be planted.
Favourable tree species include:

Common English Name	Scientific Name
Apple	<i>Malus sp.</i>
Bird Cherry	<i>Prunus padus</i>
Cherry	<i>Prunus var.</i>
Cobnut / Filbert	<i>Corylus var.</i>
Crab-apple	<i>Malus sylvestris</i>
Damson	<i>Prunus var.</i>
Mountain Ash	<i>Sorbus aucuparia</i>
Mulberry	<i>Morus nigra</i>
Pear	<i>Pyrus sp.</i>
Plum / Greengage	<i>Prunus var.</i>
Silver Birch	<i>Betula pendula</i>
Small-leaved Lime	<i>Tilia cordata</i>
Walnut	<i>Juglans regia</i>
Wild Cherry	<i>Prunus avium</i>

8. RELEVANT PUBLICATIONS

Bat Conservation Trust and Institution of Lighting Professionals (2018). Guidance Note 8 Bats and Artificial Lighting.

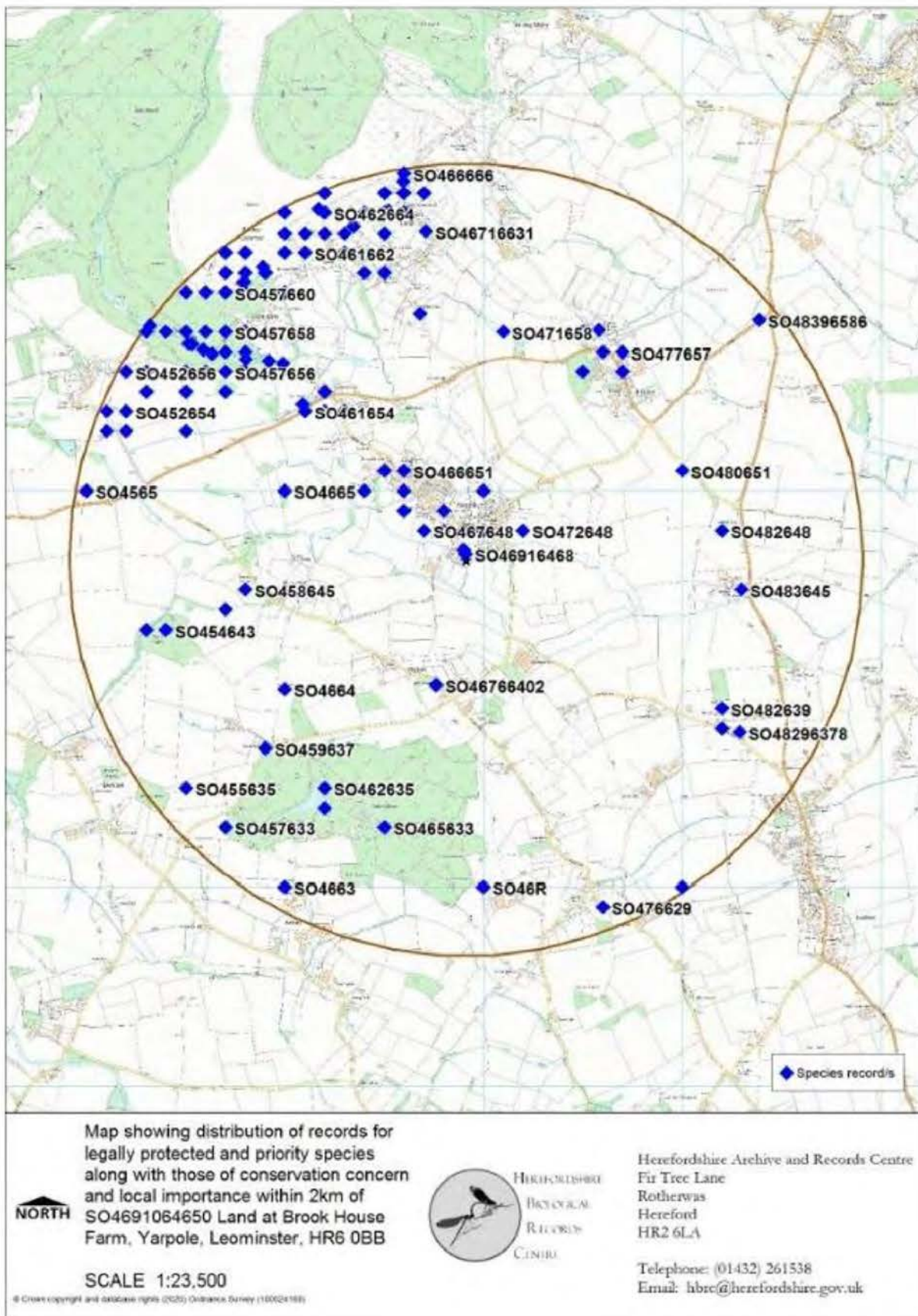
Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). UK Habitat Classification – Habitat Definitions V1.1 at <http://ukhab.org>

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

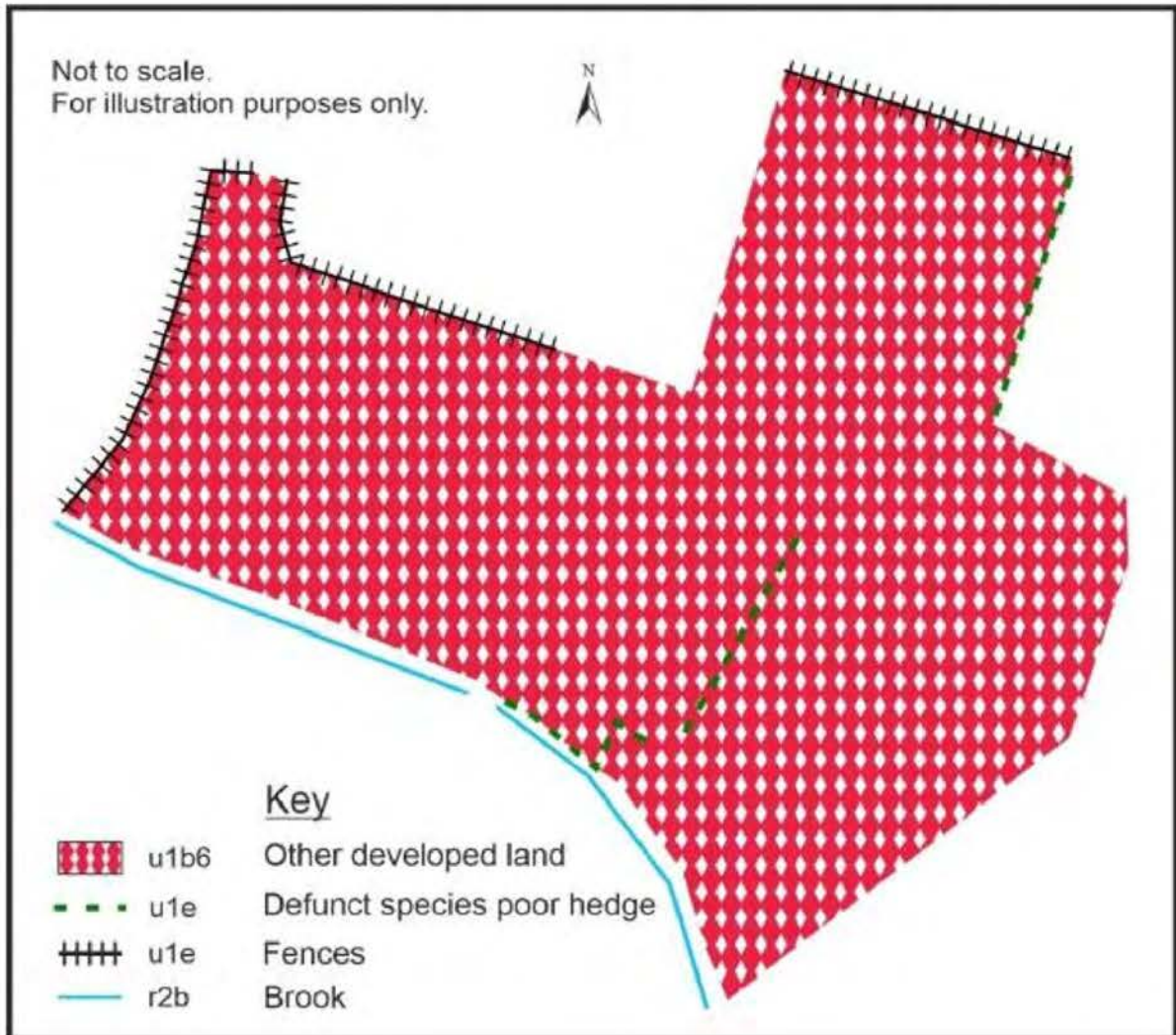
Multi-Agency Geographic Information Centre (MAGIC) (<http://magic.gov.uk>).

Natural England (2020). European Protected Species Method Statement document. Form WML-A14-2.xls.

APPENDIX 1 – Herefordshire Biological Records Centre Record Search



APPENDIX 2 – Extended UK Habitat Map



APPENDIX 3 – Site Photographs



Photograph 1.
View of the northeast area.
Looking south from north.



Photograph 2.
View within the southeast area.
Looking north from south.



Photograph 3.
View of the central area.
Looking northeast from southwest.



Photograph 4.
View within the west area.
Looking southeast from northwest.