Preliminary Bat Roost Assessment and Bird Survey for,
LNE Property.
Building at,
18 Burton Road,
TWYCROSS,
ATHERSTONE,
CV9 3PR.

Map Ref SK 3349 0523
24th June 2025.

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Natural England Bat Mitigation Class License
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Contents.

Summary.

- **There is possible evidence of Brown long eared bats using the buildings as a place of shelter. A small number of possible bat droppings were found but these did not produce bat DNA when tested possibly due to age. A single Common pipistrelle bat emerged from the building on the 30th June 2025. This place of shelter for bats can be retained in the refurbishment.**
- **There are roosting opportunities against the ridge board in the dwelling and these will be retained when the property is refurbished.**
- **There was no evidence of birds nesting in the dwelling.**
- **There are moderate/poor roosting opportunities in the outbuilding. One emergence and one dawn survey have been undertaken to determine if bats are using the building as a place of shelter. No bats were seen emerging or returning to a roost in the building.**
- **There was no evidence of birds nesting in the outbuilding.**
- **The demolition of the outbuilding, if approved by the Local Authority must not occur if birds are nesting in the building until the young have fledged.**
- **A new bat roosting opportunity can be created by installing an integrated bat box into the apex of each gable elevation of the new dwelling to be built on the site, to meet the requirements of the National Planning Policy Framework (2023).**
- **A method of working must be put in place with contractors to ensure that in the event of bats being found they will not be injured.**

Introduction.

An inspection and building survey for bats and birds was requested by LNE Property. The survey was to be undertaken in relation to the submission of a planning application to Hinckley and Bosworth Borough Council to refurbish the dwelling, demolish the outbuilding and building a new dwelling. The property was visited on the 18th May 2025 and the surveyor spent 0.75 hour on site.

Temperature; 13°C Wind; 0-1 Beaufort Scale Cloud Cover; 8/8th.

Legislation concerning bats.

The Wildlife and Countryside Act 1981 (WCA) protects bats and their roosts in England, Scotland and Wales. Some parts have been amended by the Countryside and Rights of Way Act 2000 (CRoW) which applies only in England and Wales, and by the Nature Conservation (Scotland) Act 2004 which applies in Scotland.

The Conservation and Habitats Regulations 2010 (better known as the Habitats Regulations) implements the Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. All bats are listed as 'European protected species of animals'

Under Regulation 41 of the Conservation of Habitats and Species Regulations 2010 it is illegal to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species (EPS),

- Deliberately disturb wild animals of an EPS (affecting ability to survive, breed or rear young) – disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young,
- Deliberately disturb wild animals of an EPS (impairing ability to migrate or hibernate) – disturbance of animals includes in particular any disturbance which is likely to impair their ability in the case of hibernating or migratory species to hibernate or migrate,
- Deliberately disturb wild animals of an EPS (affecting local distribution and abundance) – disturbance of animals includes in particular any disturbance which is likely to affect significantly the local distribution or abundance of the species to which they belong,
- Deliberately disturb wild animals of an EPS (whilst occupying a structure of place used for shelter or protection) – intentionally or recklessly disturb any wild animal while it is occupying a structure or place which it uses for shelter or protection,
- Damage or destroy a breeding site or resting place of a wild animal an EPS.

Under the Wildlife and Countryside Act 1981 (as amended) it is illegal to:

- Recklessly or intentionally kill, injures or take any wild animals included in Schedule 5.
- Recklessly or intentionally damage or destroy, or obstruct access to any structure or place which any wild animal included in Schedule 5 uses for shelter or protection,
- Recklessly or intentionally disturb any such animal while it is occupying a structure or place which it uses for shelter or protection.

https://www.theguardian.com/business/2020/11/housebuilder-fined-600000-destroying-bat-roost-south-london-bellway

Legislation concerning 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.

Methodology for bats.

The building surveys have been undertaken in accordance with Bat Surveys for Professional Ecologists- Good Practice Guidelines, 2023, the Bat Conservation Trust. Surveys of the buildings were undertaken during the daytime to look for evidence of bats using the buildings, or likely roosting sites. The evidence of bats using a building as a place of shelter can include bat droppings, grease marks, urine stains or actual bats. This evidence is then considered when

planning evening emergence counts and activity surveys, using bat detectors. These surveys provide evidence of where bats are roosting and activity across the site by foraging or commuting bats.

The Bat Surveys for Professional Ecologists- Good Practice Guidelines, 2023, specify that emergence surveys are undertaken dependent upon the roost potential of the buildings on the survey site, as set out below;

Roost potential.	**Number of surveys.**
High.	3
Low to moderate.	2
Low.	1

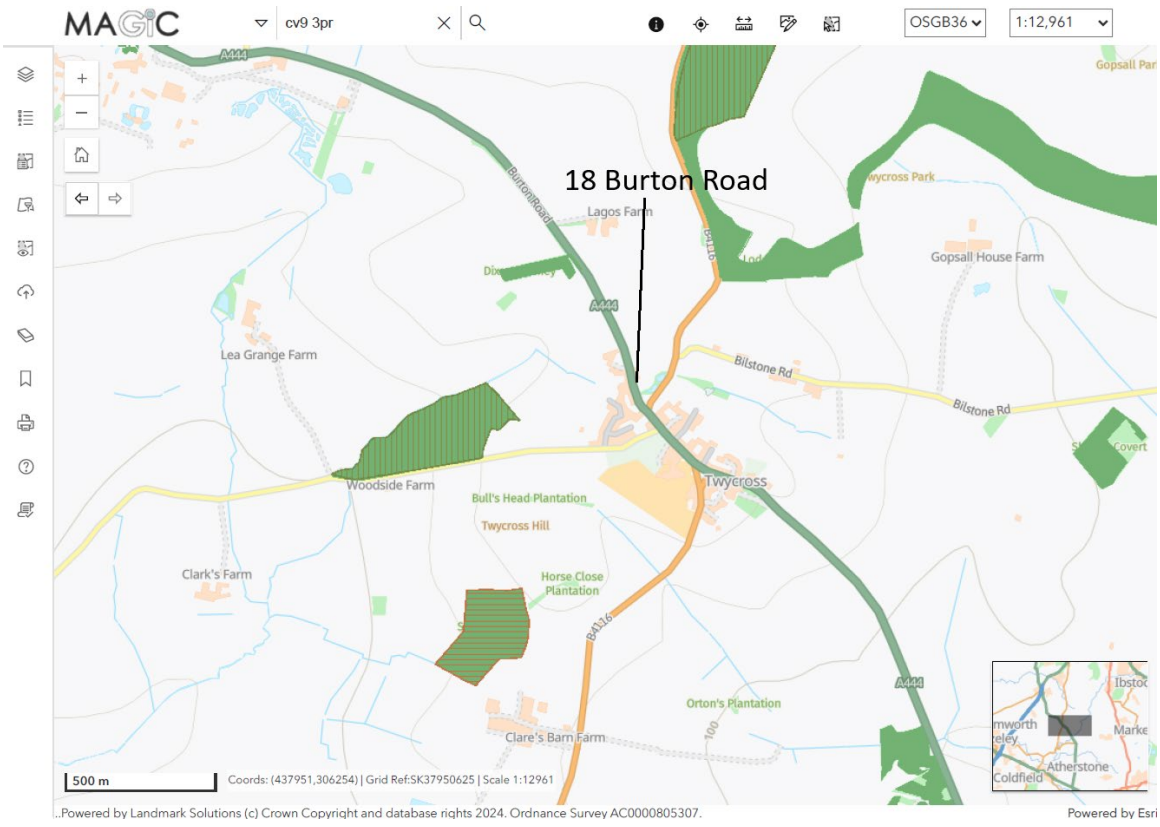
The surveys are started at sunset, with bats emerging from roosts at different times, dependent upon the species, and continued for two hours. Emergence surveys can only be undertaken from the beginning of April to the end of September when bats are active. The optimum period of undertaking surveys is the beginning of May to the end of August. Their emergence is dependent upon the weather, the bats only leaving their roost on warm nights when there will be sufficient insect prey around to make flight worthwhile. While bats will emerge in light rain and moderate winds, the surveys would not be undertaken when there is heavy rain and/or strong winds as this would not provide reliable data upon which to base the conclusions of the surveys. Mild weather in April and September will produce bat activity, particularly providing information on forage areas, commuting routes and pre-maternity group roosting.

Any trees on site are surveyed following the methodology set out in the Bat Tree Habitat Key, Henry L Andrews et al 2022, which produces a key for identifying Potential Roost Features in trees and their likleyhood of being used by bats. Trees on any site being surveyed will have Potential Roost Features identified from ground level surveys and highlighted in the report.

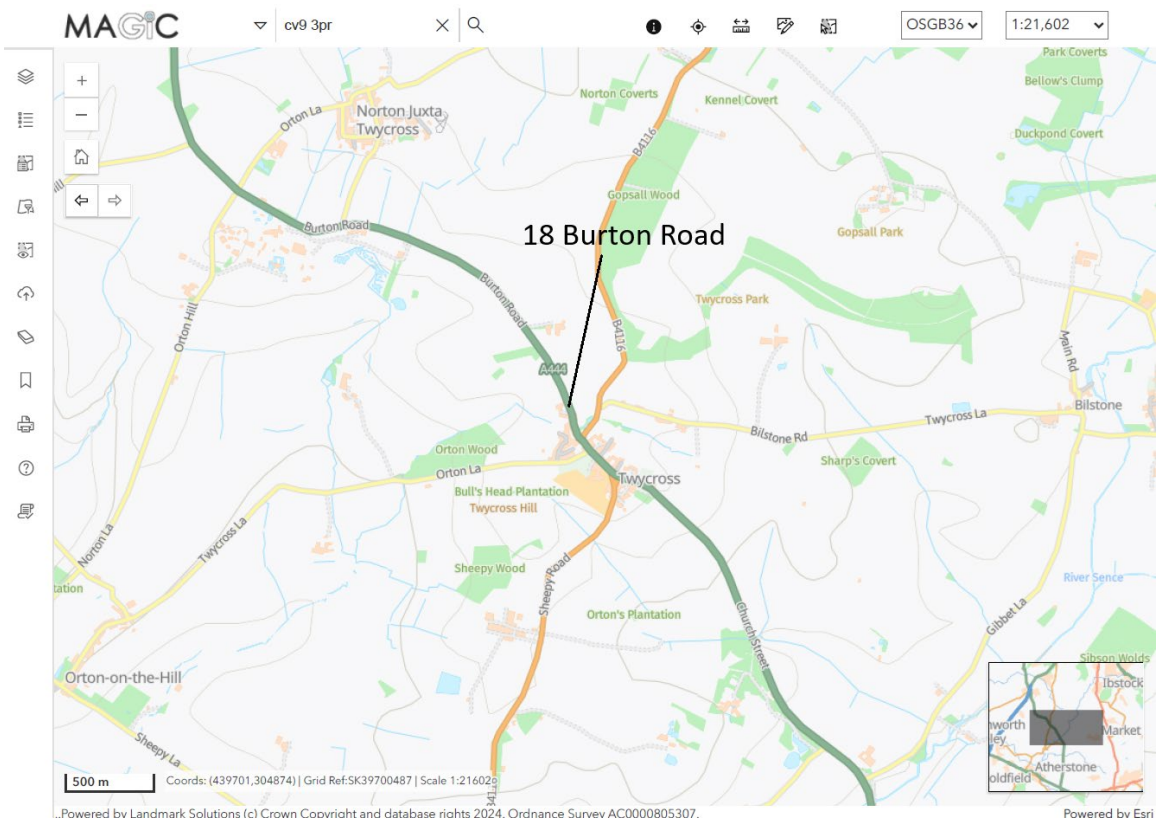
Bat records and habitats.
A search of public records has revealed the presence of the following bats within 3km of the site;

Myotis daubentonii.
Myotis Nattereri.
Pipistrellus pipistrellus.
Pipistrellus pygmeaus.
Plecotus auratus.

A search of the DEFRA MAGIC Dataset shows that there are no habitats adjacent to the site which of a special nature conservation status or significance. There are areas of Deciduous Woodland on the Priority Habitat Inventory in the landscape. There is agricultural land surrounding the village of Twycross. The areas of deciduous woodland on the Priority Habitat Inventory in the landscape will provide forage opportunities for bats and there is moderate connectivity between the woodlands, the hedgerows being a mixture of hedgerows with some mature trees and some being post and wire fences.

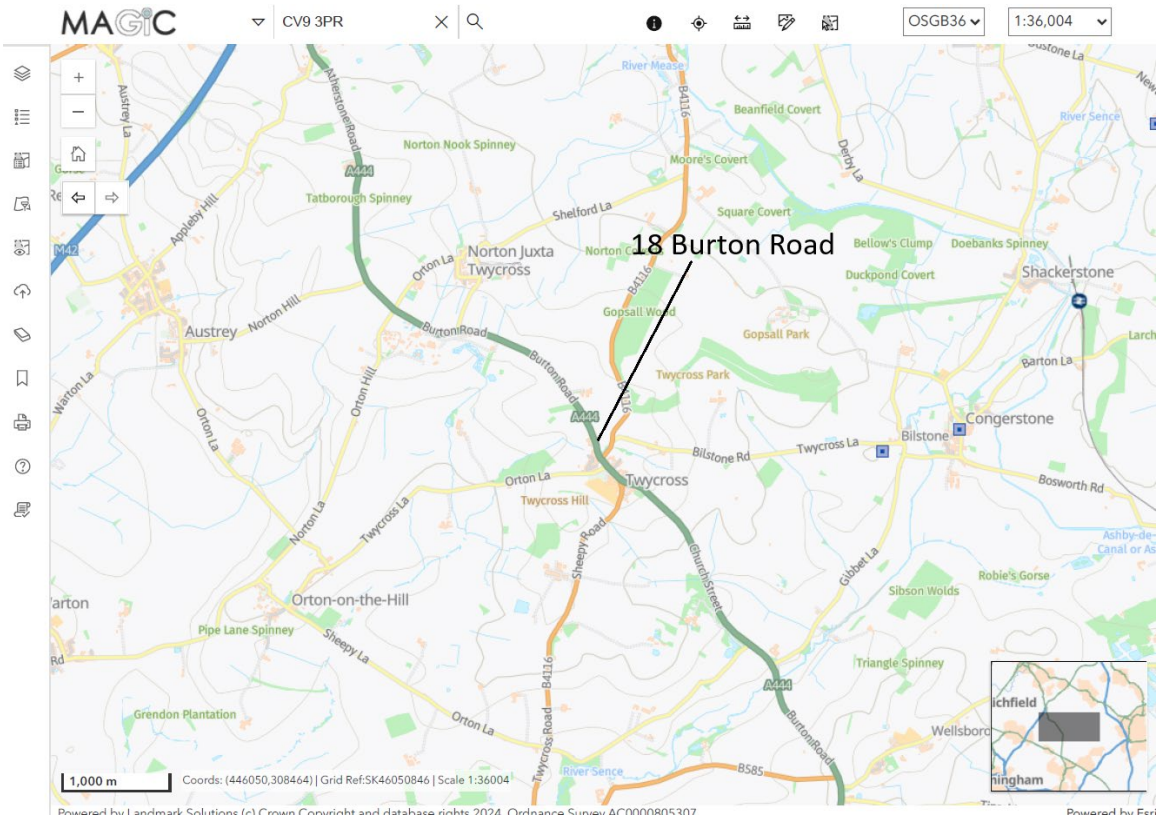


A search of the DEFRA MAGIC Dataset shows that the site does not fall into the buffer zones around the Deciduous Woodland to the northeast and southwest of the site. There are no other biodiversity enhancement areas adjacent to the site.



A search of the DEFRA MAGIC Dataset shows that there have been a number of European Protected Species licenses granted locally. None of the sites is adjacent to the property being surveyed.

Species.	**Destruction of or damage to a breeding site for bats.**	**Destruction of or damage to a resting place for bats.**
Brown long eared, Common pipistrelle bats, Natterer's, Soprano pipistrelle bats.	No	Yes
Common pipistrelle, Brown long eared bats.	No	Yes
Brown long eared, Common pipistrelle, Daubenton's bats.	No	Yes

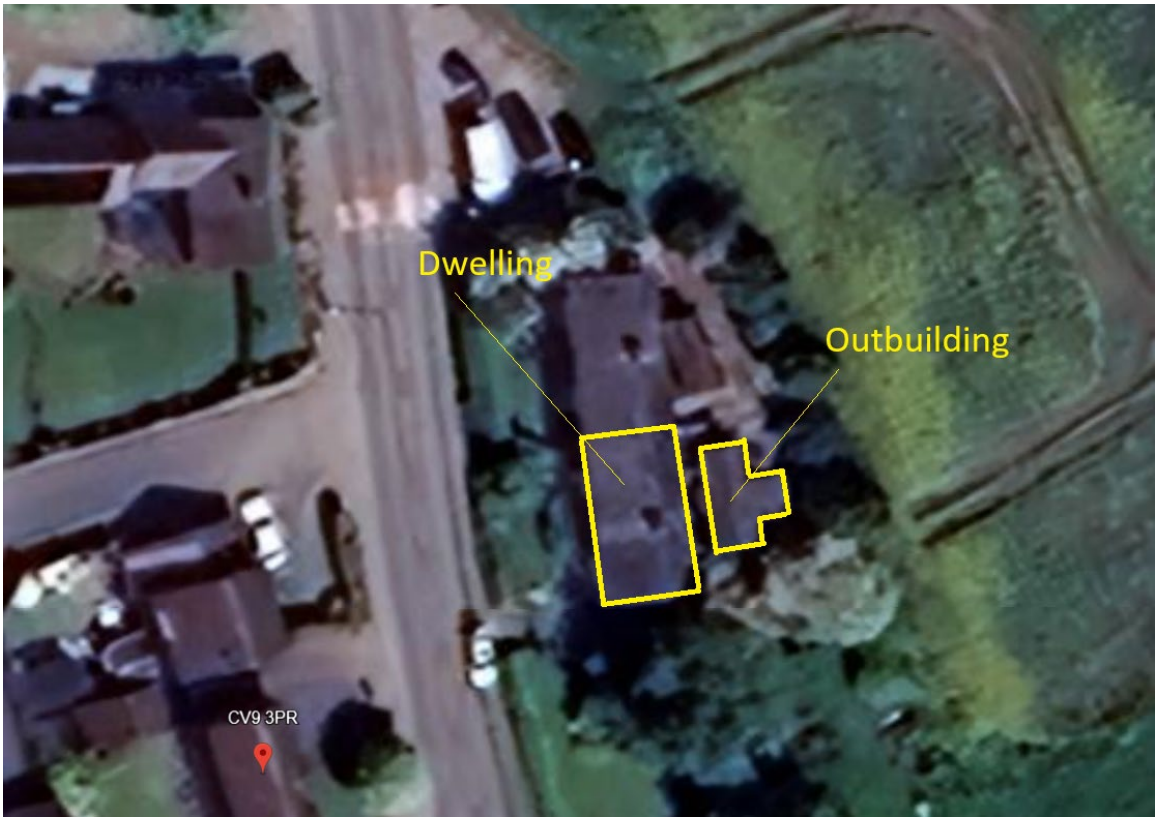


Constraints.

The building survey was undertaken in the spring when evidence of bats internally can still be seen but external evidence may be unavailable after heavy rain. The surveyor does not believe that the weather masked any evidence or access points for bats. There were no constraints to the surveyor for access in the building survey for bats.

Building Survey.

The buildings to be surveyed consisted of a two storey solid brick dwelling with a solid brick single storey outbuilding to the rear with a pitched roof covered with plain tiles. The proposal is to refurbish the dwelling, demolish the outbuilding and build a new dwelling in the garden



The results of the building survey are presented as the likelihood of bats using an area/feature;

None. Bats are unlikely to use the feature/area in any way.
Low. Bats may use the feature/area but it is not thought to be likely.

Moderate. The feature/area provides an area that may be used by bats and no direct evidence of occupation was found.

High. The feature/area provides an area or feature that may provide very good potential to be used by bats but no direct evidence of occupation was found

Definite. Clear evidence of the use of a feature/area as a place of shelter, such as droppings.

These are based on the Bat Survey Guidelines (2023) recommended scale of assessment for potential bat roosting.

The dwelling is a two storey solid brick building with a slate covered roof. There is no underfelt on the roof.

There is access under the ridge tiles and under the slates at the verges. The refurbishment of the property can retain these features.

The verge can be repaired by leaving 2 50mm wide gaps, one on the north and one on the southern elevation, where there is no mortar between the slate and the solid brick wall. This will retain bat roosting for crevice dwelling bats in the building.

The proposal is to refurbish the dwelling but no work is to be done on the roof. There were 7 medium sized bat droppings in the roof. They were slightly deformed by moisture and their shape was difficult to determine. These were taken and three sent for DNA analysis, the results set out below.

As can be seen from the report the droppings could not be identified as bat droppings. Degradation of the droppings occurs due to UV light (not possible as these were in a roof space) age after collecting (these were sent off the day of collection) or general old age. It is likely that these were unable to be identified due to their old age. The Bat Consultant believes that they are likely to have been from a Brown long eared bat, being found beneath the ridge board. The roof space is not being affected by the refurbishment and access can be retained for bats.

Folio No:	1486-2025
Purchase Order:	18 Burton Rd
Contact:	Tamworth Property Services
Issue Date:	06.06.2025
Received Date:	15.05.2025

Biological Report

Technical Report

SureScreen Scientifics

Folio No: 1486-2025
Purchase Order: 18 Burton Rd
Contact: Tamworth Property Services
Issue Date: 06.06.2025
Received Date: 15.05.2025

SureScreen Scientifics

Biological Sample Analysis

Summary

Most biological materials (tissue, feces, hair, blood, etc.) contain small amounts of DNA from the organism of which it originated. Using molecular methods such as PCR (polymerase chain reaction) and DNA sequencing, SureScreen Scientifics are able to analyze an unknown sample to determine which species the sample originates from our methods are optimized for the detection of species including bats (over 92% of bat species worldwide can be identified including all 18 UK bat species), mammals; bees, wasps & hornets; birds; fish; plants (from roots, leaves, stem and even dried wood) and many more species.

Results

Lab ID	Site Name	OS Reference	Sample Type	Species Name	Match(%)
B4683	18 Burton Rd - 1	SK 3349 0523	Bat Dropping	Inconclusive	-
	Genetic Sequence --				
B4684	18 Burton Rd - 2	SK 3349 0523	Bat Dropping	Inconclusive	-
	Genetic Sequence --				
B4685	18 Burton Rd - 3	SK 3349 0523	Bat Dropping	Inconclusive	-
	Genetic Sequence --				

Matters affecting result: none
Reported by: Chelsea Warner

Approved by: Jennifer Higginbottom

SureScreen Scientifics Ltd, Morley Retreat, Church Lane, Morley, Derbyshire, DE7 6DE, UK
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SureScreen Scientifics

Methodology

Once samples have arrived in the laboratory, the DNA is isolated using a commercial DNA extraction kit. Using PCR, DNA (if present within the sample) is amplified using universal molecular markers designed to amplify a short fragment of the DNA of the target species group (i.e. mammal, fish, arthropod, reptile, plant etc.). If amplification is successful, the resulting DNA sequence is revealed using a process known as Sanger Sequencing in order to obtain the genetic sequence of the mitochondrial gene within the sample. The sequence results are aligned against a library of known reference sequences using bioinformatics software, which enables us to determine which species the DNA sequence from the sample matches with, informing the species identity and sequence similarity (match %).

If the initial analysis is unsuccessful, the entire process is repeated up to two additional times with a fresh reserve sample (if available) in order to obtain a species identification. If no DNA is detected after three attempts, then we can be confident that any further analysis of the sample will likely also fail to result in species identification.

Interpretation of Results

Sample Type:

The sample you send to us can come from a variety of sources. Fecal, dropping, urine, hair, blood, carcass (skin, flesh, bone), gamete, plant matter or unknown biological material all contain DNA that we can test for in order to identify the species of origin.

Genetic Sequence:

The unique DNA sequence obtained from the sample.

Match (%):

How closely matched the DNA sequence from your sample is to the sequences within our reference database. This can be interpreted as a score of result accuracy, with the maximum score of 100% indicating an exact match of the sample to the indicated species' reference sequence. Lower scores (80-99%) indicate some variation between the sample and reference sequence, likely due to natural variation between individual genetic sequences and/or systematic variations generated through the sequencing process. Scores below 80% similarity should be interpreted with care and can indicate part degraded or part contaminated samples.

Inconclusive Result:

Degraded sample:

DNA is degraded and we are unable to determine species identification due to degradation of sample DNA. This can happen either before sample collection (old samples, exposure to UV etc.) or after sample collection if stored for long periods before analysis or not handled correctly.

Inhibited/contaminated sample:

We are unable to determine species identity due to contamination or the suspected presence of large quantities of PCR inhibitors. Contamination sources can originate from other species which could have come into contact with the samples, or human contamination during sample collection.

Alternative Result:

Sometimes, for targets such as bat dropping analysis, other mammalian species such as rodents are detected. We find this to be a common occurrence as some bat droppings can be similar in appearance to rodent droppings. Although sometimes unexpected, repeat analyses in these cases would likely return the same results.

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No Brown long eared bats have been seen to emerge or re-enter the roof space so the access point for bats is unknown. To ensure continued access the two verge access points on the eastern elevation will maintain access to the roof space.

The outbuilding is of a solid brick construction with a timber rafter roof covered with plain tiles. There is no underfelt on the roof.

There is access to the roof space for Brown long eared bats and roosting against the ridge board.

The rear of the ridge tiles can be partially seen from within the building and could provide access to the roof space and a place of shelter for crevice dwelling bats. Two emergence/re-entry surveys are therefore required to determine if this Moderate roosting opportunity is being used by bats.

Bat roosting opportunities; Moderate.

There is an overgrown shed in the northern hedgerow of the property. This offers no places of shelter for bats.

Emergence surveys.

In order to provide data upon bat movements on site, to determine whether bats are roosting in buildings and to allow the identification of bats emerging from buildings, one evening emergence survey and one dawn re-entry survey were undertaken. The number of surveys undertaken on each building was determined with reference to the Bat Survey Guidelines for properties with moderate roost potential.

The aim of each survey was to look at different areas of the building to determine if bats were emerging from a roost and to assess bat activity across the site. The surveys were undertaken using heterodyne and frequency division bat detectors from which it is possible to identify bats by their different ultrasound call. Separate bat passes are recorded where the echolocation ends for more than 5 seconds. Where a bat was seen it was recorded on a plan of the site to provide information upon movements across the site. As bats close in on their prey their echolocation calls get closer together sounding like a buzz. These feeding buzzes are recording as they confirm the presence of prey and bats feeding in the area.

The surveys were undertaken using Batbox Duet frequency division bat detectors with an Edirol R09 recording device, a Batbox Baton frequency division bat detector with an Olympus WAV sound recorder, a Batbox Baton XD Time Expansion bat detector with Olympus wav recorder and Elekon Batscanner bat detectors.

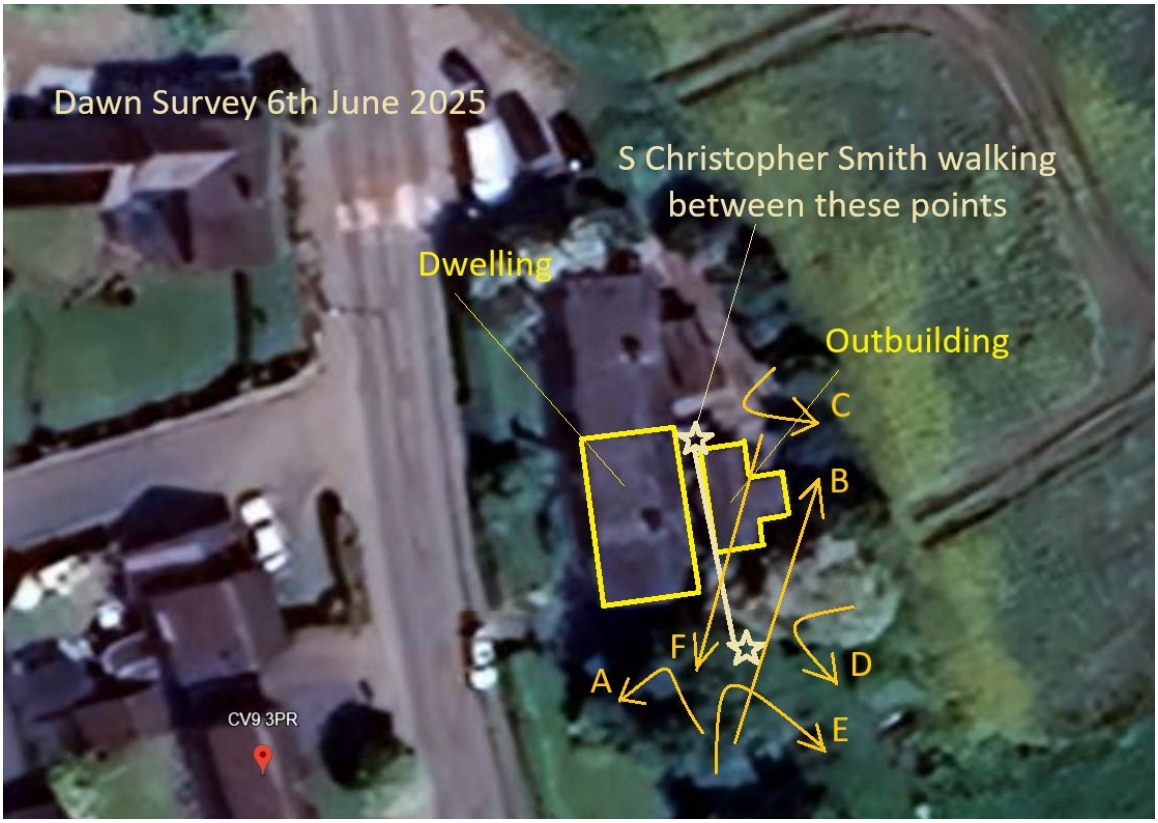
6th June 2025.

Sunrise.	04.48
Air Temperature.	11°C at the start of 10°C at the end of the survey .
Wind.	Beaufort Scale 1-2.
Cloud cover.	3/8th.

Survey started 02.36 and ended at 05.08.

Surveyors; S. Christopher Smith (licensed bar surveyor).

Time.	Direction.	Activity.	Species.	Notes.
02.55	Not seen	Commuting	Common pipistrelle	Faint
03.15	Not seen	Commuting	Common pipistrelle	
03.52	A	Foraging	Common pipistrelle	2 passes
03.54	B	Commuting	Common pipistrelle	
03.55	A	Foraging	Common pipistrelle	
03.57	B	Foraging	Common pipistrelle	2 passes
03.57	C	Foraging	Common pipistrelle	5 passes
03.58	D	Foraging	Common pipistrelle	
04.01	E	Foraging	Common pipistrelle	3 bats
04.02	D	Foraging	Common pipistrelle	2 passes
04.04	F	Commuting	Common pipistrelle	04.04 to 04.08



30th June 2025.

Sunset.	21.33
Air Temperature.	25°C at the start of 22°C at the end of the survey .
Wind.	Beaufort Scale 0-1.
Cloud cover.	1/8th.

Survey started 21.22 and ended at 23.25.

Surveyors; Katy Smith (10 years bat work experience), Sharon Redfern (5 years bat work experience).

Katy Smith.

Time.	Direction.	Activity.	Species.	Notes.
22.00	A	Emerged	Common pipistrelle	
22.02	Not seen	Foraging	Common pipistrelle	
22.03	Not seen	Commuting	Noctule	
22.05	B	Foraging	Common pipistrelle	
22.06	Not seen	Foraging	Common pipistrelle	
22.10	Not seen	Foraging	Soprano pipistrelle	
22.14	C	Foraging	Common pipistrelle	
22.18	Not seen	Foraging	Common pipistrelle	
22.22	C	Foraging	Common pipistrelle	

22.26	Not seen	Foraging	Common pipistrelle	
22.30	C	Foraging	Common pipistrelle	
22.32	D	Re entry	Common pipistrelle	
22.35	Not seen	Foraging	Common pipistrelle	
22.42	Not seen	Foraging	Common pipistrelle	
22.48	Not seen	Foraging	Common pipistrelle	
22.49	Not seen	Foraging	Common pipistrelle	
22.56	Not seen	Commuting	Noctule	

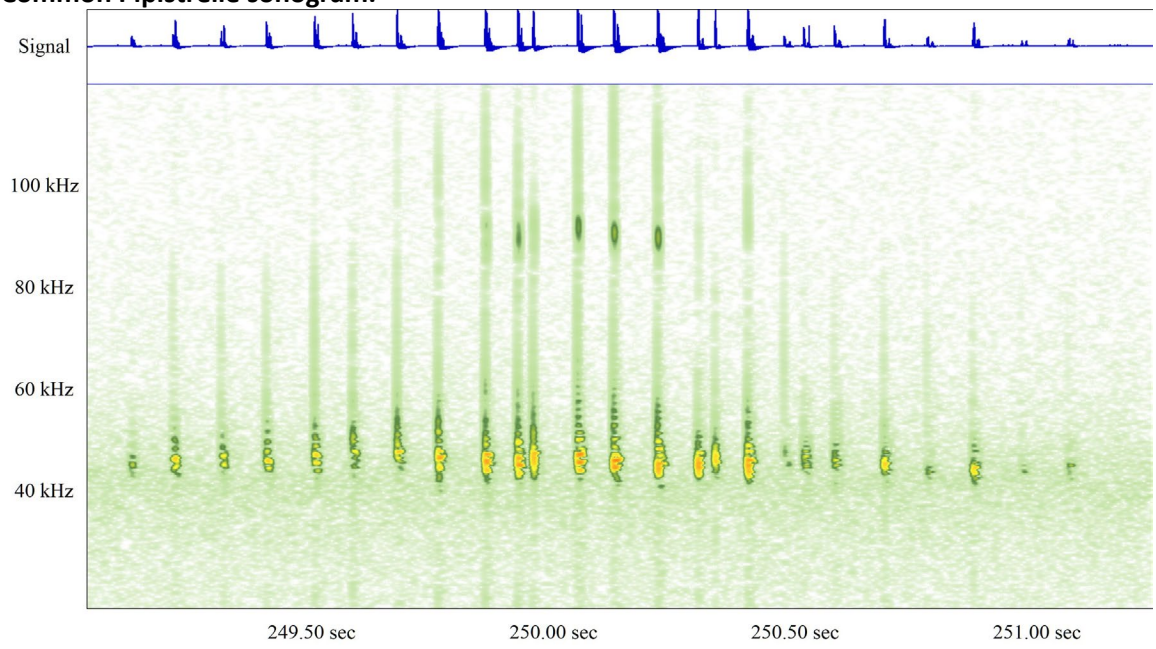
Time.	Direction.	Activity.	Species.	Notes.
22.00	Not seen	Commuting	Common pipistrelle	
22.01	1	Commuting	Common pipistrelle	
22.01	1	Commuting	Common pipistrelle	
22.05	1	Commuting	Common pipistrelle	
22.09	1	Commuting	Common pipistrelle	
22.11	2	Commuting	Common pipistrelle	
22.13	1	Commuting	Common pipistrelle	2 bats
22.13	3	Commuting	Common pipistrelle	
22.13	Not seen	Commuting	Brown long eared	
22.22	Not seen	Foraging	Common pipistrelle	
22.28	1	Commuting	Brown long eared	

22.32	1	Commuting	Common pipistrelle	
22.35	1	Foraging	Common pipistrelle	2 bats
22.42	Not seen	Commuting	Common pipistrelle	
22.44	4	Commuting	Brown long eared	
22.48	3	Foraging	Common pipistrelle	
22.48	Not seen	Commuting	Brown long eared	
22.54	Not seen	Commuting	Noctule	
22.59	Not seen	Commuting	Common pipistrelle	

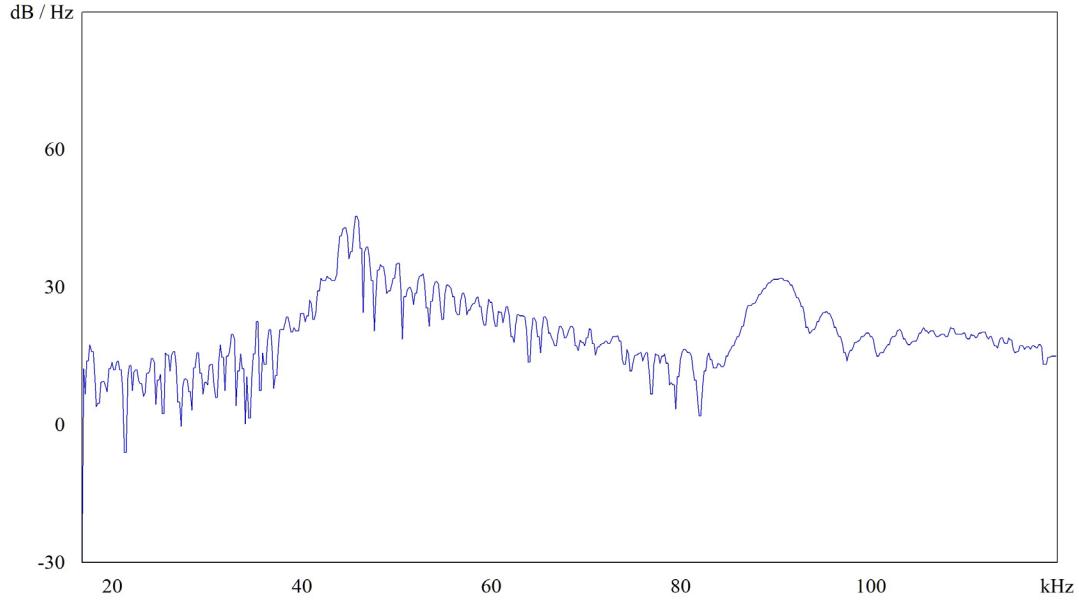
Analysis of the recordings from the bat detectors have confirmed the presence of Common Pipistrelle bats and bats.

The bats were commuting across the site with forage calls recorded. The sonogram shows the typical 'hockey stick' shape for all pipistrelle echolocation calls, an initial frequency modulated downwards sweeping call followed by the constant frequency peak frequency area. The peak frequency can be seen to be around 45kHz on the peak frequency graph, confirming that the bat was a Common Pipistrelle.

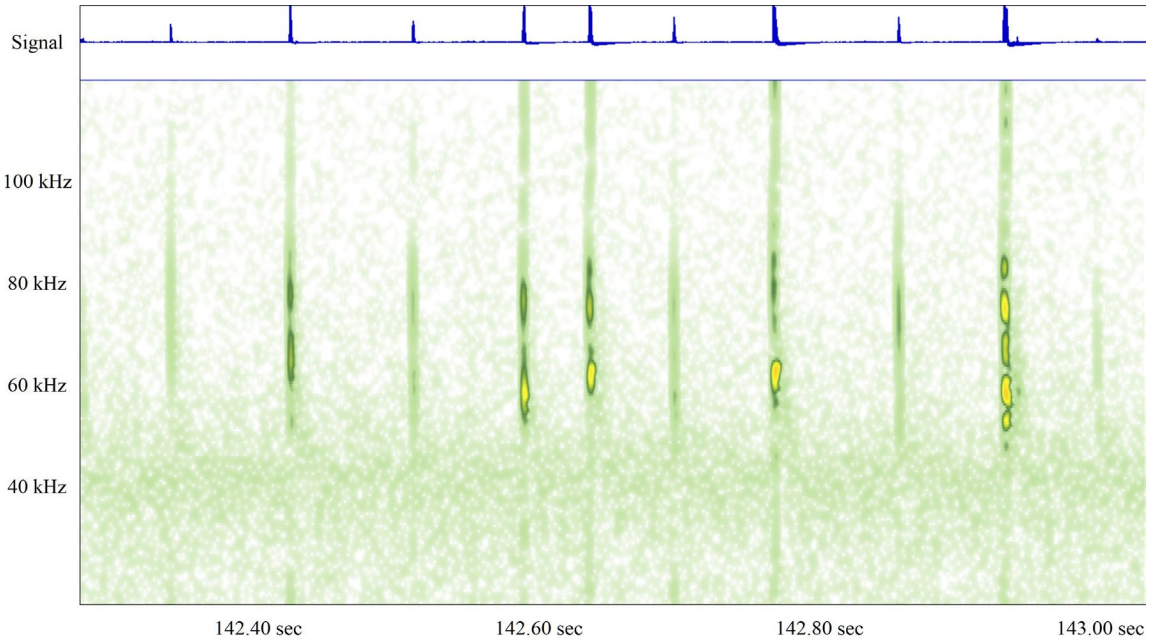
Common Pipistrelle sonogram.



Common Pipistrelle peak frequency.



Brown long eared sonogram.



The presence of Brown long eared bats was confirmed by the bats being seen in flight. The calls are very quiet and show a frequency modulated call with a split in the call making it appear as a staggered downwards line.

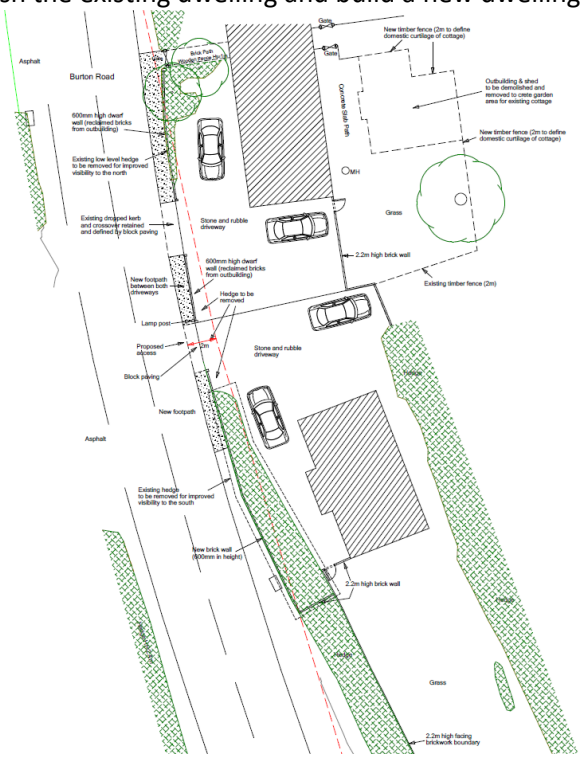
Birds.

There are no bird nesting opportunities in the dwelling but there are bird nesting opportunities in the outbuilding and the collapsed shed in the garden.

If birds begin to nest in any of the areas being demolished between the beginning of March and the end of August in any year then work must stop until the young have fledged.

Conclusion.

The proposal is to refurbish the existing dwelling and build a new dwelling in the garden.



There was droppings evidence of bats using the dwelling as a place of shelter. The bat droppings looked like Brown long eared bat droppings, and Brown long eared bats are recorded across the site. When tested for DNA the droppings were so old that they were not able to provide any reliable data. The Bat Consultant believes that Brown long eared bats are using the roof space as a Day roost but the use is very occasional. The Day roosting opportunity can be maintained during the refurbishment by retaining the verge access that is also being used by Common pipistrelle bats.

A single Common pipistrelle bat was recorded using the verge on the eastern verge as a place of shelter. This can be retained when the property is refurbished.

There are no bats using the outbuilding as a place of shelter and the demolition of the outbuilding will not affect a place of shelter for bats. The method of working must be followed.

The demolition of the shed in the garden will not affect a place of shelter for bats.

There was no evidence of birds nesting in the dwelling or the outbuilding. There was no evidence of birds nesting in the dilapidated shed. Demolition must be undertaken between the beginning of September and the end of February to avoid disturbance of birds. If demolition is to be undertaken between the beginning of March and the end of August in any year there must first be a check for nesting birds. If birds are nesting then demolition cannot proceed until the young have fledged.

Impacts on bats.

The demolition of the outbuilding will have no impact on bats. The bat roosting for Brown long eared bats and Common pipistrelle bats, both Day roosts, in the existing dwelling can be maintained.

Enhancements for bats.

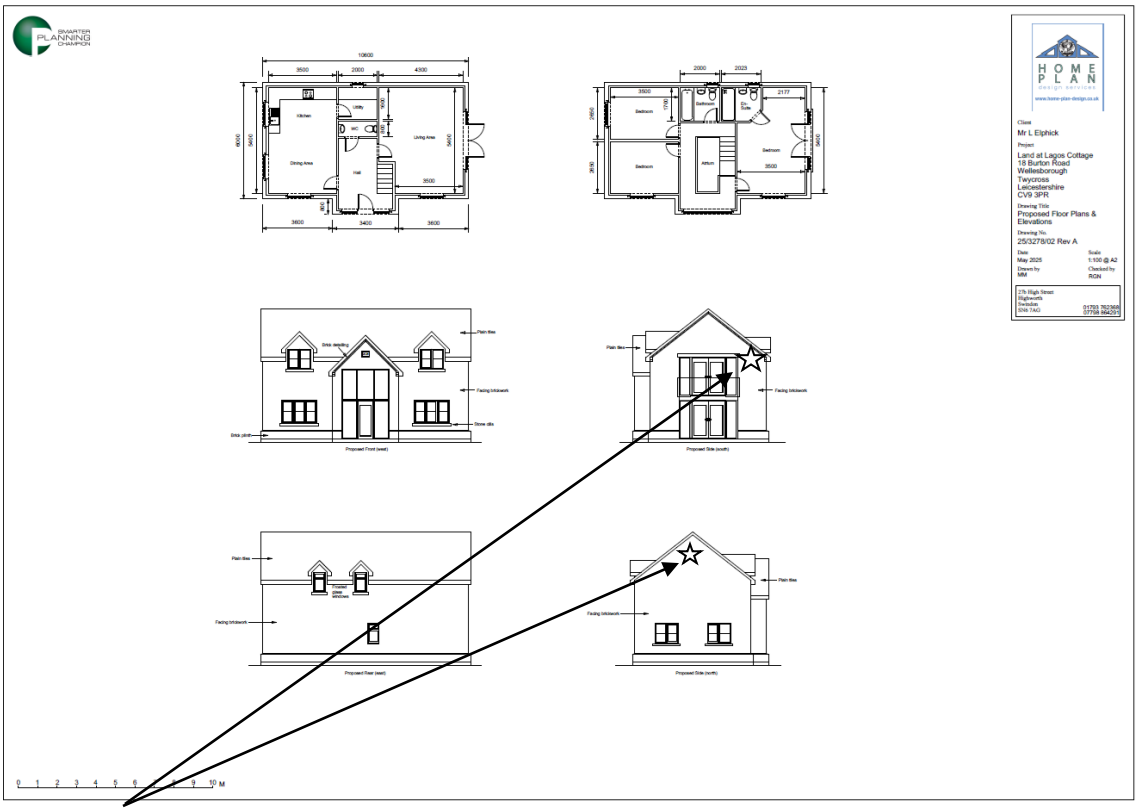
The bat roosting in the existing dwelling is to be retained with access through the verge on the eastern elevation. The verge on the eastern elevation can be repaired by leaving 2 50mm wide gaps, one on the north and one on the southern elevation, where there is no mortar between the slate and the solid brick wall. This will retain bat roosting for crevice dwelling bats in the building.

Records show that there are populations of crevice dwelling bats locally. New roosting opportunities for these species of bats can be created when the new dwelling is built if planning permission is granted, to meet the requirements of the National Planning Policy Framework (2023).

An integrated bat box can be installed at the gable apex of one elevation and at the eaves of tother gable elevation of the new dwelling, should planning permission be granted. These are constructed from brick or concrete blocks and are built into the outer leaf of brickwork. They can have facing bricks or be rendered. They provide no access to the cavity wall.

They are made by a number of companies including Wienerberger, Ibstock Brick, Habibat and Schwegler.

A location away from doors and windows has been chosen so that droppings falling from the bat box will not cause a nuisance for the occupiers.



Integrated bat box.

There should be no direct illumination of the new bat roosting opportunity. Lighting around the site will be by low wattage down lights at low level to provide security and safety lighting for the dwelling and service area. This lighting will be set no higher than the head height of the ground floor windows and will minimise the possible disturbance to bats in this area. Any security lighting will use PIR's to ensure they turn off automatically once the movement has ceased.

The method of working has been set out so that it can printed and handed to contractors on site.

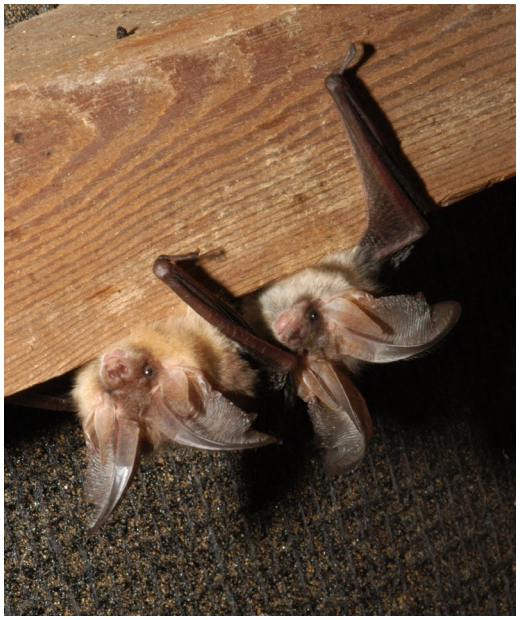
Method of working.

There is evidence of bats using the existing dwelling as a place of shelter but it is possible that individual bats may use the possible roosting sites uncovered during the refurbishment at different times of year. Because of this possibility a method of working should be put in place when there are contractors on site. This would cover work to the roof or demolition where there was access for bats.

The common species of bats that are likely to roost in buildings of this nature and are evidenced from the regional records, are crevice dwelling bats, such as the Common Pipistrelle. These bats are small and can use accesses as little as 50mm x 20mm. when found in buildings they appear no bigger than a thumb and have dark brown fur.

It is common to find bat droppings in places used by bats. These are small and often confused with mouse droppings. It is possible to distinguish between them as mouse droppings are hard whereas bat droppings, being only insect remains, crumble when rubbed between the fingers.

The other species of bat that may possibly be found on site is the Brown Long Eared bat. These are a medium sized bat, larger than a Pipistrelle with very long ears that meet in the centre of the head. These bats may be found in crevices in the brickwork, behind ridge boards or in splits in the larger roof timbers.



- When tiles are removed they should be lifted away from the roof and not slid or twisted to avoid injuring any bats roosting beneath the tiles.
- Ridge tiles should be lifted without sliding so as to avoid injuring any bats roosting beneath them.
- If a bat is found under a roof tile or ridge tile, the tile should be carefully replaced and work in that area stopped until such time as a licensed bat worker can attend the site and contact Natural England to discuss how the work can proceed.
- The bat can then be removed to a place of safety until such time that it can be released at night.
- The demolition of any part of the building where bats could potentially roost should be by hand. This includes the removal of roof tiles, ridge tiles, soffits, gutter fascia boards and hanging tiles. If a bat is found the work should be stopped immediately and a bat worker called to come and deal with the bat. The bat should not be handled except by a licensed bat worker. Any bats found will be taken into care for release on site later dependent upon the time and weather.
- Bats discovered during the winter period will be taken into care, feed and kept healthy until they can be released on site in the Spring.
- Bats will not be released on site until evening temperatures are consistently above 6^{o}C, at least three nights, the wind is light, and there is no rain.
- Bats taken into care over the winter will be released to the new roost opportunities in Spring if they are available using the same release criteria as above.

Legislation concerning bats.

The Wildlife and Countryside Act 1981 (WCA) protects bats and their roosts in England, Scotland and Wales. Some parts have been amended by the Countryside and Rights of Way Act 2000 (CRoW) which applies only in England and Wales, and by the Nature Conservation (Scotland) Act 2004 which applies in Scotland.

The Conservation of Habitats and Species Regulations 2010 (better known as the Habitats Regulations) implements the Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora. All bats are listed as 'European protected species of animals'.

It is an offence for any person to:

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

The fine for committing an offence is £5,000 per bat.

If a bat is found on site, work should stop in the area where the bat was found and the contractor should call the Bat Consultant; S. Christopher Smith 07967636115.

Breathable Roofing Membranes-Info Sheet

What are they?

- Traditional roofing felt was bitumen based
- Modern membranes are made from very fine and long plastic fibres that are spun into thin sheets. They be single ply or have various layers to provide a more complex membrane.
- They are known as Breathable roofing membranes or Vapour permeable underlay's (BRMs/VPUs)

Who Makes them?

- When most people talk about BRMs, they will call it Tyvek as this is the most famous brand name
- There are over 70 products in the UK alone, made by 20+ companies – never assume the product is Tyvek unless there is proof.

Why are they used?

- Modern houses are designed to be more energy efficient, meaning they tend to be warmer.
- Along with human activities this means increased levels of water vapour in the air
- When this passes up into the cold roof space, it forms condensation, which can lead to problems
- In the past gaps would have been left near the ridge and eaves to allow ventilation, but increased insulation often means this isn't possible. A breathable membrane aids this as it allows water vapour to pass out of the loft into the external air

Potential Problems

- There have been reports of bats becoming entangled in fibres pulled from the membranes
- Possibility of Temperature and humidity change
- Alot of membranes are white or brightly coloured

Advice

- At present we cannot recommend specific brands that are considered safe for use in bat roosts, as such it is recommended that bitumen felt be used where possible
- It is not against the law not to install a BRM
- If the planner insists on a BRM, suggest a dark coloured and reinforced membrane

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S.Christopher Smith MRICS MSc CEnv.

Appendix 1.

Roost Types as designated by Natural England and the Bat Surveys for Professional Ecologists, Good Practice Guidelines.

A. 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.
B. Night roost: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
C. Feeding roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
D. Transitional / occasional roost: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
E. Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites
F. Mating sites: sites where mating takes place from later summer and can continue through winter.
G. Maternity roost: where female bats give birth and raise their young to independence.
H. Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
I. Satellite roost: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.
J. Other – Explain what the roost type is if not one of the above (it is recognised that roost types are interchangeable and not always easy to classify according to the nuances of certain species).