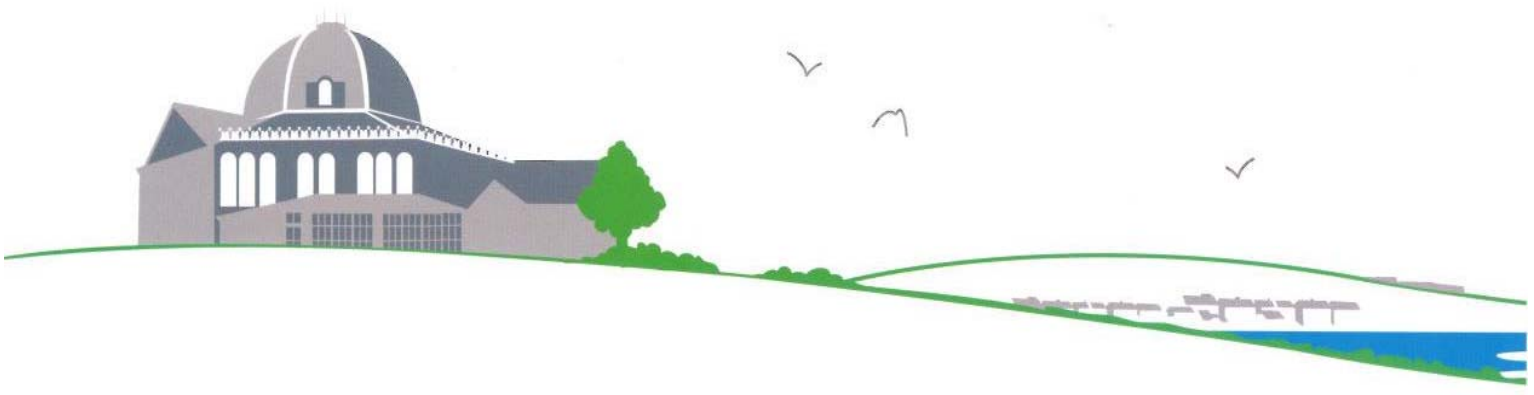
Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

SJ DESIGN / MR AND MRS BROADHURST

STUBBINS FARM, CHINLEY

BAT ROOST AND NESTING BIRD ASSESSMENT



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BAT ROOST AND NESTING BIRD ASSESSMENT

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September 2017

This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

Signed:_____

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APPENDICES

1. INTRODUCTION

Background

1.1 Penny Anderson Associates Ltd (PAA) was commissioned by Mr and Mrs Broadhurst to carry out a survey for bats and nesting birds at a barn on Stubbins Farm, Chinley (OS grid reference SK 0347 8269). The barn is proposed for conversion to residential use and is hereafter referred to as 'the site'.

1.2 This report details the fieldwork undertaken and evaluates the results in the context of the proposed works, making recommendations for any mitigation or ecological enhancement as required.

Site Description

1.3 The barn is one of several existing buildings at Stubbins Farm, Chinley, which is situated on the north western outskirts of the village. Beyond the farmyard, the barn is surrounded on all sides by open countryside including grassland fields, small areas of woodland and scattered trees.

Bat Biology

1.4 There are 17 species of native bats known to be resident (i.e. breed) in the British Isles. British bats feed entirely on insects and have developed a complex sonar system, known as echolocation, which enables them to find prey and navigate around their environment at night.

1.5 Habitat requirements vary widely, both on an individual and species level, although certain features, such as woodland, parkland, traditional pasture, marshes and areas of freshwater, are often focal points for foraging, as insects are plentiful in these areas (Mitchell-Jones 2004). Bats use linear features, such as rivers, hedgerows, roads and woodland edges as landmarks in order to commute from one location to another (Schofield and Mitchell-Jones 2003).

1.6 Bats utilise different roosts at different times of the year. Between late October and March, bats hibernate; this requires an unexposed roost with a stable temperature, typically a cave, cellar or tunnel. Around March, the bats emerge and gradually move to their summer roosts, typically within man-made structures or suitable crevices in trees. During the spring and summer period female bats gather together at maternity roosts to give birth and rear their young. Most births occur between late June and mid-July, with the young able to fly within three to five weeks (Altringham 2003; Waters and Warren 2003). By the end of August, most of the young bats are independent and the colony begins to break up (Schofield and Mitchell-Jones 2003). Mating takes place between August and December, either at the winter hibernation site or at autumn breeding sites. The numbers of bats utilising these roosts can vary from single bats to hundreds of bats in a nursery colony or hibernation site (Altringham 2003).

1.7 Bats play an important role in many environments around the world, including pollination and insect control. In the UK, bats can tell us a lot about the state of the environment because they are top predators of common nocturnal insects and are extremely sensitive to changes in their surroundings, e.g. climate, landscape, agricultural intensification, development and habitat fragmentation. Populations of British bats have suffered severe declines in the past century, influenced by these factors.

Legislative Context

1.8 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2010 (further amended in 2011 and 2012); further details can be obtained from the Joint Nature Conservation Committee (JNCC) website at www.jncc.defra.gov.uk.

1.9 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA) (1981) (as amended) and Countryside and Rights of Way (CRoW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).

1.10 At the national level, the UK Post-2010 Biodiversity Framework published in 2012 is the Government's response to the Convention on Biological Diversity (2010). It describes the UK's biological resources, commits a detailed plan for the protection of these resources within the UK's devolved framework across England, Wales, Scotland and Northern Ireland. The document identifies future priorities for nature conservation and adopts a more strategic approach, including ecosystem services and sustainability alongside biodiversity. Despite administrative changes following devolution, there is still an underlying objective of protecting and enhancing a range of priority species and habitats, often still based on the objectives and classifications of the original UK Biodiversity Action Plan (BAP). Biodiversity 2020 is England's national biodiversity strategy. Building on the Natural Environment White Paper published in 2011, this provides a means of delivering the international and EU commitments to biodiversity. Under Biodiversity 2020, Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

1.11 Finally, the National Planning Policy Framework (NPPF), published in 2012 provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. The NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for biodiversity, with a particular focus on the maintenance and creation of ecological networks. Furthermore, the NPPF also states that any planning proposals for which significant negative impacts on biodiversity cannot be avoided, mitigated or compensated should be refused. Biodiversity 2020 Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity in England within Section 74 of the CRoW Act 2000, and Sections 41 (England) of the NERC Act 2006. The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:

a) protecting and enhancing valued landscapes, geological interests and soils;

b) recognising the wider benefits of ecosystem services; and

c) minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity,

including by establishing coherent ecological networks that are more resilient to current and future pressures.

1.12 Details of the protected species legislation relevant to this site can be found in Appendix 1.

2. METHODS

Overview

2.1 Survey methodology followed current good practice guidelines published by The Bat Conservation Trust (Collins 2016) and all visits were undertaken within the appropriate season and with weather conditions considered to be suitable for bat survey.

2.2 The preliminary daytime inspection was carried out by licensed bat ecologist Hazel Robson[1] MCIEEM[2] and ecologist Caroline Boffey. Emergence and re-entry surveys were led by Hazel and licensed bat ecologist Helen Hamilton[3] MCIEEM with assistant ecologist Rob Lamb. Each member of the survey team was appropriately qualified for their assigned tasks based on the CIEEM competency framework (CIEEM 2013).

Preliminary Daytime Inspection

2.3 The barn was inspected externally and internally, including a search for potential roost features that could be used by bats, such as small holes and crevices in stonework or beneath roof coverings and also potential access points for bats to enter/exit dark internal areas. A search was also made for any evidence of bat presence such as accumulations of droppings and feeding remains or sightings of the animals themselves. Binoculars (Avian F 8x42), torch (Clulite 1 million candlepower) and endoscope (Rigid Micro CA300) were used to inspect potential roost features where necessary.

2.4 The habitats within the site and immediately adjacent areas were also considered for their general suitability for commuting and foraging bats to place the site in the context of its surroundings, as this can have a bearing on the likelihood of a roost being present. The assessment of suitability was based on the broad criteria outlined in Table 1 and Table 2 below (Collins 2016), combined with the professional judgement and experience of the surveyor in recognising suitable habitat features and field signs of bats.

[1] *Natural England class licence registration number 2015-10504-CLS-CLS, survey level 2 (WML-CL18)*

[2] *Full member of Chartered Institute of Ecology and Environmental Management*

[3] *Natural England class licence registration number 2015-15940-CLS-CLS survey level 2 (WML-CL18)*

Table 1 Bat Roost Assessment Criteria (Collins 2016)

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically, but does 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. A tree of sufficient size to contain potential roost features but none seen from the ground or only those with very limited suitability. (i.e. suitable for occasional day roosting but unsuitable for maternity or hibernation roost).
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 type of high conservation significance. (i.e. suitable for day roosting but unsuitable for maternity or hibernation roost).
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. (i.e. suitable for maternity and/or hibernation roost).
Confirmed Roost	A structure or tree with evidence of bat presence, i.e. droppings, feeding remains, audible bat calls heard during daytime survey or sightings of the animals themselves, existing (reliable) record of bats roosting at the location.

Table 2 Bat Habitat Suitability Assessment Criteria (Collins 2016)

Suitability	Description of Commuting / Foraging Habitats
Negligible	Negligible habitat features likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated 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.
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.
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 known roosts.

2.5 Potential presence of nesting birds was also considered, with particular attention paid to any scope for protected species such as barn owl *(Tyto alba*) and notable species such as house sparrow (*Passer domesticus*) or barn swallow (*Hirundo rustica*). Any incidental field signs were noted.

2.6 Photographs illustrating the results of the survey are provided in Appendix 2.

Dusk Emergence and Dawn Re-entry Survey

2.7 One dusk emergence and one dawn re-entry survey were carried out to confirm presence/likely absence of roosting bats and, in the event of a roost being found, to highlight roost entrances and enable bat roost characterisation.

2.8 Each emergence or re-entry survey lasted for approximately two hours, with emergence surveys commencing approximately 15 minutes prior to sunset and re-entry surveys concluding at approximately 15 minutes after sunrise to take in the most likely periods when bats would be observed at a roost site.

2.9 Surveyors were positioned at vantage points on each side of the buildings to observe any bats entering or exiting potential roost features. Each surveyor was equipped with a Batbox Duet bat detector to aid detection in the field and an Anabat SD1 to record bat calls and enable sonogram analysis to confirm identification of any species found to be roosting.

2.10 Weather conditions were recorded at the start and end of each survey. Temperature and humidity were measured using a hygro-thermometer (810-190 www.etiltd.com). Wind was estimated using the Beaufort Wind Force Scale, ranging from 0 calm to 5 moderate breeze (NB while the scale extends to force 12 hurricane, 6 or higher would be unsuitable conditions for survey). Cloud cover was estimated using the standard meteorological scale of oktas (eighths), where 0/8 is a completely clear sky and 8/8 is completely overcast.

2.11 In addition to this, an Anabat Express bat detector was left *in situ* inside the ground floor room of the barn to monitor for bat activity over a period of approximately one week. The detector was programmed to be active and recording any bat calls from 30 minutes before sunset until 30 minutes after sunrise, with the unit being on ‘sleep mode’ during the daytime to conserve power.

2.12 The survey effort was based on the evaluated roosting potential, as determined by the results of the preliminary daytime inspection.

Data Analysis

2.13 Recorded bat calls from each of the survey visits were analysed using specialist sound analysis software AnalookW. Based on parameters such as peak frequency and call duration, each call was assigned to a particular bat species. A sonogram illustrating some of the recorded data for the species encountered is provided in Appendix 3.

Limitations

2.14 Different species of bats use buildings in different ways. Species such as brown long-eared bats (*Plecotus auritus)* typically use roosts with large enclosed spaces and fly around inside prior to emerging, which frequently leaves evidence such as droppings and feeding remains in visible areas. Species such as pipistrelle bats (*Pipistrellus* sp.) tend to utilise small cavities and

crevices and, therefore, evidence of their presence may not be apparent during a visual inspection.

2.15 Daytime inspection, therefore, provides an assessment of the suitability of a structure for use by roosting bats, but cannot necessarily confirm presence/absence of all bat species. However, in combination with observational surveys at dusk/dawn and monitoring using automated bat detectors, a good robust overview of bat roosting activity can be gained.

3. RESULTS

Daytime Inspection

Roosting Bats

3.1 The barn was situated in a sheltered rural area, surrounded on all sides by open countryside with little or no illumination by artificial lighting. The fields in the wider landscape were relatively open with limited shelter due to the use of dry stone walls rather than hedgerows along field boundaries; however, there were mature trees along Stubbins Lane and the nearby Over Hill Road providing semi-wooded corridors suitable for commuting and Chinley Local Nature Reserve to the south east provides further foraging and commuting habitat.

3.2 The building was found to be a small stone building, two storeys high with a pitched roof covered with large stone tiles. There was also a smaller single-storey section adjacent to the eastern gable end with a sloping roof of corrugated sheets, and a derelict cottage adjacent to the western gable end with no roof. At the rear the barn was enclosed at ground level by a lean-to style shelter with breezeblock walls and a sloping roof of corrugated sheets.

3.3 On the exterior, there were gaps in the mortar between the stonework providing potential roost features for crevice-dwelling bats. The roof was in poor condition with numerous holes but gaps between the large individual stone tiles could provide suitable day roosting features for individual bats.

3.4 The ground floor had a concrete base throughout and the walls were partially rendered. At first floor level, the walls were bare stone. The ground floor rooms were considered to provide relatively poor conditions for day roosting but were suitably dark and sheltered for use as a night time feeding roost. A small accumulation of moth wings was discovered in the ground floor room of the barn (former milking parlour), close to the open doorway on the rear of the building beneath the lean-to shelter. This is typical evidence of feeding behaviour by a species such as brown long-eared bats, although no droppings were found.

3.5 The first floor level was a single open room, accessed by ladder via a small open hatch in the wooden floor. The floor was in poor condition and unsafe to walk on, with widespread damage from water ingress and also partial collapse of the heavy stone roof tiles from above. The room was small enough that all areas could be viewed clearly from the top of the ladder and while it was not possible to search extensively through dust and debris on the floor, it was considered that any notable accumulation of droppings would have been apparent from this vantage point.

3.6 The roof was supported by a single wooden king post, made of square cut timbers with no obvious gaps or cavities at the joints. The ridge and most of the rafters were intact; however, there were numerous large holes in the roof where the heavy stone tiles had slid down the roof pitch or collapsed into the room below. Due to the movement of these tiles, the narrow wooden ridge beam was almost entirely exposed at the front of the building and these holes in the roof also allowed natural light to illuminate the room.

3.7 Due to the exposure of the ridge and ingress of water and draughts, the upper room was considered to provide only very poor conditions for roosting and no bat droppings or feeding remains were found.

3.8 The lean-to shelter at the rear had no obvious potential roost features, although could provide shelter for bat foraging activity in poor weather conditions.

Nesting Birds

3.9 Holes and crevices in the stonework provided nesting opportunities for species such as blue tit (*Cyanistes caeruleus*), great tit (*Parus major*) winter wren (*Troglodytes troglodytes*) and house sparrow, although no nests were seen in any of the areas accessible for inspection.

3.10 There was also no evidence of barn swallow nests inside the building, or signs such as pellets or faecal splashing to indicate barn owl using any part of the building.

Monitoring Surveys for Bats

3.11 The dates and weather conditions for each of the surveys are provided in the table below. Observations from the individual survey visits and monitoring are described in further detail under the sub-headings the follow.

Table 3 Dates and Weather Conditions of Surveys

Date	Survey Type	Start Time	Sunset / Sunrise	End Time	Weather
21 Aug 2017	Dusk emergence	20:10	20:23	21:35	Very light drizzle for a short period early on during survey, flying insects noted to be still active so survey continued. No wind, cloud cover 100% throughout. Relative humidity 61%, increasing to 90%. Temperature 19.6°C, decreasing to 16.9°C.
21 Sept 2017	Dusk emergence	19:00	19:15	20:45	Dry and calm throughout. Cloud cover 6/8 decreasing to 1/8 by end. Relative humidity 63%, increasing to 89%. Temperature 11.9°C, decreasing to 7.4°C.
21-29 Aug 2017	Automated monitoring	19:50	20:23 06:12	06:40	Predominantly dry conditions with only light winds. Temperatures ranging from highs of 20.75°C during daytime to lows of 12.0°C at night.

Dusk Emergence Survey 21 August 2017

3.12 No bats of any species were seen to emerge from roost during the survey.

3.13 Common pipistrelle (*Pipistrellus pipistrellus*) bats were seen and heard throughout the survey, with a maximum of three individuals seen together at any one time. The first individuals were encountered within a few minutes of sunset but were seen to commute from the south and therefore did not emerge from the barn. A single *Myotis* bat was detected briefly at approximately one hour after sunset at the rear of the barn then again approximately five minutes later to the front of the barn.

Dusk Emergence Survey: 07 September 2017

3.14 No bats were seen to emerge from roost during the survey.

3.15 Common pipistrelle bats were detected from approximately 15 minutes after sunset, and first seen approaching the site along the lane rather than emerging from the barn. Common pipistrelle bats were observed foraging near and commuting past the site frequently throughout the survey, with a maximum of two individuals seen together at any one time.

3.16 A *Myotis* bat was detected commuting past the site at approximately 1.25 hours after sunset and a brown long-eared bat was also detected several times.

Automated Monitoring: 21 to 29 August 2017

3.17 Bat calls were recorded on each night of the monitoring period, with common pipistrelle being the most frequently detected species, considered likely to be foraging in and around the barn. Noctule (*Nyctalus noctula*) and *Myotis* bats were detected briefly on two nights each.

3.18 Calls of brown long-eared bats were detected several times each night and on each occasion the sonogram indicated a single individual rather than multiple bats calling together. Most of the calls were detected within approximately 3hrs of either sunrise or sunset, although there was no clear pattern within this broad window of time. No social calls or feeding buzzes were discernable on the sonograms.

4. EVALUATION AND RECOMMENDATIONS

Roosting Bats

4.1 The exterior of the building was found to provide a number of potential roost features suitable for crevice-dwelling bat species such as pipistrelles, for example crevices in the stonework. The ground floor rooms were poorly suited for day roosting[4] by any species, and although the upper rooms were a more suitable structure for species such as brown long-eared or a Natterer's (*Myotis nattereri*) that would more often require a dark and sheltered room or roof void in which to fly before emerging, the extensive damage to the roof limited the value of this part of the building. Due to partial collapse of the heavy stone roof tiles, the ridge beam was almost entirely exposed to wind and rain on the southern side and, therefore, provided only very minimal shelter for bats. There was some minor scope for day roosting in this part of the building, but it was considered too exposed to light, draughts and water ingress to be suitable for a maternity roost[5].

4.2 No evidence of bat droppings was found to indicate a roost location and the emergence surveys revealed no evidence of bats emerging from or re-entering roost features on the structure.

4.3 The accumulation of moth wings found beneath an exposed ceiling joist in the ground floor room is a typical sign of feeding behaviour for several bat species. The automated monitoring survey detected brown long-eared bats entering this part of the barn occasionally every night and, therefore, this is considered to be a feeding roost[6] for this species, used by one individual or very small numbers of bats.

4.4 A feeding roost for brown long-eared bats has relatively low conservation status compared to other types of roost or those used by rarer bat species; however, all bats and their roost types are protected and a licence will be required to undertake the works (see below).

4.5 The conversion of the barn for residential use is anticipated to present the following impact on bat populations within the local area:

- Destruction of a bat feeding roost – (medium impact based on guidance on impact assessment outlined on the gov.uk website (2017))

4.6 As there is no evidence of day roosting and building work is generally carried out by contractors during daytime when the bats would be absent, the work is not anticipated to result in any disturbance of bats or risk of harm to bats.

Recommendations

4.7 A licence application to Natural England (NE) will be required to permit the destruction of the bat roost in a managed way under an agreed Method Statement. The licence can only be applied for once planning permission has been granted.

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[4] *Day roost - a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.*

[5] *Maternity roost - where female bats give birth and raise their young to independence.*

[6] *Feeding roost – a place where individual bats or a few individuals rest or feeding during the night but are rarely present by day.*

4.8 There would be no restrictions on timing of works affecting a feeding roost and under current licensing and mitigation policies NE does not typically require any specific compensation for the loss of this type of roost. As the site is so small there is very limited scope to provide an alternative feature that would be suitable for a feeding roost and as noted above this would not be required for the licence; however, the sheltered cattle barns immediately to the rear of the lean-to that will be unaffected by the proposals may maintain suitable conditions for a feeding roost within the immediate vicinity.

4.9 If feasible within the proposals, it would be good practice to incorporate some roosting provision for bats as ecological enhancement, for example by maintaining a small crevice feature at the eaves that could provide access for pipistrelle bats to roost atop the wall plate, or installing a bat box on the gable end. Further advice on this can be sought from the Ecologist at the time of works.

Nesting Birds

4.10 Crevice and cavity features in the walls of the building provide suitable nesting opportunities for various common bird species that are likely to be present in the local area, such as European robin (*Erithacus rubecula*) and winter wren.

4.11 The building was considered to provide relatively poor conditions for barn owl due to the extensive state of dilapidation and there was no evidence of their presence on the date of survey; however, there is some potential that barn owls could use the site for occasional roosting in future and this will need to be considered at the time works commence on site.

4.12 All nesting birds, their nests, eggs and dependent young are protected under the WCA 1981 (as amended), which will have implications for timing of works such as vegetation clearance and repairs to the stonework. Whilst breeding, barn owls also receive additional protection under Schedule 1 of the WCA 1981 (as amended).

Recommendations

4.13 Some bird species are relatively tolerant of human activity and therefore may nest in the holes and crevices on the building even once some works on site have commenced. Contractors must remain vigilant for signs of nesting activity (such as birds carrying nesting materials or food) and any such features used for nesting must not be blocked up or damaged until after the young have fledged.

4.14 Evidence of barn owl is considered likely to be relatively obvious, comprising pellets and/or large splashes of white droppings beneath perches such as roof beams. In the unlikely event that barn owls are suspected to be using the building when works commence then further advice must be sought from a suitably experienced ecologist so that it can be established whether the site is used for breeding or roosting to avoid any offence under wildlife legislation and to enable appropriate mitigation to be devised.

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6. ABBREVIATIONS

BAP	Biodiversity Action Plan
CRoW	Countryside and Rights of Way
EU	European Union
JNCC	Joint Nature Conservation Committee
NERC	Natural Environment and Rural Communities
NPPF	National Planning Policy Framework
PAA	Penny Anderson Associates Ltd
SSSI	Sites of Special Scientific Interest
WCA	Wildlife and Countryside Act

APPENDICES

APPENDIX 1

Summary of Relevant Protected Species Legislation

SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CRoW) Act 2000 and the Conservation of Habitats and Species Regulations 2010, and this legislation is applicable to England and Wales. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2010.

The Conservation of Habitats and Species Regulations 2010[1] state that a person commits an offence if they:

(a) deliberately capture, injure or kill any wild animal of a European protected species,

(b) deliberately disturb wild animals of any such species, in such a way as –

  (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or

  (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or

  (iii) to affect significantly the local distribution or abundance of the species to which they belong;

(c) deliberately take or destroy the eggs of such an animal, or

(d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), that are frequently found in buildings, are listed as a 'Priority Species' under the under the 2011 biodiversity strategy for England, *Biodiversity 2020: A strategy for England's wildlife and ecosystem services,* under the 2012 UK Post-2010 UK Biodiversity Framework. These Priority Species are also referred to as 'species of principal importance' for the conservation of biodiversity in England and Wales within Section 74 of the CRoW Act 2000, and Sections 41 (England) and 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006. Section 11 of the National Planning Policy Framework (NPPF) states that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible. The NPPF also includes the requirement to contribute to the Government's commitment to halt the overall decline in biodiversity and to promote the reservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets. Reference is made to Circular 06/2005 *Biodiversity and*

[1] *These regulations have been slightly amended by The Conservation of Habitats and Species Regulations 2012*

Geological Conservation - Statutory Obligations and Their Impact within the Planning System in respect of statutory obligations for biodiversity and geodiversity conservation.

Local authorities in England are required to ensure that where significant harm resulting from development cannot be avoided (through locating on alternative sites with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, planning permission is refused. The commitment to preserving, restoring or enhancing biodiversity is further emphasised for England and Wales in Section 40 of the NERC Act 2006.

Please note: the above text provides a brief summary of the legislation in relation to bats in England and Wales and the original Acts, Regulations and any amendments should be referred to for the precise wording.

Penny Anderson Associates Ltd
CONSULTANT ECOLOGISTS

SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CRoW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

> 'If any person intentionally,
>
> (a) kills, injures or takes any wild bird;
>
> (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
>
> (c) takes or destroys an egg of any wild bird,
>
> he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CRoW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

> 'If any person intentionally or recklessly,
>
> (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
>
> (b) disturbs dependent young of such a bird,
>
> he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as barn owl (*Tyto alba*), black redstart (*Phoenicurus ochruros*), wood lark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species.

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by authorised persons at all times. This includes species such as carrion crow (*Corvus corone*), black-billed magpie (*Pica pica*), feral pigeon (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.

APPENDIX 2

Site Photographs

Plate 1

Front and eastern gable end of barn with adjacent single-storey structure. NB: adjacent cottage at far left of picture (paler stonework) is not part of the proposals.

Plate 2

Western gable end of barn is partially enclosed by the adjacent derelict cottage, which has no roof.

Plate 3

Rear of barn enclosed at ground floor level by lean-to style shelter of breeze blocks with corrugated sheet roof.

Plate 4

Open doorways into barn on rear wall and also at gable end beneath lean-to shelter.

Plate 5

Ground floor of single-storey section of barn – former dairy with concrete floor and partially tiled stone walls.

Plate 6

Ground floor of barn – former milking parlour with concrete floor and partially rendered stone walls.

Plate 7

Accumulation of moth wings on floor of former milking parlour (found on ramp leading into the milking parlour close to the open doorway at the rear of the barn).

Plate 8

Doorway into former milking parlour, location of moth wings (bat feeding remains) marked with arrow.

Plate 9

Upper storey of barn – single room with bare stone walls and partially collapsed roof and floor.

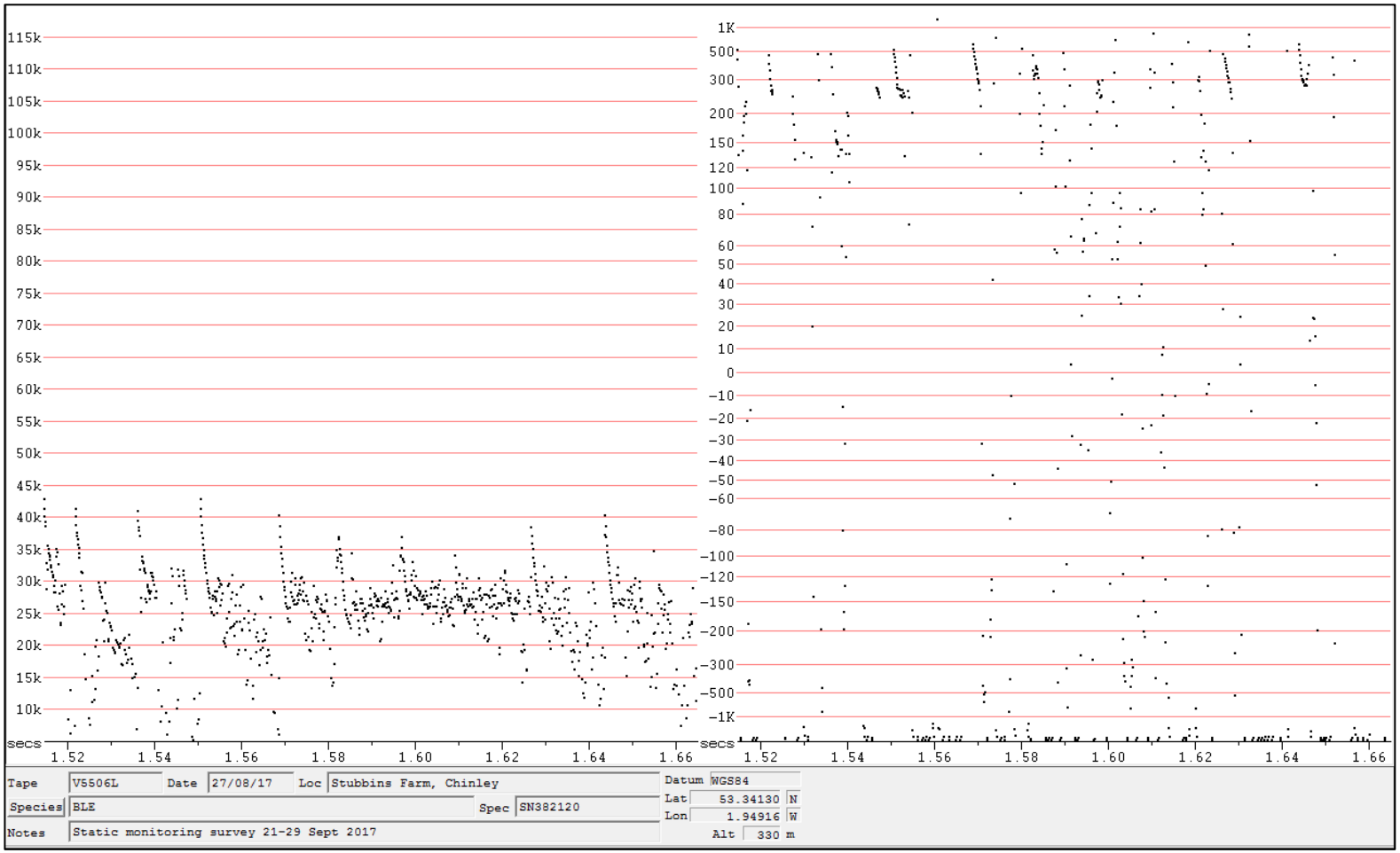
Plate 10

Single king post supporting roof of barn. Covering of stone tiles in very poor condition and partially collapsed, leaving ridge beam very exposed.

APPENDIX 3

Sonogram

Sonogram 1: Echolocation calls of brown long-eared bat recorded during automated monitoring inside the ground floor of the barn.
Recorded by Anabat SD1 and analysed using Analook (view: F7 compressed, frequency and slope).



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