

ECOLOGICAL ASSESSMENT:

PITCHKETTLE FARM GOODBOYS LANE GRAZELEY GREEN, READING RG7 1ND

Client: Neil Stewart

Our reference: ECO3015

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Report issued in electronic format only



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1.0 Introduction

Survey and reporting

- 1.1 This report details the results of an Ecological Assessment - comprising an Extended Phase 1 Habitat & Protected Species Scoping Survey and Preliminary Bat Roost Assessment - of Pitchkettle Farm, Goodboys Lane, Grazeley Green, Reading, RG7 1ND.
- 1.2 The survey, carried out on 7 March 2022, was undertaken to inform a part retrospective planning application for the site.

Application site

- 1.3 The application site is located towards the northern end of Goodboys Lane, a rural road situated to the south of Grazeley Green (National Grid Reference SU67996666, Figure 1). It comprises part of a yard, mainly consisting of an area of hardstanding and two new building with areas of tall ruderal herb, a section of hedgerow and a line of trees around the perimeter.
- 1.4 Figure 2 shows the previous site layout and Figure 3 shows the current site layout.
- 1.5 The total area of the application site is approximately 1.5ha.

Details of proposed works

- 1.6 This is for a part retrospective planning application for the:
“erection of two modular buildings following demolition and removal of existing structures, and change of use of site to flexible Class B2/B8/E(g) use” .

Figure 1 – Site location

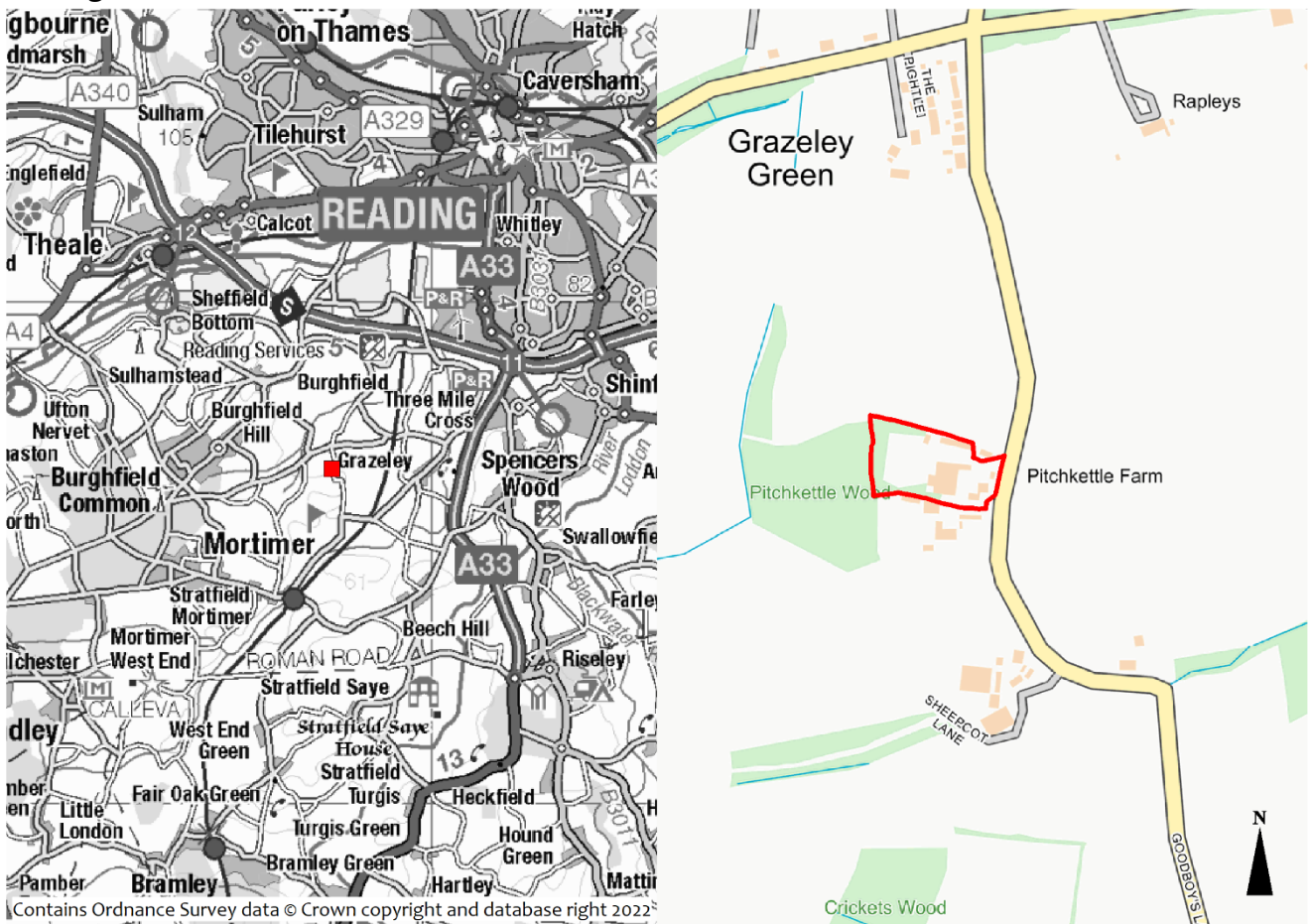
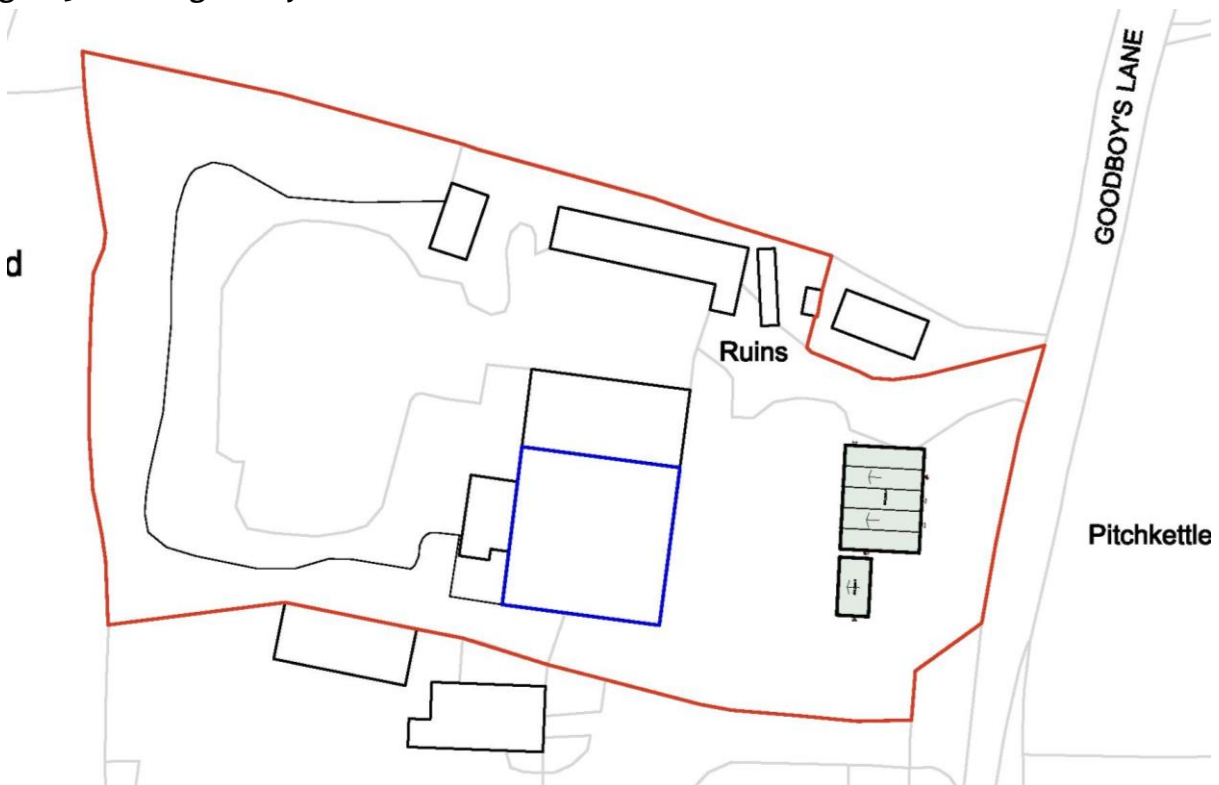


Figure 2 – Previous site layout



Figure 3 – Existing site layout



2.0 Methodology

Desk study

- 2.1 A desk study data search was undertaken. This involved reviewing publicly available datasets and citations of statutory designated sites of importance for nature conservation, Natural England's Priority Habitat Inventory GIS dataset for England, and Natural England's Ancient Woodland Inventory for sites within the zone of influence of the survey area which is considered to be a maximum of 1km in this case.
- 2.2 In addition, species records (on Natural England's MAGIC website¹) were accessed, and aerial photographs and Ordnance Survey maps were studied for features of interest.

Extended Phase 1 Habitat and Protected Species Scoping Survey

- 2.3 An Extended Phase 1 Habitat and Protected Species Scoping Survey was undertaken. This comprised a walkover survey of the application site and the classification of habitats following the descriptions provided within the Joint Nature Conservancy Council 'Handbook for Phase 1 Habitat Survey' (JNCC 1993). An assessment of the site in terms of its suitability for notable or protected species was carried out and any features of note were described.

Preliminary Bat Roost Assessment

- 2.4 The preliminary bat roost assessment comprised a survey of the buildings, and any trees to be affected by the proposals (understood to be none in this case), for bats, signs of bats and features potentially suitable for use by roosting bats, and an assessment of the surrounding habitat in terms of its suitability for commuting and foraging bats.
- 2.5 The survey consisted of a detailed search of the interior and exterior of the buildings looking for bats and/or evidence of bats including droppings (on walls and windowsills and in roof and loft spaces), rub or scratch marks, staining at potential roosts and exit holes, live or dead bats and features, such as raised or missing tiles, potentially suitable for use by roosting bats. Binoculars, an endoscope, a ladder and a high-powered torch were used as required.
- 2.6 Buildings are classified according to their suitability for use by roosting bats. The classification is dependent on a number of factors including:
 - Bats and/or signs of bats
 - External and internal features potentially suitable for use by roosting bats (e.g. raised or missing tiles, gaps behind fascia boards)
 - Setting
 - Night time light levels
 - Disturbance levels
 - Proximity of suitable foraging habitat and commuting routes (e.g. ponds, streams, woodland, large gardens, hedgerows)
- 2.7 The categories used to classify buildings and trees and the survey effort required to determine the presence or absence of bats (as per the Bat Conservation Trust's Bat Survey Guidelines², referred to by Natural England in their standing advice to planning officers) are described in Table 1, and factors affecting habitat suitability in Table 2.

¹ <https://magic.defra.gov.uk/>

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn) Bat Conservation Trust

Table 1 – Description of the categories used to assess a building or tree’s bat roost potential and the survey effort required to determine the likely presence or absence of bats

Bat Roost Potential	Roost status	Description	Survey effort required to determine the likely presence or absence of bats
	Confirmed	Bats or evidence of bats found.	Surveys would be required to establish the status of the roost. Generally three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August (two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey).
	High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Three dusk emergence and/or pre-dawn re-entry surveys between May and September. Optimum period May – August. Two surveys should be undertaken during the optimal period and at least one survey should be a pre-dawn survey.
	Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only i.e. irrespective of species conservation status, which is established after presence is confirmed).	Two surveys, comprising one dusk emergence and a separate pre-dawn re-entry survey between May and September (one of the surveys needs to be carried out between May and the end of August).
	Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation) A tree of sufficient size and age to contain features but with none seen from the ground or features seen with only very limited roosting potential	One dusk emergence or pre-dawn re-entry survey between May and the end of August (but only if features will be affected by the proposals). May not be required for trees with low roost suitability (dependent on case-specific conditions) as a precautionary approach to tree works can be taken to minimise the risk of harming bats.
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further surveys required.	

Table 2 – Habitat suitability scale for commuting and foraging bats

Suitability of habitat for commuting and foraging	Habitat Suitability	Description
	High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts
	Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water
	Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
	Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats

Surveyor details

- 2.8 The survey was undertaken by Giles Sutton BSc (Hons) MSc MCIEEM CEnv of GS Ecology Ltd. Giles holds a Natural England GCN Survey licence, a Natural England WML A34 Level 2 bat survey licence, is registered to use Natural England's Bat Mitigation Class Licence WML-CL21, is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and is a Chartered Environmentalist with more than 20 years' experience as professional ecologist.

3.0 Results

Desk study

Statutory sites of importance for nature conservation

- 3.1 There are no statutory sites of importance for nature conservation within 1km of the site.

Ancient woodland

- 3.2 There are no areas of woodland listed on Natural England's Ancient Woodland Inventory within 1km of the site.

Protected and notable species records

- 3.3 Within 2km of the site there are three records of licenses issued by Natural England for works affecting protected species on The MAGIC website. These records are summarised in Table 3 below.

Distance and direction from the application site	Species affected	Breeding site	Year licence was issued
1.2km South-east	Common pipistrelle	No	2018
1.3km West	Brown long-eared, common pipistrelle, soprano pipistrelle, whiskered	No	2020
1.9km East	Brown long-eared, common pipistrelle	Yes	2016

Nearby Ponds

- 3.4 There is one pond shown on ordnance survey maps and aerial photos within 250m of the application site. This pond is located approximately 190m south of the application site.

Habitats surrounding the application site

- 3.5 The application site is located towards the northern end of Goodboys Lane, a rural road situated to the south of Grazeley Green. There is a small section of woodland at the western end of the site which forms part of a small block of woodland, Pitchkettle Wood, directly to the west of the application site.
- 3.6 Directly adjacent to the application site to the south is a similar sized property which also backs onto Pitchkettle Wood. Approximately 300m north of the application site, also along Goodboys Lane, are some residential houses and their associated gardens with trees. Directly adjacent to the application site to the north, east and south and beyond the woodland to the west are agricultural fields (arable and pasture) which have hedgerows and trees scattered along their boundaries. Scattered between the surrounding fields are some small blocks of woodland, the nearest being 290m south-east, 280m south and 310m west from the application site.

Habitats within the application site

- 3.7 The application site comprises part of a yard, mainly consisting of an area of hardstanding and two new buildings with areas of tall ruderal herb, a section of hedgerow and a line of trees around the perimeter. A Phase 1 habitat map and associated target notes are provided in Appendix 1, and photographs provided in Appendix 2.
- 3.8 A brief description of each habitat is given below:

Buildings and structures

- 3.9 See section 3.15 below.
- 3.10 **Hardstanding** – Tarmac hardstanding across the majority of the site.

- 3.11 **Tall ruderal herb** – Strips of tall ruderal herb along the eastern and southern boundaries, species include nettle, thistle, and dock.
- 3.12 **Broadleaved trees** – Defunct hedge/line of trees adjacent to the road, species include holly, ash, birch, elm, and hawthorn.
- 3.13 **Defunct species poor hedge** – Small section of leylandii hedge along the northern boundary.

Bats – preliminary roost assessment

- 3.14 We did not visit the site prior to the buildings that were previously on the site being demolished however aerial images appear to show a series of metal clad structures that were unlikely to have hosted roosting bats and would likely have been classified as having “negligible“ potential to host a bat roost.
- 3.15 The new building is a modern pre-fabricated building with metal sides and roof. This building is unsuitable for use by roosting bats.

4.0 Assessment and recommendations

Statutory sites of importance for nature conservation

- 4.1 There are no statutory sites of importance for nature conservation within 1km of the site.

Ancient Woodland

- 4.2 There are no areas of woodland listed on Natural England's Ancient Woodland Inventory within 1km of the site.

Habitats

- 4.3 The Secretary of State periodically publishes a list of habitats that are of principal importance for the conservation of biodiversity in England under Section 41 (S41) of the 2006 Natural Environment and Rural Communities (NERC) Act. The list currently comprises 56 habitats which are referred to as "priority habitats" in the National Planning Policy Framework (NPPF).
- 4.4 Paragraph 179 of the NPPF reads:
"To protect and enhance biodiversity and geodiversity, plans should [...] 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"
- 4.5 As such where priority habitats are found they should be protected from the adverse impacts of development.
- 4.6 The habitats that have been cleared to facilitate the development appear to have been of very little ecological value (dilapidated farm buildings/ sheds and peripheral ruderal vegetation).
- 4.7 The hedgerow along the front, although defunct, is a priority habitat. It is recommended that this be restored by coppicing, laying and gapping up so that it continues to function as a hedge into the future. This could be secured via a planning condition.

Bats

- 4.8 All species of bats receive special protection under UK law and it is a criminal offence under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (The Habitat Regulations), deliberately or recklessly to destroy or damage their roosts, or to disturb, kill or injure them without first having obtained the relevant licence for derogation from the regulations from the Statutory Nature Conservation Organisation (the SNCO - Natural England in England).
- 4.9 In addition, many bat species are "priority species" as defined in the NPPF (see Paragraph 179 of the NPPF above). As such where priority species are found they should be protected from the adverse impacts of development
- 4.10 We did not visit the site prior to the buildings that were previously on the site being demolished however aerial images appear to show a series of metal clad structures that were unlikely to have hosted roosting bats and would likely have been classified as having "negligible" potential to host a bat roost.
- 4.11 The new building is a modern pre-fabricated building with metal sides and roof. This building is unsuitable for use by roosting bats.
- 4.12 Appendix 5 provides further information on bat ecology and legislation.

Nesting birds

- 4.13 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Section 1 of this Act makes it an offence to kill, injure or take any wild bird, or intentionally to take, damage or destroy the nest of any wild bird while that nest is in use or being built.
- 4.14 The buildings may have been used by nesting birds and these could have been disturbed when they were cleared, although the site may have been checked by the demolition contractors prior to works being undertaken.
- 4.15 It is recommended that six new bird boxes are installed on the new building to compensate for the loss of potential nesting sites when the site was cleared.

Other protected species

- 4.16 It is considered highly unlikely that the development will have had any other adverse impact upon other protected species as no signs of badgers were seen and the site (which was mainly hardstanding) is likely to have been sub-optimal for reptiles.

5.0 Summary

Habitats

- 5.1 The habitats on site are likely to be of limited ecological value, are not “priority habitats” and their loss would not have been a constraint to the proposals.
- 5.2 The hedgerow along the front, although defunct, is a priority habitat. It is recommended that this be restored by coppicing, laying and gapping up so that it continues to function as a hedge into the future. This could be secured via a planning condition.

Bats

- 5.3 We did not visit the site prior to the buildings that were previously on the site being demolished however aerial images appear to show a series of metal clad structures that were unlikely to have hosted roosting bats and would likely have been classified as having “negligible” potential to host a bat roost.
- 5.4 The new building is a modern pre-fabricated building with metal sides and roof. This building is unsuitable for use by roosting bats.

Nesting birds









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- 5.6 It is recommended that six new bird boxes are installed on the new building to compensate for the loss of potential nesting sites when the site was cleared.

Appendix 1 – Extended Phase 1 Habitat Map and Target Notes

Target notes

- (1) Strip of tall ruderal herb (nettle (*Urtica dioica*) and dock (*Rumex obtusifolius*)) adjacent to closed board fence.
- (2) Defunct native hedge adjacent to the road. Species include, elm, hawthorn, ash and alder.
- (3) Area of bare ground and tall ruderal herb between hedge line and new building.
- (4) Twin stemmed mature alder tree, with a diameter at breast height of 20cm and a height of 10m.
- (5) New building, a modern flat roofed building. Unsuitable for use by roosting bats.

Key

-  Application site boundary
-  Target Note
-  Tall ruderal herb
-  Buildings
-  Hardstanding
-  Fence
-  Defunct species-poor hedge
-  Broadleaved trees



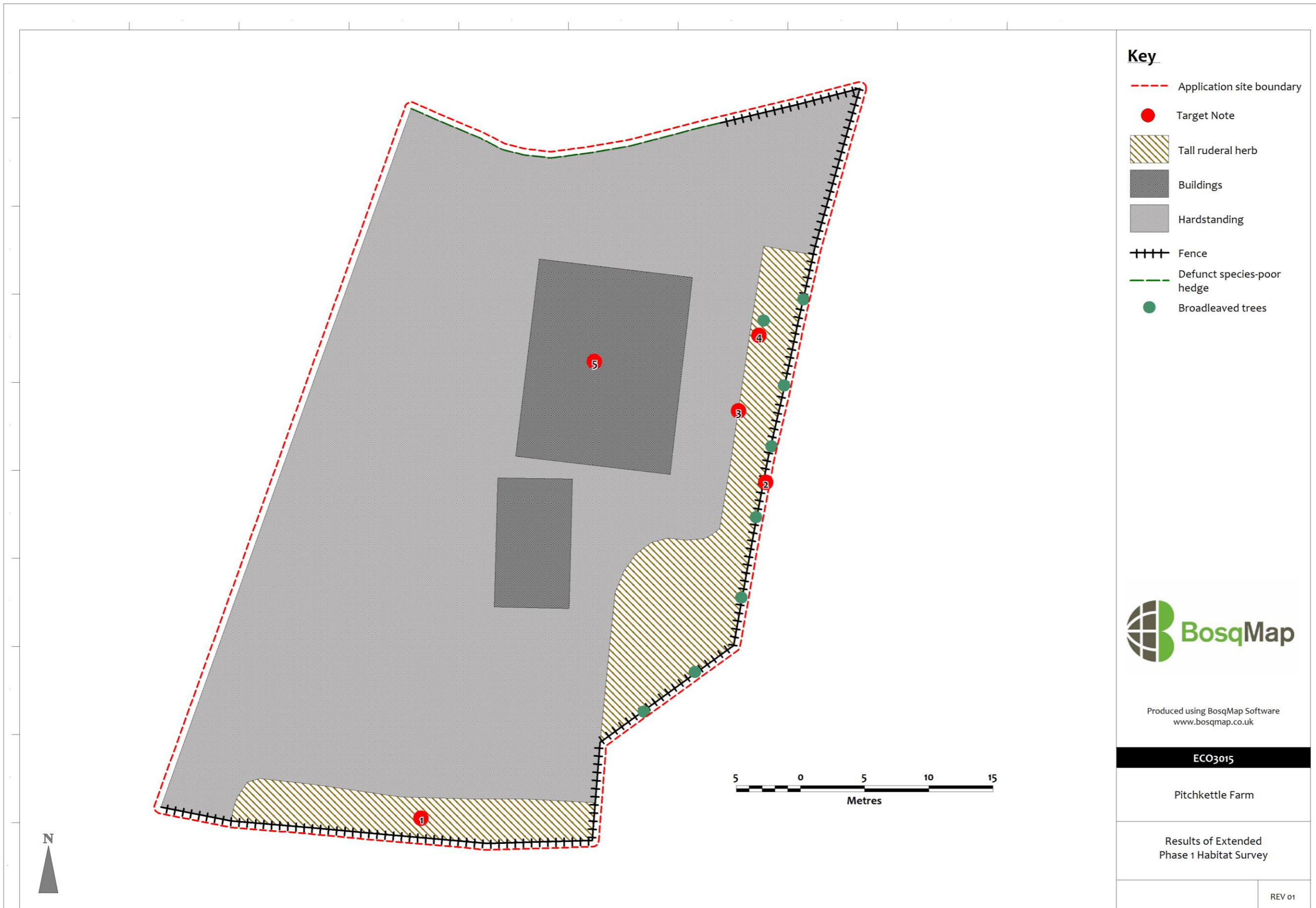
Produced using BosqMap Software
www.bosqmap.co.uk

ECO3015

Pitchkettle Farm

Results of Extended
Phase 1 Habitat Survey

REV 01



Contains Ordnance Survey data © Crown copyright and database right 2022

Appendix 2 - Photographs

Photo 1 – The site viewed from the south. Photo 2 – South-east corner of the site.



Photo 3 and 4 – Strip of tall ruderal herb adjacent to the fence along the southern boundary.



Photos 5 and 6 – Defunct hedge/line of trees and fence adjacent to the road.



Photos 7 and 8 – Area of tall ruderal herb and bare ground between the fence and new building.



Photos 9 and 10 – New building viewed from the south and south-east.



Photo 11 – Leylandii hedge along northern boundary 2. Photo 12 – Mature alder tree to the east of the new building.



Appendix 4 – Legislation and planning policy

Planning Authorities have a legal duty to consider biodiversity when assessing planning applications. Where there is a reasonable likelihood that a planning application might affect important protected sites, species or habitats, information on the species, habitat or site likely to be affected, together with an assessment of the impacts of the proposals, will almost certainly be required.

The legal duty for Planning Authorities to have regard to the conservation of biodiversity was introduced in the 2006 Natural Environment and Rural Communities Act (The NERC Act). This act clarified existing commitments with regard to biodiversity, raised the profile of biodiversity and aimed to make the consideration of biodiversity a natural and integral part of policy and decision making.

In addition to the NERC Act there is also national and international biodiversity legislation. This includes legislation in relation to protected species and sites which operates outside of the planning system. Local Authorities and developers have a duty to comply with this legislation.

National planning policy

Paragraph 99 of the Government Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System (this document has not been revoked by the recently published National Planning Policy Framework) states that:

'It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.'

As such, in line with national planning policy, most planning authorities will ask for this information to be provided before a planning decision is made and in many cases before it is registered.

Local planning policy

In addition to national planning policy, most councils have planning policies to protect biodiversity, and to enhance it where practicable within and adjacent to development sites.

European protected species

The United Kingdom hosts a number of European Protected Species (EPS) of animals (table 1) and plants (table 2). These species receive special protection under UK law and it is an offence under the Wildlife and Countryside Act 1981 (as amended) and the European Habitats and Species Directive (92/43/EC), enacted in the UK through The Conservation of Habitats and Species Regulations 2017, to deliberately or recklessly destroy or damage their habitat, or to disturb, kill or injure the species without first having obtained the relevant licence from Natural England.

Planning Authorities have a statutory duty under these regulations to have regard to the requirements of the Habitats Directive and need to be satisfied that the development is likely to receive a licence from Natural England, and therefore comply with the Habitats Directive, before granting planning permission.

Table 1 – European Protected Species of Animal found in the UK

Common name	Scientific name
Bats, Horseshoe (all species)	<i>Rhinolophidae</i>
Bats, Typical (all species)	<i>Vespertilionidae</i>
Butterfly, Large Blue	<i>Maculinea arion</i>
Cat, Wild	<i>Felis silvestris</i>
Dolphins, porpoises and whales (all species)	<i>Cetacea</i>
Dormouse	<i>Muscardinus avellanarius</i>
Frog, Pool	<i>Rana lessonae</i>
Lizard, Sand	<i>Lacerta agilis</i>
Moth, Fisher’s Estuarine	<i>Gortyna borellii lunata</i>
Newt, Great Crested (or Warty)	<i>Triturus cristatus</i>
Otter, Common	<i>Lutra lutra</i>
Snail, Lesser Whirlpool Ram’s-horn	<i>Anisus vorticulus</i>
Snake, Smooth	<i>Coronella austriaca</i>
Sturgeon	<i>Acipenser sturio</i>
Toad, Natterjack	<i>Bufo calamita</i>
Turtles, Marine	<i>Caretta caretta</i> <i>Chelonia mydas</i> <i>Lepidochelys kempii</i> <i>Eretmochelys imbricata</i> <i>Dermochelys coriacea</i>

Table 2 – European Protected Species of Plant found in the UK

Common name	Scientific name
Dock, Shore	<i>Rumex rupestris</i>
Fern, Killarney	<i>Trichomanes speciosum</i>
Gentian, Early	<i>Gentianella anglica</i>
Lady’s-slipper	<i>Cypripedium calceolus</i>
Marshwort, Creeping	<i>Apium repens</i>
Naiad, Slender	<i>Najas flexilis</i>
Orchid, Fen	<i>Liparis loeselii</i>
Plantain, Floating-leaved water	<i>Luronium natans</i>
Saxifrage, Yellow Marsh	<i>Saxifraga hirculus</i>

Nationally protected species

Many species of animal are protected under the 1981 Wildlife and Countryside Act (as amended). ‘Full protection’ applies to EPS and some non EPS species such as the water vole. This prohibits the intentional killing, injuring or taking (capture. etc); possession; intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places; sale, barter, exchange, transporting for sale and advertising to sell or to buy. Many species, such as common species of reptile and amphibian, are protected from intentional killing and injuring and trading.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended), whilst they are actively nesting or roosting. Section 1 of this Act makes it an offence to kill, injure or take any wild bird, and to intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built. It is also an offence to take or destroy any wild bird eggs.

In addition, bird species listed under Schedule 1 of the Act receive extra protection. The Act states that ‘it is an offence to intentionally or recklessly disturb any wild bird listed in Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird’.

In practice this means that in areas where birds are likely to be nesting works should not be undertaken during the nesting season, which is generally considered to be March to September, although this very much depends on weather conditions, habitats and the species involved. If works cannot be avoided then areas should first be checked for nesting birds. Habitats likely to host nesting birds include trees, hedgerows and dense scrub, buildings, reedbeds and riverine habitats and open areas with tussocky vegetation.

Appendix 5 – Bat ecology and conservation status

Background

Bats are the only true flying mammals and belong to their own taxonomic group, the *Chiroptera*. Worldwide there are almost 1,000 species, with 16 in the UK. All species in the UK are insectivorous. They have a highly sophisticated echolocation system that allows them to avoid obstacles and catch invertebrates, either in flight or by picking them off water, the ground or foliage.

Bat species in the UK

There are 16 species of bat that are known to exist in the UK mainland, with a further two - the greater mouse eared bat *Myotis myotis*, and the parti-coloured bat *Vespertilio murinus* - that are thought to occur as rare migrants or to have small populations in the UK. Bats in the UK belong to one of two taxonomic families, the Rhinolophidae (horseshoe bats) and the Vespertilionidae (all other UK bats).

Bat Conservation Status

Bat populations have undergone a significant decline in the past sixty years. For example, estimates from the National Bat Colony Survey suggest that the UK pipistrelle population (one of our commonest bat species), declined by approximately 70% between 1978 and 1993. Factors contributing to this decline include:

- Loss of, and damage to, roosting sites, including buildings, trees, and underground structures (mines, tunnels, ice-houses, cellars, etc).
- Loss and fragmentation of suitable insect-rich feeding habitats such as wetlands and deciduous woodland.
- Reduction in the abundance and diversity of insect prey due to intensive agriculture, particularly over-grazing and the use of pesticides.
- Loss of linear features such as tree-lines and hedgerows, depriving bats of commuting routes between roosts and feeding areas.
- Loss of winter roosting sites in buildings and old trees.
- Disturbance and destruction of roosts, including the loss of maternity roosts due to the use of toxic timber treatment chemicals.

Roosts

Bats use a variety of roosts of different types including trees, buildings, caves, mines and other structures. Most species are colonial and roost in groups. This can make populations particularly vulnerable to loss of roosts as the loss of a single roost may affect the whole population. Some species hang in obvious locations, such as the timbers near to the apex of a roof, others roost in cracks and crevices, such as the gaps under tiles, and as such can be very difficult to locate.

During the winter (November to February), when there is a reduction in insect numbers, bats hibernate to conserve energy. They prefer sites with a constant low temperature and a high relative humidity. On mild winter's nights, bats may wake up and feed. However, bats are particularly vulnerable to disturbance at this time of year, as flying in winter uses up large quantities of energy that cannot easily be replaced.

In the spring, after emerging from hibernation, bats often move from site to site and may congregate in small groups. Female bats gather together in the summer (approximately May to August dependant on species) in maternity roosts. Once the young have stopped suckling, and the baby is independent, bats

tend to disperse and use other roosts. Maternity roosts are particularly vulnerable to disturbance, as bats may have come from a wide geographical area, and have a strong tradition of returning to the same roost year after year.

During the late summer and early autumn males occupy mating roosts which are visited by several females. After mating some species gather together at swarming sites to fatten up prior to hibernation.

Habitat associations

In addition to roosts, bats also need foraging habitats to find suitable food resources, and commuting routes to get to these areas. As would be expected, the highest numbers of bats are found in areas with abundant invertebrates. Some species specialise in catching small invertebrates in flight, whilst others specialise in catching larger invertebrates such as moths and beetles. The distances that bats travel to foraging areas varies between species; records have shown some greater horseshoe bats travel up to 22km to forage, although many species will typically feed within 1km of a roost.

Bats, especially the smaller species, tend to follow linear features (such as hedgerows and tree lines) to their foraging habitats and will often not cross open spaces. A gap of 10m in a linear feature will often not be crossed by bats, and it is important that developments do not create such gaps if linear features are used by bats.

Appendix 6 - About GS Ecology

Established in 2009, GS Ecology is an independent ecological consultancy in Berkshire. We carry-out surveys and ecological consultancy services for public and private sector clients including in Berkshire, Oxfordshire and Hampshire, London and the south of England. We can advise you on cost effective sustainable solutions for your project, whether it be a bat survey to inform a planning application, the ecology chapter of an Environmental Statement or a Woodland Management Plan.

Our work is undertaken by experienced and qualified ecologists, who are members of the Chartered Institute of Ecology and Environmental Managers. Our services include:

- Ecology surveying and reporting to inform planning applications, e.g.
 - Preliminary Ecological Appraisal
 - Extended Phase 1 Habitat Survey
 - Protected species surveys, e.g. badgers, dormouse, great crested newts
 - Bat surveys in Oxfordshire, Berkshire, Hampshire, London and Southern England
- BREEAM ecology assessments – to demonstrate the sustainability of a new building
- Protected species licensing such as bat and great crested newt licences for development sites after planning permission has been obtained
- Providing advice to land managers and writing ecological management plans, such as woodland management plans and farm environmental plans for England woodland Grant Scheme and Environmental Stewardship applications
- Providing ecology advice to Local Authorities and Local Planning Authorities