



fauna forest ecology ltd

BAT & BIRD SURVEYS
Forge Farm, Bestwood Village

Angela Dearden

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Fauna Forest Ecology Limited

Registered company number in England: 10184201

VAT Registration number: 284024905

Registered office address: South View Bungalow, Cheadle Road, Oakamoor, ST10 3AN

T: 01538 703890

M: 07917765464

E: info@faunaforest.co.uk

W: www.faunaforest.co.uk

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Methods used to prepare this report, including those carried out in the field followed The Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct.

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1 INTRODUCTION

- 1.1 Fauna Forest Ecology Limited was instructed by Angela Dearden to carry out a daytime building inspection for bats and birds, followed by three subsequent nocturnal bat surveys at Forge Farm in Bestwood Village (central OS grid reference SK 550 471). The development proposals are to convert an agricultural barn complex for residential use. A planning application will be submitted to Gedling Borough Council in due course.
- 1.2 This report presents the findings of the desk and field-based studies undertaken in 2020. The purpose of the surveys was to assess the survey buildings for their suitability to support roosting bats and birds and to ascertain evidence of roosting. The field visit results provide information to determine the potential ecological impact the proposed development may have on roosting bats and nesting birds, and to inform the level of further survey effort and mitigation required to comply with relevant nature conservation policies and legislation. The evaluation and findings in this report can be used by Gedling Borough Council in their view of the planning application.
- 1.3 The site is in an agricultural suburban setting off Moor Road on the southern fringe of Bestwood Village. It is approximately 1.5km east of the M1 corridor. Much of the surrounding landscape consists of grazed pasture and arable fields with hedge margins leading further to the wider landscape.
- 1.4 The site comprises a farmhouse that is currently occupied, as well as a series of agricultural buildings, including barns, cow sheds and stables. The farmhouse is not part of the development. The survey buildings are referred to as B1, B2, B3, B4 and B5.
- 1.5 All survey and assessment work was completed in accordance with official assessment guidelines¹ and largely followed that recommended by the Chartered Institute for Ecology and Environmental Management (CIEEM)² and follows the British Standard Code of Practice³.

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

² CIEEM (2015) Guidelines for Ecological Report Writing. CIEEM, Winchester.

³ British Standards Institution (2013) BS 42020:2013. Biodiversity – Code of practice for planning and development. British Standards Institution, London.

2 METHODOLOGY

Desk Study

- 2.1 A search was undertaken using desktop resources including the Multi-Agency Geographic Information for the Countryside⁴ (MAGIC) resource. MAGIC was used to search for records of designated sites and Google Earth⁵ was also used to study the nearby landscape within 1km of the site.

Overview

- 2.2 Five of the six buildings on site were surveyed. The main farmhouse is not part of the development, therefore it was not surveyed. All five adjacent agricultural buildings were however surveyed. They were subject to daytime inspections for bats and birds, and also three nocturnal bat surveys.

Daytime Building Inspection for Bats

- 2.3 The preliminary building inspection was carried out by ecologist Martin Kessel (bat licence number 2018-33025-CLS-CLS) on 9th July 2020. Ecological consultants David Nixon (bat licence number 2015-18322-CLS-CLS; barn owl licence number CL29/00311) and Eleanor Harrison completed an updated building inspection on 2nd September 2020.
- 2.4 The surveys were carried out using visual encounter survey techniques. Potential bat movement corridors and movement barriers were assessed and noted. During the site visits, where possible, all areas of each building were internally and externally examined for evidence of bats. The survey included an internal and external assessment using a powerful torch and an endoscope.
- 2.5 Internal rooms were fully assessed using a powerful torch beam to scan walls and flat surfaces for droppings and other signs of bat activity. Feeding remains such as moth and butterfly wing concentrations were also surveyed for. All holes and crevices considered by the surveyor as likely to be used as a bat roost were examined to ascertain presence or absence of bats.
- 2.6 Externally, visual ground inspections of all elevations were undertaken using binoculars. Photographs were taken to capture likely features of ecological value to bats and birds i.e. missing tiles, damaged or missing mortar, exposed gable ends, gaps within soffit board, rotten timber and other potential entry points.
- 2.7 Other external aspects of the buildings were surveyed, including windows, window sills, external doors and the ground within close proximity of the structure was thoroughly inspected for bat droppings and feeding remains.

⁴ Multi-Agency Geographical Information for the Countryside (MAGIC). Crown Copyright and database rights [2015]. Ordnance Survey 100022861. Available at: <http://www.magic.gov.uk/>

⁵ https://www.google.co.uk/intl/en_uk/earth/

Table 1: Guidelines summary for assessing potential bat roost suitability

Suitability	Description of building, tree or structure
Negligible	Negligible habitat features on site likely to be used by roosting bats
Low	A structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, potential roost sites not suitable for larger numbers or regular use (i.e. maternity or hibernation).
Moderate	A structure or tree with one or more potential roost sites that could be used by bats, but unlikely to support a roost of high conservation status.
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.
Confirmed roost	Evidence of bats or use by bats found.

Daytime Building Inspection for Barn Owl

- 2.8 A daytime high-level scoping survey was carried out in each of the five buildings for the presence of barn owls *Tyto alba*, and the signs indicative of their past and present use. The survey was carried out following the 'bottom-up' intensive search survey method outlined by the Barn Owl Trust⁶. The survey started with a search for barn owl evidence starting with the least suitable part of the site and finishing with the most suitable part, thereby minimising potential disturbance to barn owls. Evidence includes pellets, feathers, splash marks (droppings), nest debris, actual sightings of live or dead owls and owlets, smell, and food begging calls. Further to this, all suitable nesting locations were recorded, including water tanks, ledges, roof supports, chimneys, hay bales and wall tops. Likely perches were checked and all ledges and cavities were examined for nesting debris using a ladder and powerful torch light. An assessment of the surrounding habitat for barn owl was also made.

Inspection for Common Nesting Birds

- 2.9 The daytime building inspection included an assessment for evidence of common nesting birds. Inside the buildings, artificial light was used to search for birds, dead birds, dead chicks, nesting material and eggs.

⁶ Barn Owl Trust (2012) Barn Owl Conservation Handbook: A Comprehensive Guide for Ecologists, Surveyors, Land Managers and Ornithologists.

Nocturnal Bat Surveys

- 2.10 Buildings 1 – 5 were subject to three nocturnal surveys using five surveyors on each occasion. The following surveyors were used over the course of the three surveys:
- Phil Playford BSc MSc GradCIEEM (bat licence number 2020-44658-CLS-CLS)
 - Martin Kessel (bat licence number 2018-33025-CLS-CLS)
 - Nathan Rimmer BSc (Hons)
 - Eleanor Harrison BSc (Hons)
 - Dan Cliffe BSC
 - Andrew Williamson MSc
 - Nick Clayton
- 2.11 The first survey was carried out at dusk on 3rd August 2020. The second survey was also carried out at dusk on 21st August 2020. The final survey was at dawn on 6th September 2020.
- 2.12 Surveyors took up separate positions surrounding the buildings for 15 minutes prior to and for 1.5 hours after sunset for the dusk emergence surveys and for 2 hours prior to and for 15 minutes after sunrise for the dawn re-entry survey. At any one time between the surveyors, all areas of the roof and external area of the building(s) deemed to hold risk of bat emergence were being observed. Visual observations of bat activity were noted and bat species were identified using bat detectors. Information recorded included weather, timings, whether bats emerged from or entered the buildings, direction of travel, species and activity e.g. foraging or commuting. Equipment used during the nocturnal surveys included 1 X Anabat Walkabout, 1 X Anabat Scout, 2 X EM Touch 2 Pro devices coupled to Android and Apple tablets, Batbox Duets and also Infa Red camcorders.

3 RESULTS

Desk Study

- 3.1 The survey site does not fall within a designated site. There are however two Local Nature Reserves (LNRs) within 1km of the survey site. Both are less than 700m away. They are as follows:
- Moorbridge Pond and Springfield Corner LNR
 - Hucknall Road Linear Walkway LNR

Habitats

- 3.2 The site itself is in a suburban setting. Habitats within the boundaries comprise typical agricultural buildings, hardstanding, and short grazed grass areas. Much of the peripheral is dominated by overgrown scrub and ruderal coupled with a variety of mature trees. Further beyond the boundaries, the landscape largely comprises substantial arable fields that are bounded by a network of hedgerows and occasional tree lines that provide connectivity to the wider landscape and beyond.

Daytime Building Inspection Results

B1

- 3.3 This is a brick-built building that is three stories in height with a timber-framed traditional hipped roof that is clad with clay tiles. There is a north-facing gable-type pitched roof built within the roof complex. The building is edged with plastic guttering and timber fascias, and the eaves are overhanging. The building is subdivided at ground level into multiple elements; mostly by brick partitioning walls. There are no cavity walls throughout, and the floors are all concrete at ground level. The timber ceiling joists are exposed and visible from ground level. The west-facing section's upper levels can be accessed by steps leading from the outside area near the farmhouse. Access to the east facing section that runs in a north – west direction can be achieved using ladders via a large open window at first floor level.
- 3.4 Multiple Potential Roosting Features (PRFs) were identified during the survey. They include gaps between the roof tiles, areas where the mortar has failed along the ridge, and other small niches between the fascia and eaves area. There are very many options for bats to enter the building, such as through broken windows, via raised and dislodged tiles, and also at eaves level.
- 3.5 Bat droppings and butterfly wing feeding concentrations were found on the second floor of B1 during both daytime site visits (Figure 3).

B2

- 3.6 This is a rectangular-shaped brick building with a timber-framed traditional hipped roof that is clad with clay pantiles. The building is single storey in height and it is open to the elements with clear view up to the apex from ground level. It is edged with timber fascia and there is a series of ventilation gaps below eaves level. There is no cavity wall, no roofing felt, and there is a partitioning wall dividing the building into two separate elements.

- 3.7 The roof is in a poor state of repair with very many exposed gaps between the timbers. Numerous tiles are slipped, broken, and over time have become dislodged. These openings would provide ample access for bats to enter inside the building. Internally, several PRFs were observed. They include settlement cracks in the brickwork, crevices that have formed between roof timbers, as well as the many gaps between the tiles and roof timbers. Other suitable roosting features include exposed gaps above windows / lintels and openings beneath the ridge tiles where bedding mortar has failed.
- 3.8 No evidence of bat roosting was discovered in this building.

B3

- 3.9 This is a long former stable block that was constructed using brick. There is a partitioning wall inside the building and the far western end is extended out to form an L-shape. The roof is pitched, it is timber-framed and is clad with clay pantiles. There is a gable wall each side, there is no cavity wall, and the building is open to the apex with clear views of the roof from ground level.
- 3.10 The roof is in a poor state of repair with dislodged and missing tiles, many of which have fallen through to the ground floor. Access inside the building could easily be achieved by bats via the damaged roof or via broken windows. PRFs for roosting include small crevices caused by raised tiles and also between areas of failed bedding mortar. Small PRFs were also noted amongst the roof timbers.
- 3.11 No evidence of bats was observed during the daytime building inspections.

B4

- 3.12 B4 consists of two steel-framed cow sheds that are clad over with corrugated roof sheeting. Cows were present during both daytime building inspections and the floor area was covered with detritus. These buildings lack suitable PRFs for bats and no evidence of bats was found during the surveys.

B5

- 3.13 This is a small horse stable that was constructed using a mix of brick and concrete. The roof is mono-pitched, there is no roofing felt or cavity and it is clad with clay pantiles. The building is edged with plastic guttering and timber fascia, and the structure itself adjoins the western side of B1. Horses were present inside the building during the surveys.
- 3.14 Gaps between the clay pantiles provide suitable roosting opportunity for bats.

Daytime Building Inspection for Barn Owl Results

- 3.15 Barn owl pellets of various ages were found across the first-floor area of B1 as well as on the ground floor area of B2 (Figure 3). Based on their indicative characteristics (including their dark colour and soft moist texture), some pellets were considered to be fresh, and many others were thought to age from

three to fifteen months⁷. In addition to the pellets, splashing was noticed on the exposed timber beams in these buildings and also on the floor space beneath. In addition to the above, the exposed timber beams in B3 also provide suitable roosting features for barn owl, although no evidence was found in this building during the visits.

- 3.16 No evidence of breeding by barn owls was found on site. All buildings lack ledges and other associated features typically used for breeding.

Common Nesting Bird Inspection Results

- 3.17 The site buildings are suitable for use by common nesting birds due the very many gaps, crevices and other features allowing readily available access to their internal elements. During the daytime building inspection, nesting material was recorded in B1, B2, B3 and B5.
- 3.18 No active bird nets were discovered during the daytime building assessments.

Table 2: Weather conditions during daytime assessments

Date	Start	Finish	Temp °C	Wind	Cloud %	Rain	Notes
09/07/2020	10:00	14:00	20	None	80	0	N/A
02/09/2020	10:30	13:00	16	Gentle breeze	60	0	N/A

Nocturnal Survey Results

Dusk Survey – 3rd August 2020

- 3.19 Activity by bats was sporadic through the entirety of the survey. All call registrations were by common pipistrelle *Pipistrellus pipistrellus* bats, most of which foraged above B4 between 21:05 and 21:53. During this period, a single common pipistrelle emerged from beneath a raised tile above the eaves on the south facing pitch of B1 (Figure 3). Bat calls were also infrequently recorded by surveyors positioned along the north and southern boundary with only occasional commuting calls recorded as bats exploited the corridor between the site and adjacent field.

Dusk Survey – 21st August 2020

- 3.20 Call registrations by common and soprano pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auritus*, and a species of *Myotis* were recorded during the survey. Foraging occurred mostly by common pipistrelles which flew high above B1 and B4 as well as along the south and west boundary lines. Peak

⁷ https://www.barnowltrust.org.uk/barn-owl-facts/barn-owl-pellet-analysis/pellet_barn-owl-pellet-age/ (accessed 16/02/2018)

activity was between 20:44 through to 21:01. The *Myotis* was recorded at 21:08 and the brown long-eared bat was recorded at 21:24, neither of which were visually observed. Two common pipistrelle bats emerged from beneath raised tiles on the east facing elevation of B1 (Figure 3). The first bat left its roost at 20:26 and the second bat left its roost at 20:39.

Dawn Survey – 6th September 2020

3.21 Activity by bats was considerably lower in comparison with previous surveys. Periodic distant commuting common pipistrelle call registrations were logged. Although the bats were not seen, these calls were thought to be produced by individuals using the tree lines further beyond the southern site boundaries. One common pipistrelle was observed re-entering beneath a raised tile on the south facing roof pitch of B1 at 05:44 (Figure 3).

Table 3: Nocturnal survey weather conditions

Date	Start	Finish	Sunset/Sunrise	Temp °C	Wind	Cloud %	Rain
03/08/2020	20:35	22:30	20:54	15	Calm	05	Dry
21/08/2020	20:00	21:45	20:18	18	Calm	90	Dry
06/09/2020	04:15	06:40	06:24	11	Calm	60	Dry

Limitations

- 3.22 Bat droppings deposited in or around the exterior degrade quickly due to weather. The presence of bats or their roost must not be disregarded in the absence of droppings.
- 3.23 Much of the ground floor area of the barns was littered with typical agricultural debris and detritus, reducing the likelihood of discovering evidence of bats and birds.
- 3.24 Not all upper floor areas in B1 were considered safe to walk along which restricted the daytime searches for evidence of bats and birds.

4 DISCUSSION & RECOMMENDATIONS

- 4.1 The daytime building inspections and nocturnal bat surveys were completed with a view to assess the buildings for their suitability to support roosting bats and to ascertain evidence of any bat roosting and bird nesting.

Habitats

- 4.2 The site does not lie within any designated or non-designated sites. The proposals are considered small-scale and will therefore not impact habitats beyond the site boundaries, on the proviso existing roads and tracks are using during and after the construction phase, and nocturnal lighting is not inappropriately used.

Bats

- 4.3 With regards to bat roosting value of B4, no obvious PRFs were identified and the steel structure provides little in the way of a suitable roosting environment for bats. It was therefore considered to hold negligible roosting value. B2, B3 and B5 were considered to hold high value to roosting bats. This is due to the multiple suitable roosting opportunities made available, such as raised tiles that have become slipped, dislodged or damaged over time, as well as areas of failed mortar and also small exposed crevices between the roof timbers.
- 4.4 A small scattering of various aged bat droppings typical of those deposited by pipistrelle bats was found on the second floor of B1 during both daytime surveys. Butterfly wings were also found on the same floor which can sometimes be indicative of a feeding roost.
- 4.5 In light of the above, three nocturnal bat surveys were completed during a time of year when bats are active. Species recorded during the surveys included common and soprano pipistrelles, brown long-eared, and a *Myotis*. On average, activity by bats was considered low. Most call registrations were by bats either commuting along the hedge margins or by individuals foraging over B4; a cow shed with significant amounts of detritus scattered across the floor, which probably attracted high insect numbers.
- 4.6 Over the course of the surveys, a total of two common pipistrelle day roosts were identified. They included a roost used by two individuals located on the south facing roof pitch of B1, and a roost used by one individual located on the east facing roof pitch of B1. No feeding behaviour by brown long-eared bats was observed during the surveys.
- 4.7 Whilst discarded butterfly wings can be indicative of the presence of a feeding roost, they can also be attributed to spiders as the wings fall to the floor from webs. The presence of a feeding roost can therefore be reasonably be discounted.

- 4.8 In the absence of appropriate mitigation and compensation, bats roosting in B1 may be disturbed, injured or killed during the development and the roosts would be destroyed, which would lead to a criminal offence being committed.
- 4.9 Upon receipt of planning permission, a mitigation licence should be applied for and granted by Natural England ahead of any works commencing. In support of the licence, a Method Statement should be designed. It would include appropriate bat mitigation designs so that bats are given adequate roosting provisions during and after the development. The mitigation will also be designed in such a way that Biodiversity Net Gain is achieved (in support of NPPF, Feb. 2019) at the site with a view to ensure the long-term success of local bat populations. All bat mitigation must provide Natural England with confidence a mitigation licence is justifiable (either full EPSL or BMCL).
- 4.10 Provided that the licence is applied for during 2020, the site will qualify for registration under the Bat mitigation Class Licence (BMCL). Post-2020, surveys would either need to be repeated, or a full European protected Species Licence (EPSL) would need to be applied for. The length of time surveys are considered valid is at the discretion of Natural England.
- 4.11 For the works to lawfully proceed due to the legal protection that bats are afforded (Appendix A), Natural England expect three tests to be satisfied before a EPSL can be issued. These tests are as follows:
- There is no satisfactory alternative.
 - The action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
 - The action authorised preserved public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.
- 4.12 A bat mitigation licence is not needed in order for works to commence on B2, B3, B4 and B5, although care should be taken not to disturb the roof of B1 during the process. Best practice would be for site personnel who are responsible for undertaking works on these buildings to adopt a careful approach when working. It is recommended that the roof tiles are removed carefully by hand and that heavy mechanical machinery is not used in the process. In the unlikely event that bats are discovered during the development, work should stop immediately and Fauna Forest Ecology Limited contacted for advice.

Action to be taken if a bat is discovered during works on buildings that do not require a bat mitigation licence

- If at any point in the building works bats are discovered, then contractors must stop work immediately and telephone Fauna Forest Ecology Limited.

- Fauna Forest Ecology Limited will then either provide an appropriately licensed bat worker to the site or provide a member of staff who will liaise directly with the contractor. Actions will then be taken following advice given. This may include removal of bats, but only where the bat ecologist considers this to be a viable and safe option.
- Bats are a protected species and there should be no attempt to handle a bat if discovered. The bat should be covered with a light material (cloth) and the bat worker called out to carry out the rescue.
- Only when the bat ecologist is satisfied that the risk to bats is ceased will works recommence.
- Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.
- If a bat is found under a tile or within any other niche to the building fabric, works will stop immediately (as above). If the bat does not voluntarily fly out, then the aperture will be carefully covered over to protect the bat(s) from the elements, leaving a small gap for the bat to escape voluntarily. Any covering should be free from grease or other contaminants and should not be a fibreglass-based material.

Barn Owl

4.13 Breeding by barn owls in the buildings is unlikely due to the lack of suitable ledges typically associated with nesting. Barn owl pellets and splashing were found in B1 and B2. The low numbers of various aged pellets found beneath exposed roof timbers suggests both buildings are used as a day roost, presumably not often given no owls were observed during any of the site visits. The most likely access point for an owl to enter B1 is the large open window at first floor level on the east facing side elevation. It is likely the B2 access point would be via gaps in the roof caused by missing tiles.

Mitigation and compensation for Barn Owls

4.14 Future development needs to consider the findings of the survey, specifically in terms of the timing of when works would commence. It is recommended that alternative roosting and breeding provisions are considered for this species. Post-development monitoring of the new facilities by a suitably licensed ecologist will be an important element to evaluate the success of the mitigation scheme. It is noteworthy that as the barn owl is a Schedule 1 bird. The bird itself and its roost / nests are protected by law and therefore every attempt must be made to ensure that alternative and adequate nesting provisions are made to ensure the future success of the roosting site. With all of these factors in mind, the following range of mitigation measures are proposed:

- It is recommended that 2 X A-frame barn owl nesting boxes are installed on a poles (Figure 3) in good time ahead of works commencing with a view to encourage barn owls into the box.
- Barn owl nesting boxes should never face in the direction of a road as this will increase the risk of vehicle collision.

- The boxes should be complete with a layer of peat-free potting compost to mimic broken-down pellets barn owls use as a cushion on which to lay their eggs and insulate them from below.
- Following receipt of planning permission which may include one or more wildlife conditions, it is recommended that barn owls are excluded from the buildings by securing wooden boards to features such as open doorways, windows, gaps within roof spaces and other potential entry points. Clear excluders should not be used, to avoid barn owls and other birds from flying into them. It is considered unlikely that barn owls could be encouraged to breed in the A-frame pole-mounted boxes.
- Prior to exclusion, a suitably qualified licensed ecologist must fully inspect all onsite buildings to ensure that any barn owls present have vacated. The ecologist must be completely satisfied that there is also no evidence of breeding. If breeding or signs of breeding is noted, a new mitigation strategy must be derived.
- If in the unlikely instance an active nest is discovered, the exclusion exercise and the start of the works must be delayed until such time as further monitoring has revealed that any subsequent barn owl young have gained full independence.
- Post-works inspections are to be made to check for the presence of returning barn owls with the added possibly of incorporating this site into a local volunteer British Trust for Ornithology birds of prey nest box ringing scheme.
- Maintenance of the mitigation/compensation features on site is the responsibility of the client and should any of these features become damaged/unfit for use by barn owls, a suitably qualified ecologist should be consulted for further advice.

Common Nesting Birds

- 4.15 Bird nesting material was found in the survey buildings. Impacts to nesting birds can be avoided by timing works outside the bird nesting season which generally runs from late February to late August, or by ensuring a site visit is carried out by a suitably qualified ecologist ahead of works commencing. Without appropriate mitigation, nesting birds may be impacted by the development proposals.

General Site Lighting

- 4.16 If lighting and generators are required during construction, then a low-level lighting scheme and a noise mitigation plan should be derived, and strictly adhered to during and after construction to avoid indirect disturbance to nocturnal wildlife. We recommend that:
- During the construction phase, works are not carried out after dusk and do not commence until after dawn. It is strongly recommended that generators and machinery that emit significant noise levels are not left to run through the night.
 - Light spill is controlled and if lighting is required at night, hooded shields are fitted to prevent spill onto nearby habitats that likely to support nocturnal wildlife.
 - Lighting is not directed towards bat mitigation features.

Choose lights with the following features:

- Solar power if possible and motion-triggered lights that switch off when not required
- Low pressure sodium lamps and avoid mercury or metal halide lamps
- Minimum spill radius to be 180° (or less), not 360°.

Planning and Biodiversity

4.17 Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following planning policies. Long-term biodiversity net gains can be achieved with the design of a Biodiversity Enhancement Plan.

APPENDIX A: LEGISLATION SUMMARY

National Planning Policy Framework 2018

The National Planning Policy Framework (NPPF) (Ministry of Housing, Communities and Local Government, 2018) states: “Planning policies and decisions should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; maintaining the character of the undeveloped coast, while improving public access to it where appropriate; minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2017. These two main pieces of legislation have been consulted when writing this report and are therefore described in detail within this section.

Other relevant legislation and policy documents that have been consulted include - The Countryside and Rights of Way Act 2000; Natural Environment and Rural Communities Act 2006; The Hedgerow Regulations 1997; Biodiversity Action Plans, both UK-wide (UKBAP) and Local plans (LBAPs), and The National Planning Policy Framework (NPPF).

There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Wildlife & Countryside Act 1981 (as amended)

The Wildlife & Countryside Act 1981 (as amended) [WCA] is the primary legislation for England and Wales for the protection of flora, fauna and the countryside. Part I within the Act deals with the protection of wildlife. Most European Protected Species offences are now covered under the Conservation of Habitats and Species Regulations (see below), but some ‘intentional’ acts are still covered under the WCA, such as obstructing access to a bat roost.

The WCA prohibits the release to the wild of non-native animal species listed on Schedule 9 (e.g. Signal Crayfish and American Mink). It also prohibits planting in the wild of plants listed in Schedule 9 (e.g. Japanese Knotweed and *Rhododendron ponticum*) or otherwise deliberately causing them to grow in

the wild. This is to prevent the release of invasive non-native species that could threaten our native wildlife.

The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity. There are 'defences' provided by the WCA. These are cases where acts that would otherwise be prohibited by the legislation are permitted, such as the incidental result of a lawful operation which could not be reasonably avoided, or actions within the living areas of a dwelling house.

Licensing

Certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing or disturbing protected animals can be allowed by obtaining a licence – e.g. bat surveys.

Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 (which are the principal means by which the EC Habitats Directive is transposed in England and Wales) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994. These regulations provide for the:

- protection of European Protected Species [EPS] (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) including bats, dormice, great crested newts, and otters;
- designation and protection of domestic and European Sites - e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]; and
- adaptation of planning controls for the protection of such sites and species.

Public bodies (including the Local Planning Authority) have a duty to have regard to the requirements of the Habitats Directive in exercising their function – i.e. when determining a planning application. There is no defence that an act was the incidental and unavoidable result of a lawful activity.

It is possible for actions which would otherwise be an offence under the Regulations to be undertaken under licence issued by the proper authority. For example, where a European Protected Species has been identified and the development risks deliberately affecting an EPS, then a 'development licence' may be required. Species

Bats

In England and Wales, bats and their roosts are protected under the Conservation of Species and Habitats Regulations 2010 (as amended), and the Wildlife & Countryside Act 1981 (as amended).

Taken together, this legislation makes it an offence to:

- Deliberately capture (or take), injure or kill a bat
- Intentionally or recklessly disturb a group of bats where the disturbance is likely to significantly affect the ability of the animals to survive, breed, or nurture their young or likely to significantly affect the local distribution or abundance of the species whether in a roost or not
- Damage or destroy the breeding or resting place of a bat
- Possess a bat (alive or dead) or any part of a bat
- Intentionally or recklessly obstruct access to a bat roost
- Sell (or offer for sale) or exchange bats (alive or dead) or parts of bats

A roost is defined as being 'any structure or place that is used for shelter or protection', and since bats regularly move roost site throughout the year, a roost retains such designation whether or not bats are present at the time.

Birds

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended).

Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird
- Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

Barn Owl

All birds, their nests and eggs are protected by law under Part 1 of the Wildlife and Countryside Act 1981 (as amended). Barn owls are listed on Schedule 1 of the Wildlife and Countryside Act which gives them additional protection. It is an offence, with certain exceptions to:

- Intentionally kill, injure, or take any wild barn owl
- Intentionally take, damage or destroy any wild barn owl nest whilst in use or being 'built' (barn owls do not 'build' a nest but may make a nest scrape)
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing eggs or young
- Intentionally or recklessly disturb any dependant young of wild barn owls.

Historically, barn owls have been recorded breeding in every month of the year, and are known to be extremely faithful to breeding sites. Breeding sites are not in themselves legally protected, and when not in use they could be damaged or removed without triggering a legal offence. However, it is good practice to retain known nesting sites, given the site- fidelity of the species. They are also known to be faithful to roost sites and suitable habitat features that are regularly inhabited by barn owl for resting, sleeping and consuming prey items, although these features have no legal protection if not utilised for breeding.

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APPENDIX B: MAPS

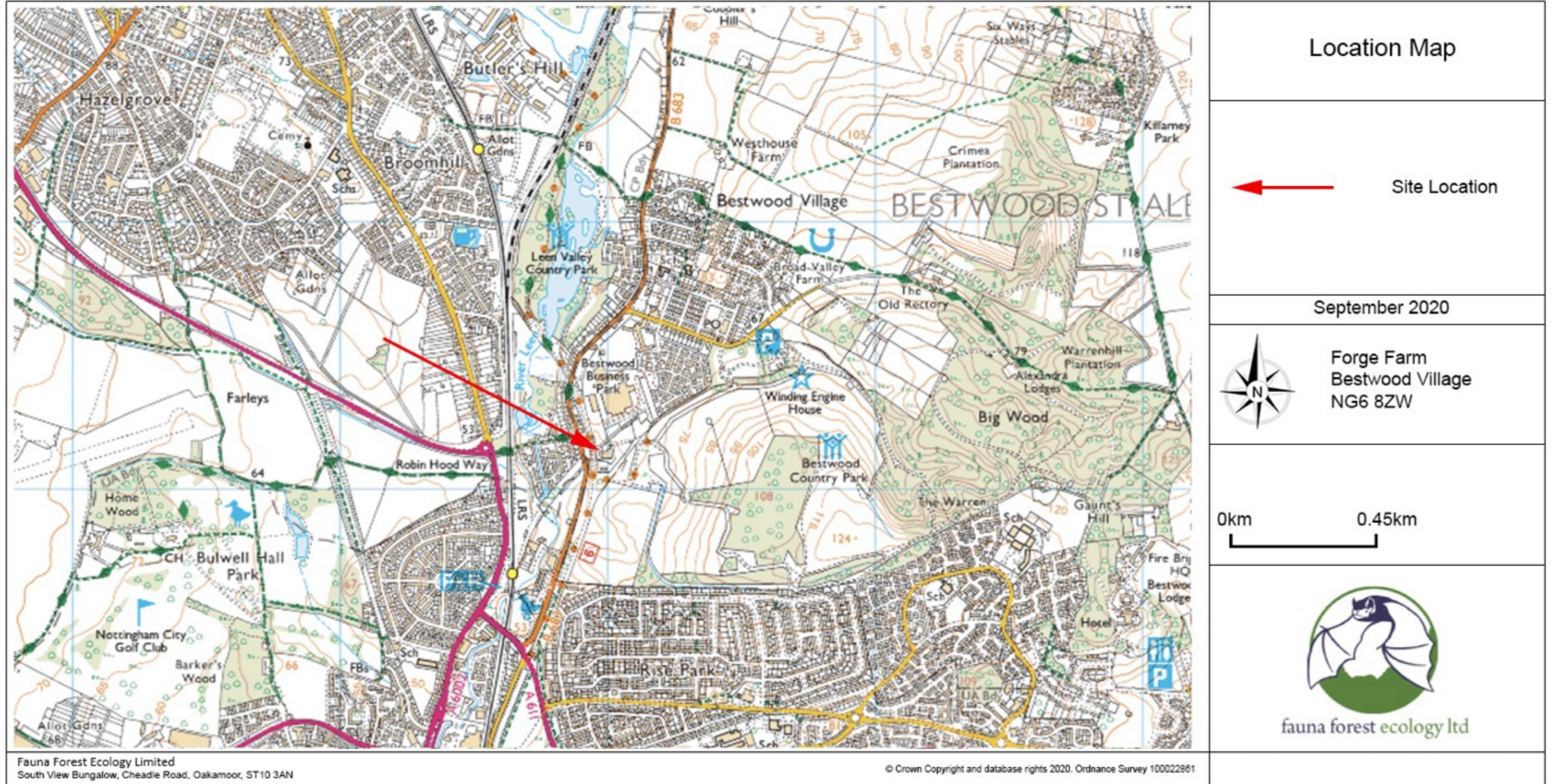


Figure 1: Site Location Map

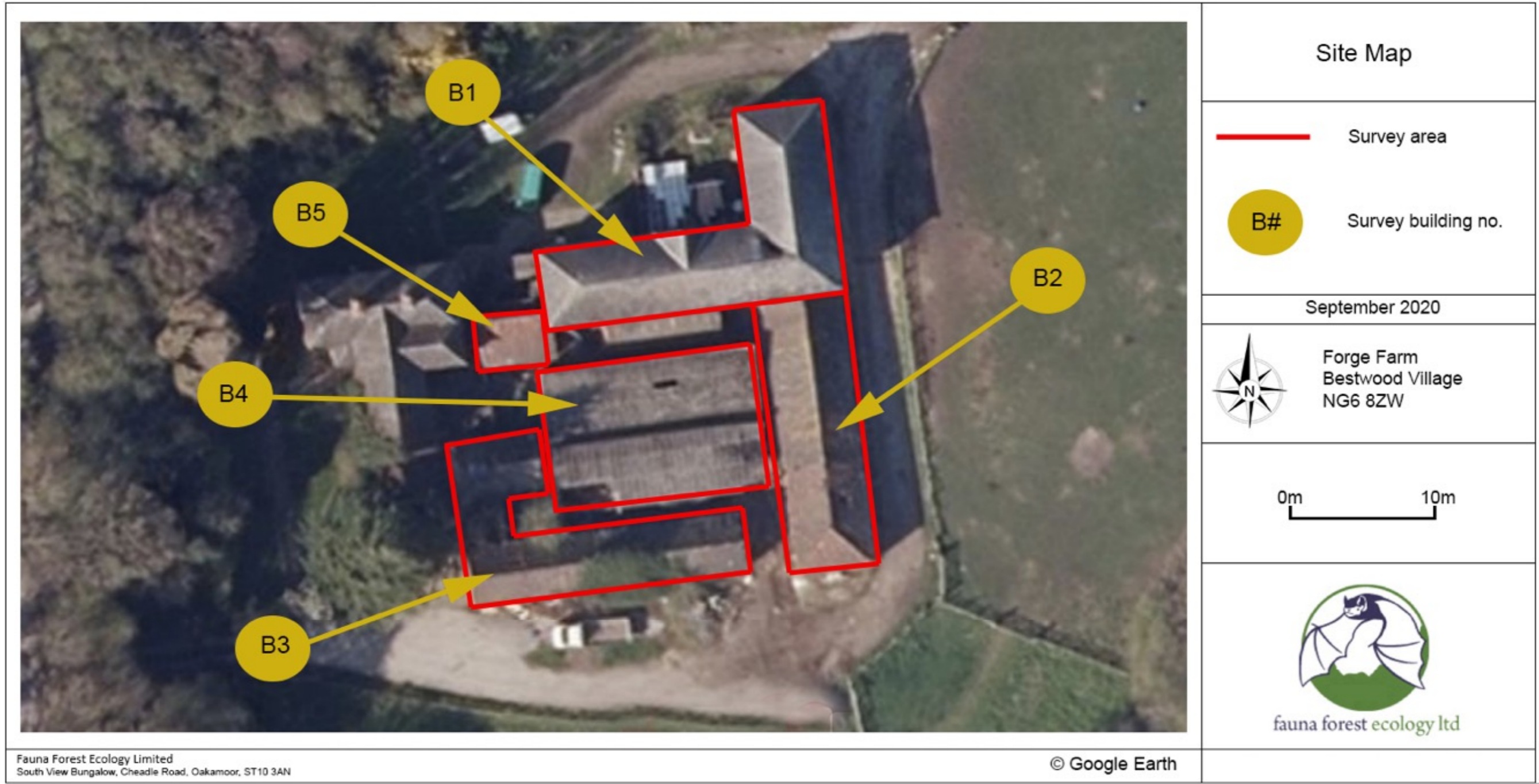


Figure 2: Site Map

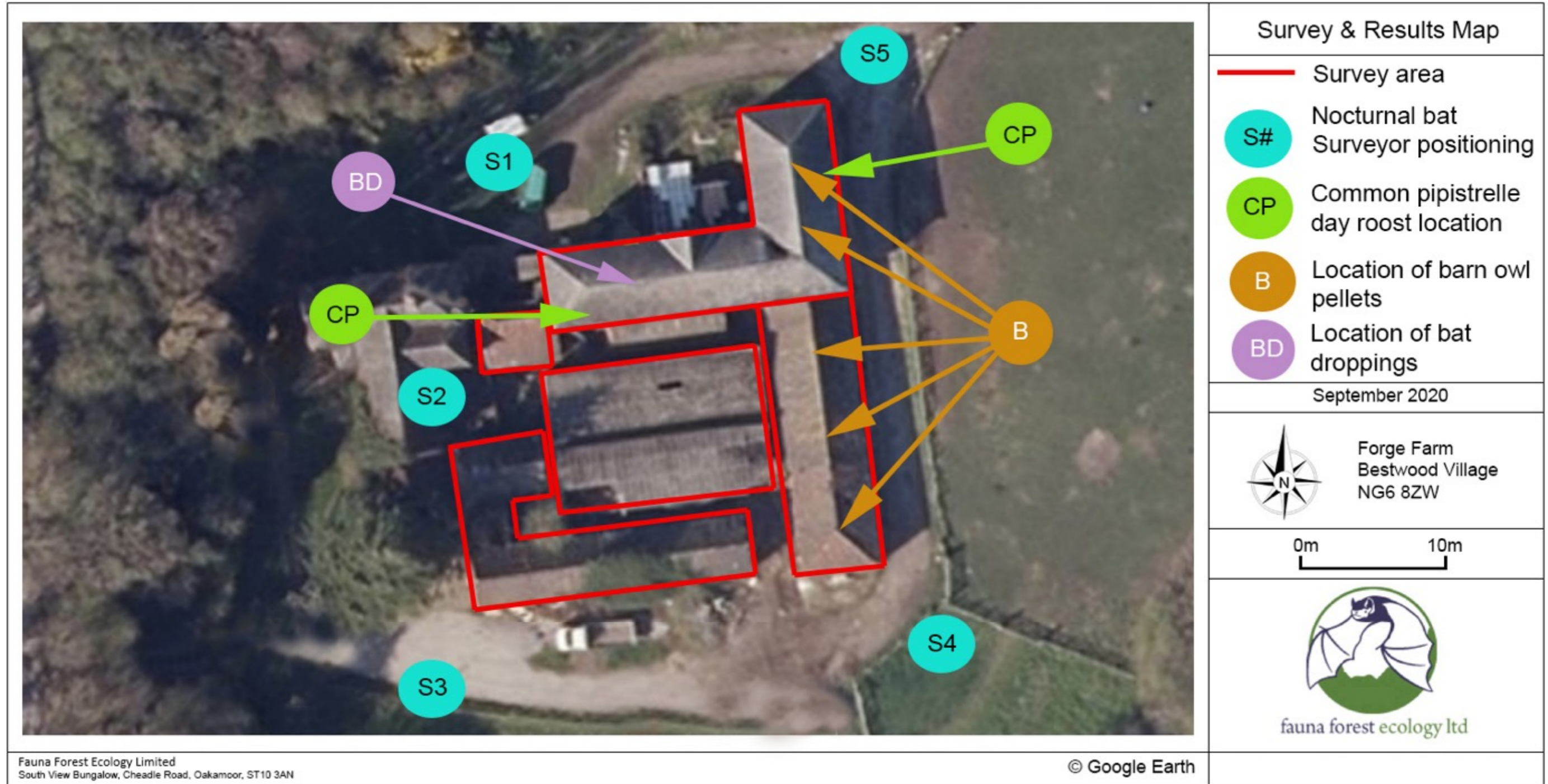


Figure 3: Survey & Results Map



Figure 4: Barn Owl Mitigation Map

APPENDIX C: SITE IMAGES



Image 1: East facing side aspect of B1



Image 2: Internal roof structure of B1



Image 3: Barn owl pellets in B1



Image 4: East facing side aspect of B2



Image 5: B4 (cow sheds)



Image 6: B5 (horse stables)