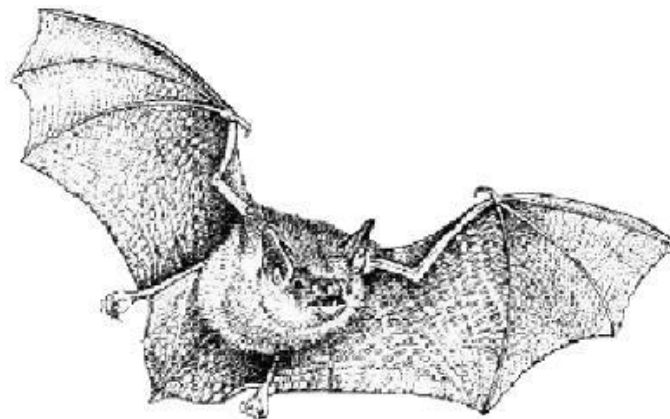


Pigeon Cote at Springbank Kennels, Birch Hill Lane, Wardle, Rochdale, Greater Manchester. OL12 9LZ

Survey & Assessment in Respect of Bat Species, and Nesting Birds.

**Surveyor- Mike Fisher
(Bat Survey Licence Level 2 Class Survey Licence WML CL18)
(Bat Roost Visitor Level 1 Class Survey Licence WML CL15)**



Echo Calls Bat Surveys

19th July 2018

1. Introduction

1.1 Reason for Survey

As part of the process to obtain planning permission to develop the site, a daytime evidence and opportunity bat survey, an evening bat emergence survey, and a nesting bird survey, were requested, on a pigeon cote, and any trees, shrubs, and hedgerows, both within and around the site boundaries. The purpose of these surveys was to provide up-to-date evidence on habitats and protected species, within the site boundaries, as part of the Local Development Framework (UDP Policy EN9).

1.2 Aims

The aims of this ecological assessment were to:

- To provide clear advice to the client, and the Local Planning Authority, on the nature conservation value of the site, and surrounding area.
- To assess the site for the presence, or potential of protected species, within the proposed development site.
- To enable the client to comply with legislation afforded to protected sites and species.
- To highlight the presence of any habitats or species of ecological importance, including Habitats and Species of Principal Importance (NERC Act, 2006).
- To identify any ecological constraints, on future development.
- To establish the need for any further surveys and assessments.
- To make nature conservation recommendations.

1.3 The Site

The targeted building was situated along the southern edge of Birch Hill Lane in the Wardle area of Rochdale, and consisted of a pigeon cote, located amongst other buildings within the overall site perimeter. The land and buildings from now on are referred to as the “site”, at OS grid reference: SD 91888 16768, (refer to **Fig 1 - The Site Location**).

1.4 The Buildings

There was a large detached pigeon cote, situated amongst other buildings within a large area of land.

1.5 Surrounding Land

The targeted building was located at the north-eastern corner of a large yard area and car park, containing other buildings being used as dog kennels. There were a few stunted trees and fragmented hedgerows situated at locations around the site perimeter, but there were no large trees or shrubs within the site itself.

Immediately surrounding the site on all sides, was a mixture of moorland and open rough pasture, containing a few semi mature trees and bordered by either walls, fencing, or by lengths of fragmented hedgerow. 0.22km away to the west, was the town of Wardle containing gardens with some shrubbery and small trees, whilst 0.19km to the south-east was a small reservoir, with a shelterbelt of mature trees, 0.1km to the east, (refer to **Fig 2 – Google Plan**).

2. Methods

2.1 Risk Assessment, Possible Hazards

The required access to the site was easy, and the perimeters of the building could be searched with care. However, the pigeon cote was occupied by numerous pigeons, and the interior of the cote was covered in feathers and guano, so the interior could only be partially searched by surveyors wearing PPE.

2.2 Methodology of Bat Surveys

A number of factors are used for the survey methodology, which include:

- Knowledge of bat species relevant to the site location, and geographical range;
- Nature of the immediate, and surrounding habitat, in relation to foraging opportunity;
- Condition of trees, shrubs, and any water bodies;
- Presence/absence of roost potential:
- Value of roost potential – if present.

2.3 Daylight Evidence and Opportunity Survey

The initial daylight evidence and opportunity survey took place on 10th July 2018, and was carried out in order to assess the site, and search for evidence of bat occupation (including recent and historic use).

It comprised a search for bats, bat droppings, remains of invertebrate prey, grease marks from repeated contact, or passage through narrow roost accesses, or against surfaces, and any other signs of bat occupation.

Areas within the targeted building searched was:

- Outside; the eaves and walls for signs of potential bat access holes, the ground, window sills, and any other surfaces, such as low roofs or refuse bins, which may occur underneath the eaves, and around the perimeter of the building, which may catch bat droppings.
- Inside the building, in pigeon nesting boxes, roof voids, on floors, roof trusses, door lintels, window ledges, or behind window shutters, peeling plaster, also in spider's webs and other places where droppings or prey remains may collect. Also, noting any noises such as scratching and squeaking which may be made by roosting bats.

The optimum time to investigate buildings for evidence of a bat roost, is between May and August, however, this can sometimes be earlier or later in the year, and is weather and temperature dependant.

Evidence and opportunity inspections and assessments may be conducted outside of this time, and can often provide conclusive results, which can save expense and time for planning applicants.

The habitats and any trees surrounding the site, were assessed for their suitability for use by foraging and commuting bats.

All nesting bird species (including pigeons) observed during the survey were recorded.

All surrounding habitats were assessed for their value for use by nesting birds. (including pigeons).

2.4 Equipment

Equipment used consisted of ladders, an endoscope, cameras, close-focus binoculars, and powerful hand-held torches.

2.5 The Evening Bat Emergence Survey.

A single evening bat emergence survey was carried out to further assess the site, by observing how bats utilise the site, and observe if any bats emerged from possible roosts within any of the buildings, or from any of the trees and boundary hedgerows, and it was carried out by two surveyors, strategically positioned to ensure maximum observation of the targeted building.

2.6 Equipment

The equipment used consisted of close-focus binoculars, powerful hand-held torches, and heterodyne bat detectors with ear phones (a Bat Box 3D and a Magenta 5).

3. Results

3.1 Daylight Evidence and Opportunity Survey

3.1.1 Weather

The weather conditions on 10th July 2018, at the start of the survey were good. It was bright and with a light breeze, (Beaufort Scale 2/3), and heavy cloud cover, and with a temperature taken at the start of the survey of 19°C. Although it had rained heavily during the previous 24 hours, conditions were still suitable for a survey of this type.

3.2 Possible Roost Sites

3.2.1 The Buildings

There was a pigeon cote surveyed as part of the planning application.

The Pigeon Cote.

The pigeon cote was a single storied, hipped building, constructed from a mixture of concrete and wooden panels, mounted on a timber frame. Along both south and western elevations were sliding door panels, which allow both people and pigeons to access into the interior. It had a pitched roof of underlined concrete tiles, but no roof void. The interior was made up of pigeon cages, mounted one upon another, totally filling the inside of the building.

The pigeon cote was uninsulated, unheated and cold, and had neither lining nor any insulation, and therefore it was deemed unsuitable for breeding bats. Also, as damp and frost were likely to penetrate the interior, the building did not offer the optimum humidity and stable low temperatures, that are suitable for hibernating bats.

Also, due to the numbers of roosting pigeons, the interior of the cote was dirty, and noisy with birds being a constant disturbance. These things, together with the copious inclusion of light through the open doors and windows, reduced roosting opportunities within the building interior. Therefore, it was concluded the pigeon cote offered negligible potential as any type of bat roost, (refer to **fig 3** and **photos 1 to 11**).

There were potential bat access points however, and these were:

- Several ridge tiles along the east-west axis, and a pair of roof tiles were also missing, one of these was close to the western gable end, whilst the other was just below the ridge line in the northern part of the roof. All of these were carefully searched using close-focus binoculars, also searching the areas around the resulting holes, and on the tiles and roof beneath them all, found neither bat droppings, remains of invertebrate prey, nor any grease marks from repeated contact, or passage through the holes, and it was deemed therefore, that bats had not used either of the holes for roosting or access purposes, (refer to **fig 3** and **photos 1 to 3**).
- There were sliding door panels along both the southern and western elevations, kept open to allow access into the building. Again, close inspection around the doors, on the floor beneath and within the building itself, found no evidence to suggest that bats use these doorways to access the interior of the building, (refer to **fig 3** and **photos 5 to 7**).
- The pigeon cote was mounted on small stilts, resulting in a large void being present beneath the building, however, inspection found the void to offer negligible bat roosting potential, (refer to **fig 3** and **4** and **photos 1 to 3**).

No evidence of bats was detected in, on, or around, any part of the building, either internally or externally. Nor was there any evidence of previous use by roosting bats detected.

The search also found no evidence to suggest that the building was being used by any nesting or roosting birds, other than pigeons.

3.2.2 Trees and Shrubs.

There were a few immature trees and some shrubbery, along with fragmented hedgerows, forming the boundaries of the site. All of them that were within the site boundary, were carefully searched, but none were found to offer any bat roosting potential, and therefore, all of the above were judged to be Category 3 (of negligible value for roosting bats) in accordance with **Appendix 3**.

It was thought likely, that some of the trees and shrubbery around the site boundaries, could be used by nesting birds, during the nesting season, but at the time of the survey, although there was some bird activity, other than pigeons in and around the site, no active nests were found.

3.2.3 Foraging Potential and Alternative Bat Roost Potential

The site was in a rural area, and the nearby habitat consisted of mainly large areas of open moorland and rough pasture, bordered by either walls, fences, or lengths of fragmented hedgerow, as mentioned above, (paragraph 1.8), and all these features together with the a few buildings in the area, offered linear features suitable for foraging bats such as common pipistrelle (*Pipistrellus pipistrellus*), and possibly other bat species, to hunt along for their insect prey.

Also, the small reservoir to the south-east, and the shelterbelt to the east, also offered some bat foraging potential.

It was considered that other buildings, especially dwellings in the surrounding area, could offer greater potential as bat roosts. Bats favour heated building whilst breeding.

3.3 First Evening Emergence Survey

An evening bat emergence survey was carried out to further assess the site, and observe if any bats emerged from roosts within any of the buildings in the site, or from the trees, hedgerows and shrubs around the site perimeter, and also to observe how bats use the surrounding areas for both commuting and foraging. This survey also took place on 10th July 2018.

3.3.1 Weather

The weather conditions on 10th July 2018, at the start of the survey were reasonable. There was heavy cloud and a light breeze, (Beaufort Scale 2/3), and a temperature taken at the start of the survey of 19°C. Although it began to rain before the survey ended, conditions were still suitable for a survey of this type.

3.3.2 The Survey

The sunset on the 10th July 2018 was 21.35 hrs, and the survey started 16 minutes before the sunset at 21.19 hrs, and ended when it was too dark to observe the bats well.

The first two bats recorded were both common pipistrelles (*Pipistrellus pipistrellus*), heard but not seen. Both of these were located to the east of the site, close to a line of trees, the first being at 21.47 hrs, and the second at 21.52 hrs, and it was suspected that these were observations of the same bat, (refer to **pink arrows 1 and 2** on **fig 3**).

At 21.57, a single common pipistrelle was observed in a foraging loop from amongst the trees to the east of the site, and looping over the nearby pasture, before exiting the area in a north-easterly direction, during which time numerous feeding buzzes were heard, and again it was thought to be the same bat recorded earlier, (refer to **pink arrow 3** on **fig 3**).

No other bat activity was heard or observed, and at no time were bats seen to have emerged from the pigeon cote, the nearby buildings, nor from any of the hedgerows, trees and shrubs around the site.

As well as the numerous pigeons on site, there was other bird activity noticed during the survey, but there were no sightings of nesting behaviour.

4. Conclusions

4.1 In summary, at the time of the current surveys, (10th July 2018), no current evidence of roosting bats, was found in any part of the pigeon cote, nor from any of the hedgerows, shrubs or trees located around the site perimeter.

4.2 The pigeon cote was inhabited by numerous pigeons, and was noisy, dirty, unheated, and cold, and had neither lining nor any insulation, and therefore it was deemed unsuitable for breeding bats. Also, as damp and frost were likely to penetrate the interior, the garage did not offer the optimum humidity, and stable low temperatures, that are suitable for hibernating bats. However, as the building was also open to copious amounts of daylight, entering through the open doors and windows, actual potential roosting opportunity was greatly reduced, Therefore, the cote was deemed to offer negligible potential as a possible bat roost, (refer to **Appendix 2**).

4.3 None of the trees and hedgerows around the site boundaries, offered any suitable roosting opportunities for bats, of any species, and therefore, all of the trees and shrubs were concluded to offer negligible potential as possible bat roosts, (refer to **Appendix 2 and 3**).

4.4 Since bats, particularly Pipistrelles, are opportunistic, an absence of roost evidence at present, does not preclude the low possibility of small numbers of bats, using the site boundaries occasionally in the future and/or at other times of year. It is considered that the likelihood of a significant roost (such as a maternity roost) being established is very unlikely, with lone and/or transient roosting likelihood being negligible.

4.5 The adjacent habitats had the potential to support low to moderate numbers of foraging common pipistrelles, but large numbers of other species of bats was unlikely.

4.6 It is concluded that since there is currently *no evidence* of the presence of bat roosts within any part of the site, that any proposed constructions of new buildings on this site, will not have significant implications on the population status of local bat species. There will not be requirement for an EPS mitigation licence (as issued by Natural England) but as a measure of best-practice, precautionary measures should be applied as described in section 5 below.

4.7 It was also concluded that since no evidence of roosting bats, or evidence of either current or historic bat occupation, had been found during the surveys undertaken on 10th July 2018, then a single visit to the site to carry out a daylight evidence and opportunity bat survey, and a single evening bat emergence survey, were considered sufficient to assess the site at this time, (refer to the 'Bat Worker's Manual' (JNCC 2004) and 'Bat Surveys – Good Practice Guidelines' (BCT 2012), paragraph 8.3.4).

4.8 It was understood that there may be some site clearance work to be carried out during the planned development, but that this will be kept to a minimum, and that the boundary hedgerows, and the trees and shrubs around the site will be unaffected by the work. As bats use linear features such as lines of trees or walls, as foraging and commuting routes, it was concluded that the loss of the habitats, and any future development works on the site, would not affect the overall foraging or commuting potential for bats in the area.

4.9 All wild birds are protected under the *Wildlife and Countryside Act 1981* (as amended) while they are breeding. There was potential for the trees, shrubs and other vegetation outside the site perimeter, to be used by birds for both roosting and nesting purposes, but no active nests were found, (Refer to **Appendices 1**).

5. Recommendations

5.1 The proposed changes to the site as laid out in the planning application, are of minimal risk to roosting bats or nesting birds, and therefore, development can commence if the following mitigation measures are adhered to.

5.2 The aim of any mitigation is to ensure that any work is carried out in a manner that avoids harm, or significant disturbance to bats and nesting birds, also, to create new enhanced roosting opportunities for bats, and bird nesting opportunities, both during, and after the development.

5.3 Ideally, the buildings, (not considered suitable for hibernation), especially the roofs, should be worked on in winter to avoid the possibility of bats moving in and using the buildings as a spring, summer and autumn roosts after the survey. The safest period will be from the first hard frosts, normally mid-December, until mid-March, although this could be earlier in a really warm spring, or later in a cold spring.

5.4 However, even if the buildings are worked on at other times, it will be very unlikely that roosting bats will be disturbed, but it is recommended that work starts as soon as possible after this survey, and that any ridge tiles, slates or sheeting over walls and gables, be carefully removed by hand, (the ridge and edge tiles and copingstones are the features most likely to harbour potential for the support of roosting bats). Once the roofs have been removed, the building should be left for two nights before demolition continues. This will permit any bats present in cracks in the brickwork at the top of a wall time to move off.

5.5 If more than 12 months elapses between this survey, and any modernisation work, or roof tile removal, then surveys of the site must be repeated. The evidence and emergence surveys need to be carried out under weather conditions suitable for normal bat activity, or carried out when bats are fully active (May to September but is weather dependent), and will also be accompanied by a suitable number, of evening bat emergence surveys.

5.6 As a measure of best practice and in accord with a key principle of National Planning Policy Framework (2012), it is recommended that the re-development scheme for this site, incorporates biodiversity enhancement measures, and an appropriate measure will be the installation of bat boxes, or bat bricks. The latter can be incorporated within building walls at the gable ends, and the former can be attached to the new building, or to any surrounding suitable trees. In connection with the development proposals it is recommended that these measures are implemented to maximise the opportunities for wildlife at the site, (refer to **Appendix 6** for details).

5.7 There was potential for both roosting and nesting birds other than pigeons, in either the pigeon cote, or the trees and hedgerows around the perimeter of the site, but it must be remembered that it is an offence to disturb active birds' nests. It is recommended therefore that before the commencement of any building work, that a careful survey looking for any evidence of nesting birds is carried out. If evidence of an active bird's nest is detected at the start of demolition, or tree felling, the nest must be left undisturbed until it is appropriately confirmed that the young birds have fledged. This guidance is applicable during the bird breeding season which typically extends from March to August inclusive.

5.8 Any future vegetation clearance should only be carried out between September and February inclusive, (i.e. outside the bird nesting season) unless it is confirmed by a suitably experienced ecologist that no active nests are present. If, however, should the felling of trees take place during the early part of the nesting season, then the trees or shrubs, should be removed from the site, immediately following the felling, failure to do so could provide potential nest sites, if left in place throughout the rest of the breeding season.

5.9 If any building work, or tree felling, takes place during the nesting season (March-August), then care must be taken to avoid active nests, and any nests found, must be left undisturbed, until the young have fledged. It is recommended therefore to reduce any nest disturbance, that no activity involving people or their equipment, it is to be carried out within a 3m radius of active nests. If there is any doubt, please refer to the consultant.

5.10 It is also recommended that, if any tree, shrub or hedgerow around the site is removed, pruned or disturbed during building works, all clearance and disturbance should be undertaken outside the hedgehog hibernating months, November to mid-March. If this is not possible, a suitably experienced ecologist must be present to oversee all vegetation removal, to ensure that no hedgehogs are disturbed whilst hibernating (Hedgehogs are a UK BAP Priority species).

5.11 To enhance the site's value for wildlife, it is recommended that trees be planted to replace any felled trees, and this is planned as part of the development, and that the trees used for re-planting are British native trees as far as is possible. These trees are more likely to attract insects and are therefore beneficial to foraging bats and other wildlife. Suitable species include: Hawthorn, Rowan, Wild Cherry, Guelder Rose and Crab Apple. These have been chosen for their attractive blossom and fruits. Oak, Ash and Willow species are recommended away from buildings and drains.

5.12 Close boarded fences with concrete bases are barriers to animal movement, and It is recommended, that any new perimeter fences along the boundaries are not to be sealed at their bases. Where possible, hedgerows are to be used instead, with timber post and wire fencing also serving to enforce boundary lines, without prohibiting wildlife movements. If any boarded fences are required, it is recommended that there is a 3 – 5cm gap between the wood and the ground (greater in some locations and less in others is not a problem) so that wildlife such as hedgehog and amphibians can pass into and out of the garden.

5.13 Outdoor lighting is typically a deterrent to wildlife, especially bats and nesting birds, it is therefore recommended, that any future outdoor lighting, installed during the proposed development, be screened, hooded, or positioned low at bollard level, so that it does not illuminate the roof or eaves, or nearby trees and shrubs

5.14 It should be remembered that bats are occasionally found in the most unexpected places. If any bats are found during unsupervised work, the consultant (077450268815) or the local bat group (South Lancashire, 0161 764 8850) should be notified and work stopped immediately. **Failure to do so would be a criminal offence.**

6. Survey Constraints.

Surveying for bats at a specific season of the year, does not provide information of use of the site by bats at other times of the year. The current surveys were undertaken in the summer, and reflects bat activity at the time of the surveys only, and whilst consideration may be given to roosting at other times, there may be no evidence for activities outside the survey period.

As bats can utilise very small cracks and crevices, it is not possible to completely discount their use of some of the buildings around the site, although the survey did not identify any evidence of use. Assessments can however be made of potential use from the survey findings collected, but it may not provide a full picture of site usage.

Small bat roosts and single roosting bats can easily be overlooked. They can be difficult to detect during inspection, as they leave few field signs which can easily be missed during surveys. External signs e.g. droppings, prey remains etc., are also subject to weather and rain, which can often remove the signs prior to an actual survey. This is particularly valid when inspecting trees and shrubs.

7. References

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8. Surveyors Qualification

The surveyor Mike Fisher is a holder of Natural England Class Licence Registration Number: 2015-10595-CLS-CLS, this is the Bat Survey Level 2 Class Survey Licence WML CL18, and Natural England Class Licence Registration Number: 2015-10592-CLS-CLS which is the Volunteer Bat Roost Visitor Level 1 Class Survey Licence WML CL15.

The surveyor also has a licence to disturb and take bats for scientific, educational or conservational purposes by Countryside Council for Wales (Licence Number 65104:OTH:CSAB:2015).

He was assisted on the surveys by Louise Fisher who is long standing member of South Lancashire Bat Group, and experienced in the use of bat detectors and bat surveys.

9. Plans & Photographs



Fig 1 - The Site Location



Fig 2 – Google Plan

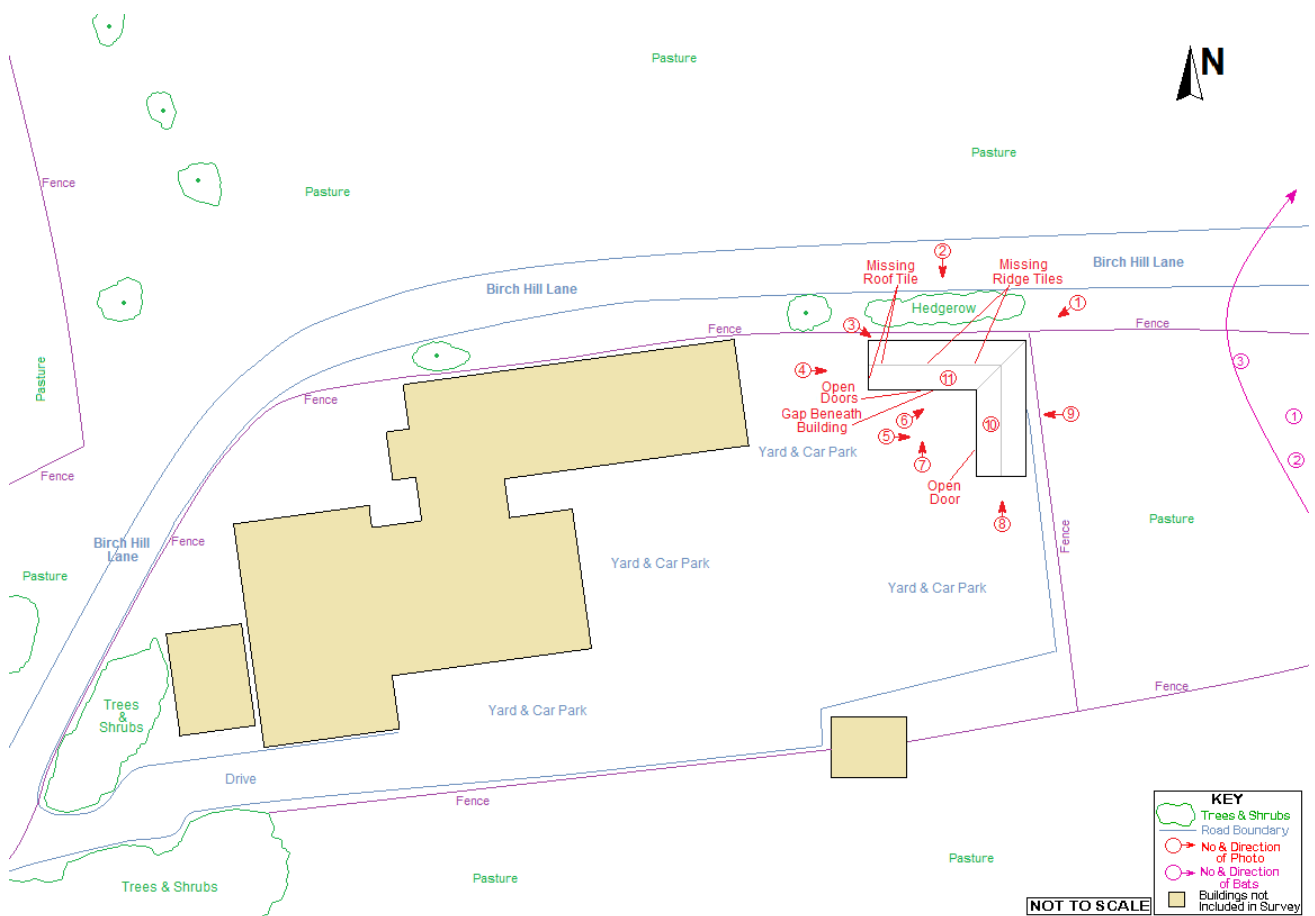


Fig 3 – Main Plan



PHOTO 1
North-eastern Corner of Pigeon Cote



PHOTO 2
Northern Elevation of Pigeon Cote



PHOTO 3
Underside of Pigeon Cote Soffit



PHOTO 4
Western Gable of Pigeon Cote



PHOTO 5
Southern Elevation of Pigeon Cote



PHOTO 6
View Along Southern Elevation



PHOTO 7
Western Elevation of Pigeon Cote



PHOTO 8
Eastern Gable of Pigeon Cote



PHOTO 9
Eastern Elevation of Pigeon Cote



PHOTO 10
Underside of Pigeon Cote Roof



PHOTO 11
Typical View of Inside of Pigeon Cote

19th July 2018
Mike Fisher, Bat Worker
Holder of Natural England Bat Roost Licence

Disclaimer.

All reasonable effort has been taken to ensure an accurate assessment of the birds and bats at this site. The absence of recorded presence or sign should not be taken as an absolute guarantee that a site is not being used by a particular species. There is also no guarantee that any particular species will not use the site at any time in the future. Survey results for both bird and bat activity may be weather or seasonally dependent. Any interpretation of legislation is based on our understanding and experience of the law. The relevant statutory authority can provide a more definitive interpretation.

This report has been prepared by Echo Calls Bat Surveys with all reasonable skill, care and diligence, within the terms of the Contract with the Client.

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APPENDIX 1: Synopsis of Relevant Legislation

Bats and the Law

In Britain, all bat species and their roosts are legally protected, by both domestic and international legislation.

This means you will be committing a criminal offence if you:

Deliberately capture, injure or kill a bat

Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats

Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)

Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat

Intentionally or recklessly obstruct access to a bat roost.

Licensing

Licenses to permit illegal activities relating to bats and their roost sites can be issued for specific purposes and by specific licensing authorities in each country. These are sometimes called 'derogation licenses' or 'European Protected Species' licenses, and are issued under the Habitats Regulations. It is an offence not to comply with the terms and conditions of a derogation Licence. If you carry out work affecting bats or roosts without a Licence, you will be breaking the law.

Who needs to take particular note of the legislation?

Property owners/householders who have a bat roost in their property.

Woodland owners, arboriculturalists and foresters.

Pest controllers.

Planning officers & building surveyors

Architects, property developers, demolition companies, builders and roofers.

Which legislation is relevant for bats and roosts?

In England and Wales, the relevant legislation is the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010).

In Scotland, the key legislation that applies is the Conservation (Natural Habitats &c.) Regulations 1994 (as amended).

In Northern Ireland bats are listed under Schedule 2 of the Conservation (Natural Habitats etc) Regulations (Northern Ireland) 1995 and in the Republic of Ireland, under Schedule 5 of the Wildlife Act 1976 and Schedule 1 of the European Communities (Natural Habitats) Regulations 1997.

Defenses include:

Tending/caring for a bat solely for the purpose of restoring it to health and subsequent release.

Mercy killing where there is no reasonable hope of recovery, (provided that person did not cause the injury in the first place - in which case the illegal act has already taken place).

Penalties on conviction –

People committing bat crimes can face six months' imprisonment and/or unlimited fines. Additionally, any profits made as a consequence of not following lawful process can be confiscated and items used to commit the offences such as vehicles, plant or machinery can be forfeited.

Under National Planning Policy Framework (2012), it is recommended that the re-development scheme for any site, protected species, such as bats should be a material consideration in planning applications. This has implications for bat foraging areas as well as their roosts.

The National Planning Policy Framework (NPPF) places a clear responsibility on Local Planning Authorities to conserve and enhance biodiversity and to encourage on the consideration that should be given to Protected Species where development may affect them.

The Office of the Deputy Prime Minister (ODPM) Circular 06/2005 provides administrative guidance on the application of the law in relation to planning and nature conservation. This is supported by a guide to good practice entitled 'Planning for Biodiversity and Geological Conservation: Building in Biodiversity' in which paragraphs 5.34 and 5.35 identify that species such as bats are highly dependent upon built structures for survival and that roosts can be easily incorporated into existing and new developments/conversions to benefit these species.

Breeding 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.

APPENDIX 2: Bat Roost Potential

Guide to bat roost assessment categories in built structures based on Table 4.2 in the BCT Bat Survey good practice guidelines (Hundt, 2012).

Category Description	Indicators
Confirmed Roost	• Sighting/hearing of bats (including emergence). • Fresh or old droppings.
High potential to support bat roost(s)	• Numerous or high potential roosting features that are not exposed to the elements: crevices deeper than 100mm, width 15-70mm: • Un-obstructed flyways. • Low disturbance levels. • Situated within or near to woodland, parkland or next to water bodies, buildings (i.e. potential foraging and roosting habitat). • Well connected to wider landscape through presence of continuous linear features such as hedgerows, watercourses, farm-tracks etc.
Moderate potential to support bat roost(s)	Some of the above features but considered to be less suitable on account of age, location and disturbance levels.
Low potential to support bat roost(s)	• Limited suitable roosting features. • Exposed roosting features e.g. open to wind/rain. • High levels of regular disturbance e.g. from lighting. • Isolated from suitable foraging habitat & commuting features.
Negligible potential	No features with bat roost potential recorded

APPENDIX 3: Bat Tree Assessment Criteria

Criteria for Assessment of Trees in accordance with Category 1 to 3 as defined in Table 8.4 of *Bat Surveys: Good Practice Guidelines 2nd Edition* (Hundt, L. 2012).

CATEGORY	DESCRIPTION	CRITERIA
Known or Confirmed	Confirmed roost	Confirmed roost Evidence found that indicates tree/tree features are being used by bats. Droppings found at the base of the tree, below a cavity. Bats heard 'chattering' inside a feature on a warm day or at dusk Bat(s) observed flying from or to a feature.
1*	Very high value	Trees with multiple, highly suitable features capable of supporting larger roosts. Features of particular significance, suitable for high priority roosts such as maternity roosts, used by large numbers of bats, offering conditions that are uncommon or rare in the local area. Features such as large cavities, extensive branch or trunk splits, also including multiple features in the same tree that offer a diversity of opportunities. Features may also include dense ivy.
1	High value	Trees with definite bat potential supporting fewer suitable features than category 1* trees or with potential for use by single bats. Features which provide a more secure form of roost for small groups of bats and individuals, but may still be quite common types of feature, such as small cavities, minor splits or sparse ivy cover.
2	Moderate value	Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential, to support bats. A tree which on close inspection the potential roost positions are in some way not ideal. They could be upward facing or holes very low down or cluttered by adjacent branches.
3	Low/Negligible value	Trees that have no features which could be used by bats for roosting (Usually young trees).

APPENDIX 4: Planning Considerations

When considering each planning application, the presence of protected species, such as those listed above, is a material consideration which must be fully considered by the Local Authority when granting planning permission. If a licence from Natural England is required, then prior to issuing any planning consent, the local planning authority will need to be satisfied that there is no reason why such a licence would not be issued. Therefore, in reaching the planning decision the local planning authority will need to have regard to the requirements of the Conservation of Habitats and Species Regulations 2010.

The three licensing tests given in the Regulations must be considered. In summary, these are that:

1. The development is required for the purpose of:
 - preserving public health or public safety,
 - for other imperative reasons of over-riding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.
 - for preventing serious damage to property.
2. There is no satisfactory alternative.
3. The proposal will not be detrimental to the maintenance of the population of the species at a favourable conservation status.

All necessary information would need to be provided to the planning authority as part of the planning application in order to address the above tests.

The Natural Environment and Communities Act (NERC Act) 2006 extended the biodiversity duty set out in the Countryside and Rights of Way (CROW) Act to public bodies and statutory undertakers to ensure due regard to the conservation of biodiversity. The Duty is set out in Section 40 of the Act, and states that:

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

The Duty applies to all local authorities, community, parish and town councils, police, fire and health authorities and utility companies. Section 41 (S41) of this Act (the 'England Biodiversity List') also requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. This list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40(1) of the Act.

Also, Local Authorities must follow the National Planning Policy Framework (NPPF) which provides guidance on the interpretation of the law in relation to wildlife issues and development. For each development proposal considered by the Local Planning Authority the NPPF states that the authority must aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

APPENDIX 5: Bats: What to do should bats be found during construction or renovation.

All of the UK's bats and their roosts, are protected by law, (see Appendix 1), so it is important to understand these laws, if you are planning any building or remedial work that may affect or disturb a bat roost. The relevant statutory authority should be initially contacted for advice.

Having bats roosting within a building, does not necessarily mean that work cannot be carried out. What it does mean is that the work will need careful consideration, especially in terms of time and materials, so that the area can continue to be used by both bats and people. Therefore, the earlier in the process the bats are taken into account, the less disruption to building plans there will be.

If at any point during either new building work, renovation work, or demolition, one or more bats are found, then all work being undertaken by contractors should stop immediately. All working machinery and contractors should be removed from the area where the bats have been found, and advice sought immediately from one of the following, on how to proceed while causing minimal disturbance to bats.

Advice can either be provided by a professional licensed ecological consultant - Echo Calls Bat Surveys on 07745 268815, the Bat Conservation Trust on 0345 1300 228, or from your Statutory Nature Conservation Organisation (SNCO), or from Natural England on 01270 754 000.

Depending on the advice given, a licensed bat worker, or suitably qualified Natural England approved representative, will then be sent to site to liaise with the site manager, and Natural England itself. Depending on the advice given, actions will be recommended that may include the safe removal of the bat by the nominated person, only where written or verbal permission has been gained by Natural England.

Works will recommence when Natural England are satisfied that the risk to bats has been removed. If, however, it is determined that the proposed work on site contains more risk to bats than was originally thought, then it is probable that further work will only proceed, under a Natural England Development Licence.

If a bat is found under a tile, slate, flashing or any other covering material, work must stop immediately. If the bat does not fly out immediately, then the area around the roost must be carefully covered over, to protect the bat from the elements and further disturbance, leaving a small gap for bats to escape voluntarily. At this point, advice must be sought as mentioned above. The materials used to cover the occupied bat roost, must be free from liquid, oil, grease and other contaminants.

It is recommended that the handling of bats be avoided wherever possible, but if it absolutely necessary, then to avoid a bat being harmed, gloves must be worn whilst handling the bat. It should be carefully caught, placed in a cardboard box with air holes in the lid, and a small container containing water. The box should then be kept in a very quiet, dark area, away from further disturbance, whilst awaiting the arrival of the licensed bat worker, or Natural England approved representative.

Failure to do any part of this could result in a criminal offence.

APPENDIX 6: Bats: Types of Bat Box and Bat Bricks.

The aim of any mitigation is to ensure that any work is carried out in a manner that avoids harm or significant disturbance to bats, and also to create new roosting opportunities for bats both during and after the development.

Schwegler 1FD boxes are to be erected to larger trees located along the edges of the site. This type of bat box is a “general all-rounder” and is suitable for all types of bats.

These boxes are to be erected as recommended by the Bat Conservation Trust guidelines which state that

- Ideally, erect the boxes facing so they face in different directions, to provide a range of temperature conditions. For example, boxes facing from south-east to south-west allow the sun to fall on each box for part of the day. During very hot days a south-facing box may overheat, but the other boxes should have some shade during the day.
- Bat boxes should be located close to a linear vegetation feature such as a tree line or hedgerow or to lines of buildings. Some bat species use these features for navigation between their roosting site and feeding ground and to avoid flying in open and exposed areas.
- Ensure that tree branches or other items will not impede the bats’ approach to the box – clear away underneath the box so the bats can land easily before crawling into the box.
- Boxes should be erected at a height of approximately 4m above ground level



Schwegler 1FD Bat Box

This Schwegler 1FD bat box has been developed specifically for smaller bats. The interior and the type and size of the entrance hole match the requirements of smaller species. It features a special layout inside the domed roof, an increased interior height, and two grooved internal wooden front panels with precise spacing between them.

This model has proved highly effective as a nursing area.

Occupants: Small bats such as the Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Daubenton’s Bat (*Myotis daubentonii*) and Common Long-eared bat (*Plecotus auritus*).

Bat Brick

Standard bricks to provide access for bats into roof or wall spaces.

With the increase in development of new building sites and redevelopment of older buildings, especially in rural areas, availability of roost sites for bat species is becoming more limited. However, bats can be encouraged to remain at old sites or colonise new sites by incorporating artificial roost spaces into the building during the build or renovation process.

The bat brick is a standard sized brick, shaped especially to allow bats to access the cavity of a house. They can be incorporated during both new build or renovation projects. (A cavity chamber may need to be constructed to maintain an area free of insulating material where bats can roost).

The bricks are available in three standard colours - Red, Golden and Brown.

Brick dimensions:

- * Height: 60 mm
- * Width: 215 mm
- * Depth: 100 mm
- * Entrance dimensions: approx. 110 x 25 mm

Brick codes:

- * Red - Ibstock A0610A (cheddar red)
- * Golden - Ibstock A0611A (cheddar golden)
- * Brown - Ibstock A0612A (cheddar brown)

