Bat and Bird Survey for,
Ann Burford.
Buildings at,
37 Stockhay Lane,
Hammerwich,
BURNTWOOD,
Staffordshire,
WS7 0JE.

Map Ref SK 0699 0838
15th March 2021.

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Contents.

Summary.

- **There is no evidence of bats using the portacabin building as a place of shelter.**
- **There is no evidence of bats using the timber shed building as a place of shelter.**
- **There is evidence of bats using the two storey brick building as a place of shelter. A Common pipistrelle was seen to emerge from under the ridge tiles on the building on the 7th May 2018. A possible emergence from the verge by a Common pipistrelle bat occurred on the 21st May 2018.**
- **There is evidence of bats using the stables buildings as a place of shelter. Two Common pipistrelle bats were seen to emerge from the ridge tiles on the 21st May 2018.**
- **There was no evidence of birds nesting in the buildings.**
- **There is a roosting opportunity under the ridge tiles of the stables building where 3 small elongated bat droppings were found when investigated with an endoscope in September 2017. There was no dropping evidence in 2021.**
- **A Bat Low Impact Class (BLIC) license will be required from Natural England, if planning permission is granted, before demolition can occur.**
- **A method of working should 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 was requested by C T Planning on behalf of their client, Ann Burford. The survey was to be undertaken in relation to the submission of a planning application to Lichfield District Council to demolish the existing buildings and replace them with new dwellings. The property was originally visited on the 27th September 2017 and the surveyor spent 1 hour on site. This report has been updated after a site visit on the 15th March 2021 when the surveyor spent 0.75 hour on site.

Temperature; 7°C Wind; 2-3 Beaufort Scale Cloud Cover; 6/8th.

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.

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, 2016, 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, 2016, 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.

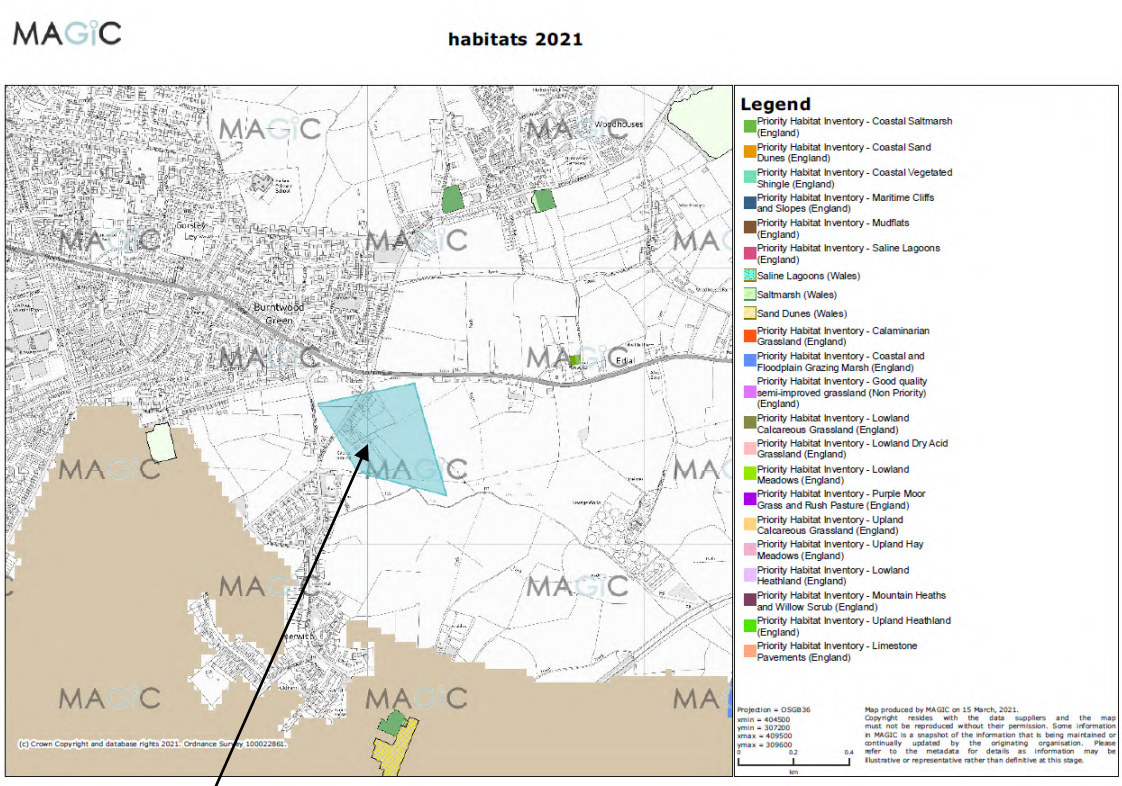
Any trees on site are surveyed following the methodology set out in the Bat Tree Habitat Key, Henry L Andrews et al 2013, which produces a key for identifying Potential Roost Features in trees and their likleyhood of being used by bats. Trees on any site being surveyed will have Potential Roost Features identified from ground level surveys and highlighted in the report.

Bat records and habitats.

A search of public records has revealed the presence of;

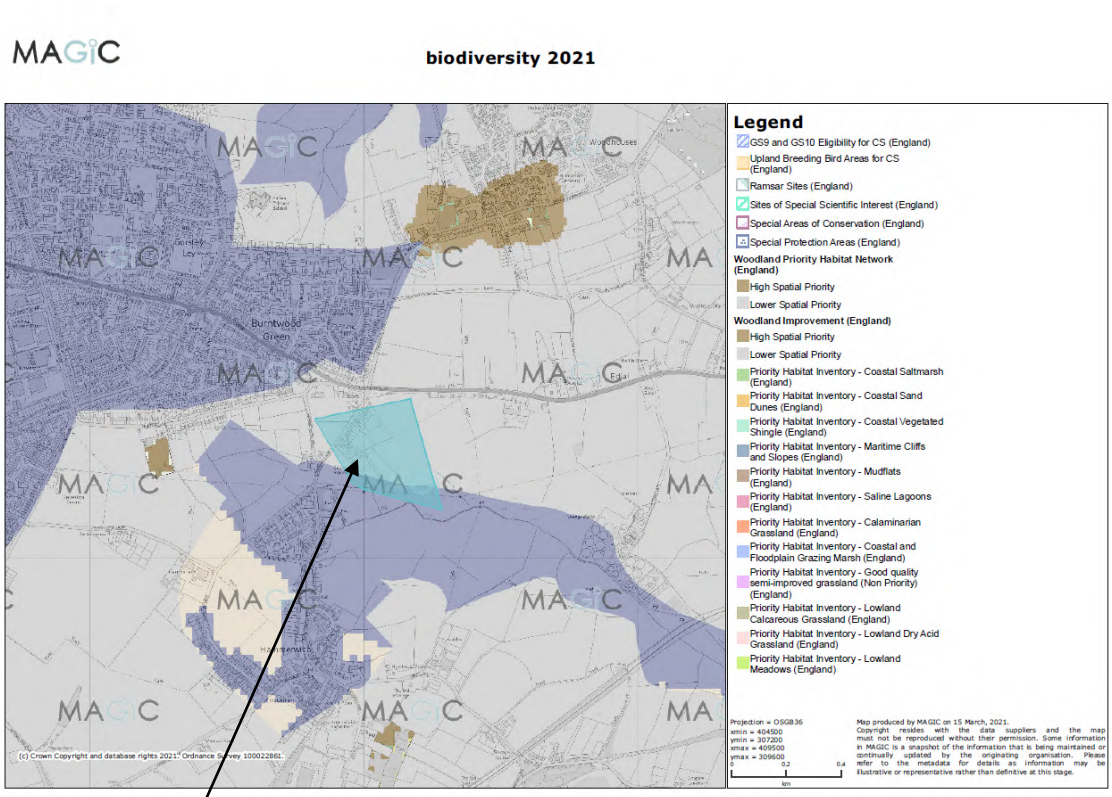
Myotos daubentonii.
Myotis mystacinus.
Nyctalus noctula.
Pipistrellus pipistrellus.
Pipistyrellus pygmeaus.
Plecotus auritus.

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 small areas of Deciduous Woodland to the north of the site that are on the Priority Habitat Inventory. To the east of the site is an area of Traditional Orchard on the Priority Habitat Inventory.



37 Stockhay Lane.

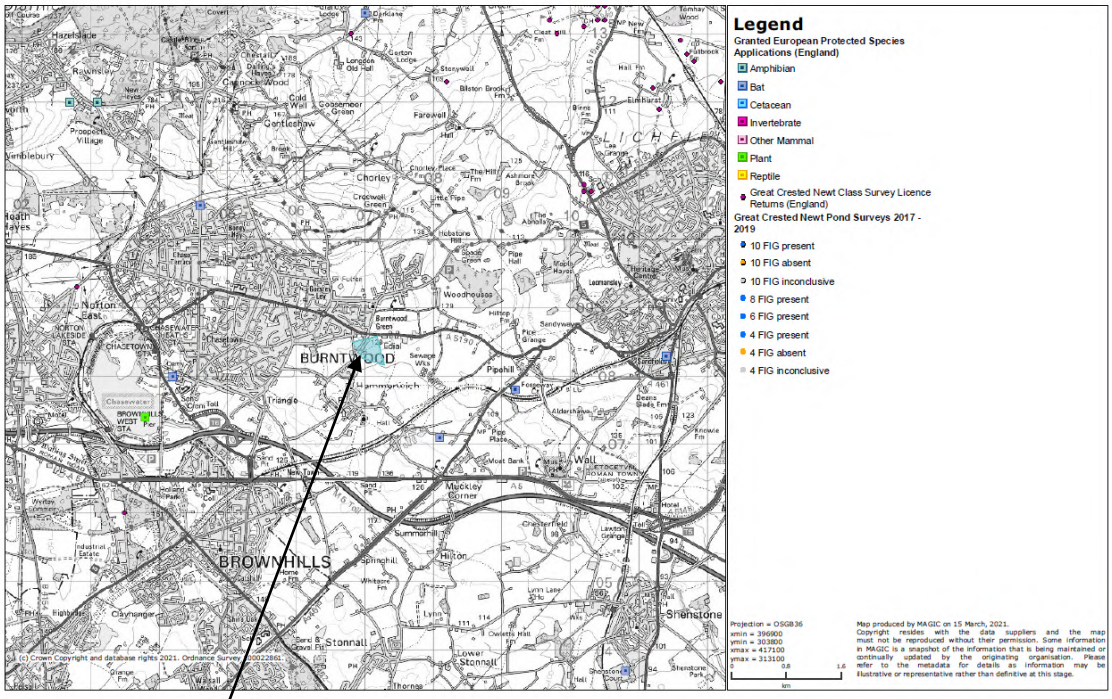
A search of the DEFRA MAGIC Dataset shows that the site falls inside of a Farm Wildlife Package area where there is support for Lapwings. There are no other biodiveristy enhancement areas adjacent to the site.



37 Stockhay Lane.

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. Those highlighted yellow were obtained by the Bat Consultant.

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



37 Stockhay Lane.

Constraints.

The building survey was undertaken in the winter when evidence of bats internally can still be seen but external evidence may be unavailable after heavy rain. There was a light snow on the day of the survey. 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. The survey was undertaken during the Covid-19 period of social distancing but there were no constraints to the surveyor for access in the building survey for bats.

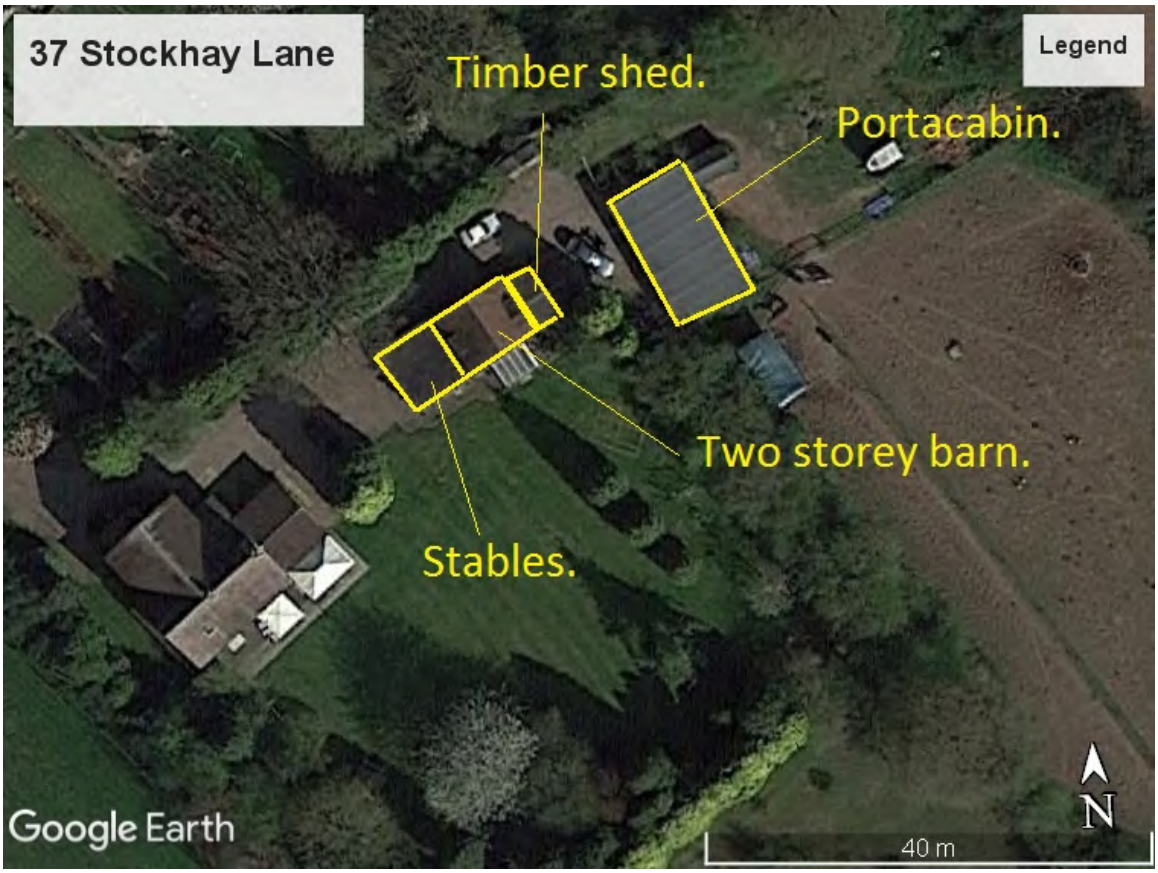
Building Survey.

The buildings to be surveyed consisted of a two storey solid brick barn building that is being used for ancillary residential purposes, an adjoining set of stables, a timber shed and a portacabin.

2017.

2021.

The property is situated on the north eastern edge of Hammerwich with urban areas to the south and the larger urban area of Burntwood to the north. There is agricultural land surrounding the urban area. There are mature trees in the hedgerows and trees between the fields which provide commuting routes for bats. There are areas of woodland in the countryside around the village and this woodland would provide foraging habitat for bats.



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.
Poor.	Bats may use the feature/area but it is not thought to be likely.
Possible.	The feature/area provides an area that may 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.

Portacabin.

This is a metal framed portable building with a shallow pitched roof.

2017

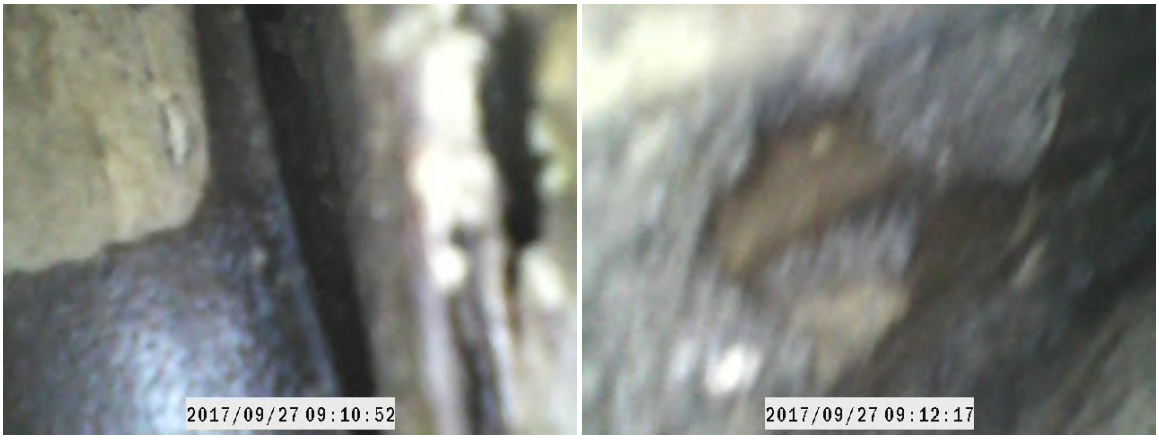

2021.


The walls were clad in timber with a waterproof paint finish when the building was new. Water penetration of the original structure has occurred and this has resulted in the roof being over clad with a new mineral felt roof covering and areas of uPVC cladding fixed to the timber.


Water penetration has continued with the timber of the soffits beginning to collapse.





This has created a temporary place of shelter for individual bats but there is no access to the roof space of the original building which is seen with the endoscope beneath the new roof covering.

This temporary place of shelter could only be used in periods of warm and dry weather by individual bats but the surveyor believes this use is highly unlikely.

There are no opportunities for birds to nest in the building.

There had been no increase in the bat roosting opportunities for bats when the site was visited in March 2021.

Bat roosting potential; None.

Bird nesting opportunities; None.

Timber Shed.

This is a timber framed building with timber plank sides and bitumous roofing membrane shingles on top of a timber plank roof.

2017.




2021.


The building offers no places of shelter for bats.

There are no birds nesting in the building.

There had been no increase in the bat roosting opportunities for bats when the site was visited in March 2021.

Bat roosting potential; None.

Bird nesting opportunities; None.

Two storey brick barn.

This is a two storey brick barn that is currently used as ancillary accommodation to the dwelling.

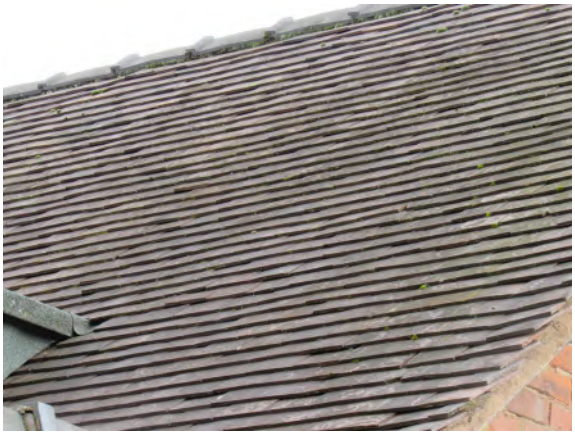
2017.


2021.


The buildings has solid brickwork with a pitched roof supported on timber rafters. The roof space of the building has been fully incorporated into the living space. There are plain tiles on the roof above a bituminous underfelt.

2017.

2021.



There is no access under the plain tiles and there are few gaps under the ridge tiles that give access for bats to the rear of the ridge tiles. The accesses are partially filled with mortar and may not extend under the ridge tiles.

2017.






2021.




There is no access at the verges.

2017.


2021.

The eaves are closed with a timber fascia board and there is no access for bats.

2017.

There has been warping of the fascia board which now creates a temporary place of shelter for crevice dwelling bats.

2021.


There are two dormer windows with bitumous mineral felt sides and roof. There is no access for bats.

2017.




The bitumous felt that covers the sides of the dormer windows is coming loos on the eastern elevation dormer. This provides a temporary place of shelter for individual bats but there is no access to the roof space and this area is open to weather penetration.

2021.

The building offers only poor places of shelter for bats.

There are no birds nesting in the building and no opportunities for birds to nest.

There had been no increase in the bat roosting opportunities for bats when the site was visited in March 2021.

Bat roosting potential; Poor.

Bird nesting opportunities; None.

Stables.

These are a single storey solid brick building with a mono pitch roof.

2017.


2021.


The roof is supported on timber rafters with a heavy duty polythene sheet roofing membrane. There are slates on the roof.

2017.



2021.


The slates have slipped in the centre where the timber beneath is broken. This allows bat access to the rear of the slates but the polythene roofing membrane makes this area unusable by bats because of their inability to crawl across the smooth surface.

There are cobwebs in the roof space indicating no use of the inside of the building by bats.

2017.


There is a timber soffit at the front of the building with no access for bats. There is no access for bats at the verge.

2017.


2021.


The ridge of the mono pitch roof is closed by a ridge tile placed at an angle over the timber wall plate. There is a cavity beneath the ridge tile and this has been used by bats with three small elongated bat droppings being visible when the area was search with an endoscope in 2017.

2017.



The droppings could be from m ice but the slightly nobly texture make this unlikely, mouse droppings being more torpedo shaped and smoother surfaced.

No bat droppings were found in 2021.

2021.


There is access to the rear of the ridge tile for birds but there was no evidence of nesting.

Bat roosting potential; Definite.

Bird nesting opportunities; Possible.

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, two evening emergence surveys were undertaken in 2018. The number of surveys undertaken was determined with reference to the Bat Survey Guidelines for properties with low/moderate roost potential.

The aim of each survey was to look at different areas of the buildings 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. Bat passes were recorded during ten minute periods from sunset. 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.

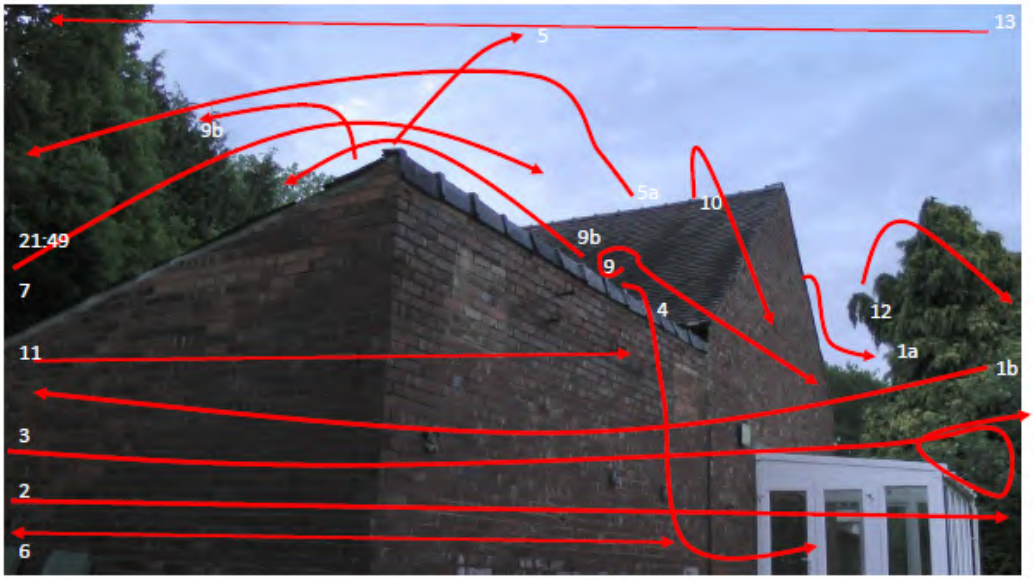
The surveys were undertaken using Batbox Duet frequency division bat detectors with an Edirol R09 recording device and a Batbox Baton frequency division bat detector with an Olympus WAV sound recorder. The surveys were undertaken by Diana Beecroft, licensed bat surveyor.

Date.	07 May 2018	Location.	37 Stockhay Lane, Hammerwich	Surveyor.	Diana Beecroft
Sunset.	20:44	Start time.	20:20	End Time.	22:25
Temperature	22/ °C	Wind	4 mph Beaufort	Cloud	0 /8th

Activity.	Code.	Activity.	Code.
Commuting.	C.	Not Seen.	NS.
Foraging.	F.	Not heard.	NH.
Emerge from roost.	E.		
Enter roost.	R.		

Time.	Direction	Activity	Species.	Notes.
21:06 – 21:20	1	E? / F	*Pipistrellus pygmaeus*	May have emerged from vicinity of corner ridge tile of two storey barn (1). Then foraged in garden.
21:21		F	*Pipistrellus pygmaeus* x 2	Foraged around garden
21:26		F	*Pipistrellus Pipistrellus*	
21:27-21:31		F	*Pipistrellus pygmaeus* & *Pipistrellus Pipistrellus*	X 4 bats foraging around garden and buildings (stables, barn, and house behind)
21:35 – 21:46		F	*Pipistrellus pygmaeus x 2*	Foraging around garden and stables
21:56	NS	C		
22:04	2	F	*Pipistrellus pygmaeus*	
22:12	3	F		From back old stables to tree line
22:18	NS	F	*Pipistrellus Pipistrellus*	

Date.	21 May 2018	Location.	37 Stockhay Lane, Burntwood.	Surveyor.	Diana Beecroft
Sunset.	21:07	Start time.	20:40	End Time.	10:40
Temperature	/ 21 °C	Wind 5mph	Beaufort	Cloud	4 /8th High cloud

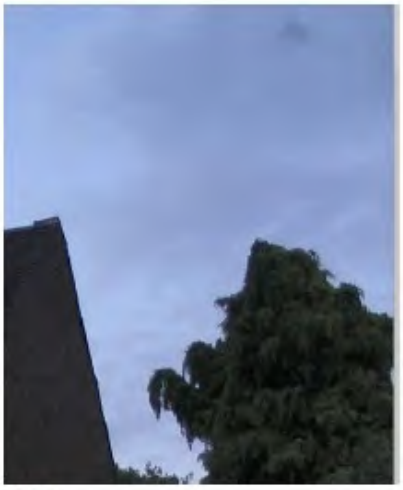


Activity.	Code.	Activity.	Code.
Commuting.	C.	Not Seen.	NS.
Foraging.	F.	Not heard.	NH.
Emerge from roost.	E.		
Enter roost.	R.		

Time.	Direction.	Activity.	Species.	Notes.
21:21	1a	E?	NH	From roof of 2 storey barn (see video 15:34 and screen shot below)
21:23	1b	C	Pip	From tree in garden on RHS of surveyor– same bat?
21:38	2	C	CP	From house towards barn – to back of barn – around trees then to garden then back to house
21:39	1b	C	CP	from tree in garden on RHS of surveyor to house.

21:40	2	F	CP	From house to garden – same bat at
21:40	3	F	Pip. X 2	Possibly SP
21:41	4	F	CP	Then around garden – Emerged?
21:41	3	F	CP	Then around garden
21:42	5	F	CP	Over head towards house
21:44-45	5a	F	CP	Then foraging around garden
21:46	6	F	SP x2	From front of stables to where surveyor was sited and back to front of stables
21:48	9	E?	NH	Dropped, looped then headed for garden – Emergence from roof? Fast and agile
21:48	9b	E?	CP	From roof of barn
21:49	7	C	CP	From house, over stables, over barn, then foraging around garden
21:54	7	F	SP	2 bats same path a few seconds apart
21:54	1b	C	SP	
21:57	3	C then F	SP	Commuting then foraging around garden
21:58	7	C	CP	Then foraged around garden and then over tall leylandii next to barn.
21:58	11	F	CP	
21:59	12	F	SP	From between leylandii and barn to garden then around stables to front of stables
22:00	12	F	SP	From between leylandii and barn to garden, around garden and then back between leylandii and barn.
22:01	6 (11)	C	SP	2 bats flew over barn roof then one flew towards garden
22:00		F	SP	From garden (RHS) to car/drive (LHS)
22:03	9b	F	SP	From trees, around stables, then around garden then back to trees
22:03	6	F	CPx2	Foraging around garden then to drive then garden x 2 then over roof of barn
22:05	10	F	Myotis?	Then foraging around garden then back of barn
22:10	6	F	CPx2	Foraging around garden then to drive then garden x 2 then over roof of barn
22:11	13	C	Myotis	
22:11	12	C	Myotis	Then around garden and back to tree

21:21



21:23

over barn roof

From the emergence surveys it has been seen that individual Common pipistrelle bats are using the accesses under the ridge tiles and roof tiles of the two storey barn as a place of shelter, and the ridge tiles of the stables as a place of shelter.

7th May 2018

1 Common pipistrelle emerged from 2 storey barn at 21.06.

21st May 2018.

1 Common pipistrelle emerged from verge of 2 storey barn at 21.21.

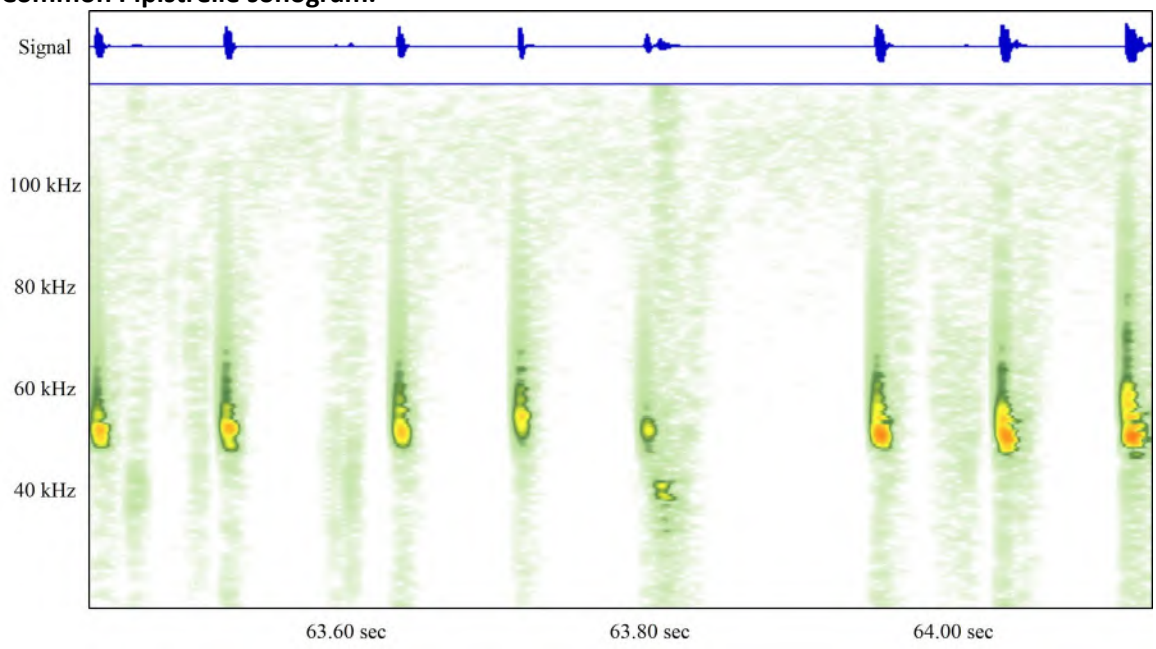
2 Common pipistrelle bats emerged from the ridge tiles on the stables at 21.48.

The emergence from the ridge tiles on the stables matches with the droppings evidence of the use of this area by bats as a place of shelter.

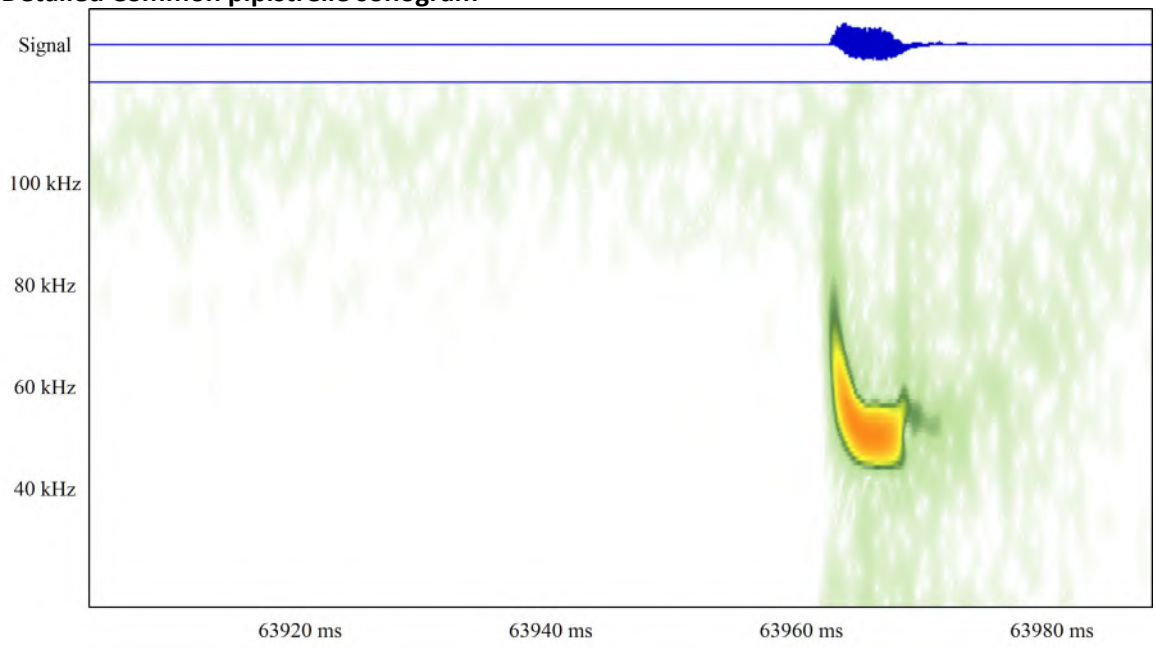
Analysis of the recordings from the bat detectors have confirmed the presence of Common Pipistrelle bats and Soprano pipistrelle bats.

The bats were commuting across the site with no 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.

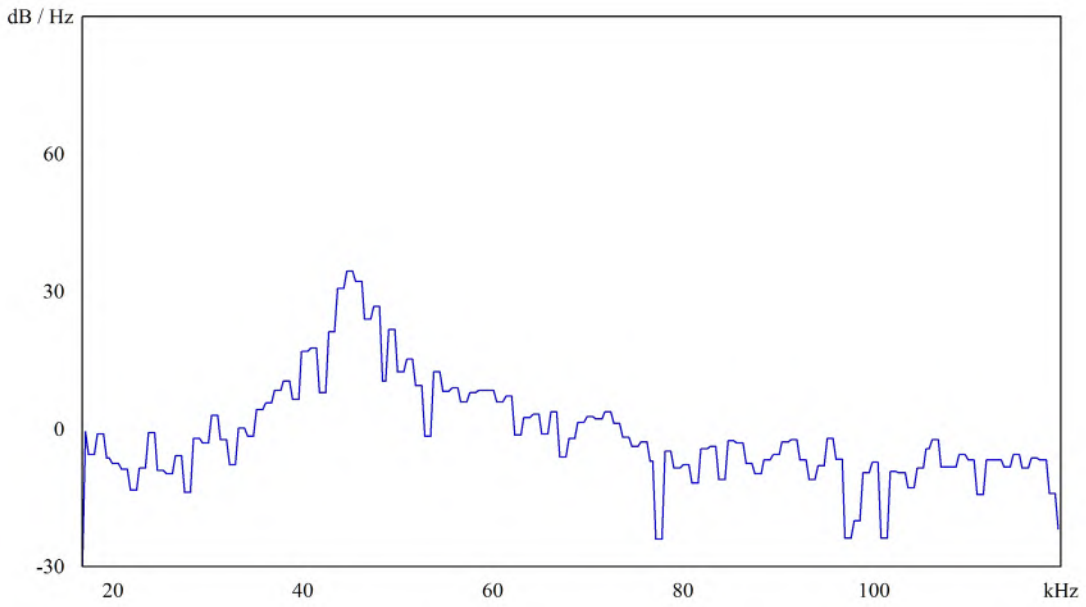
Common Pipistrelle sonogram.



Detailed Common pipistrelle sonogram

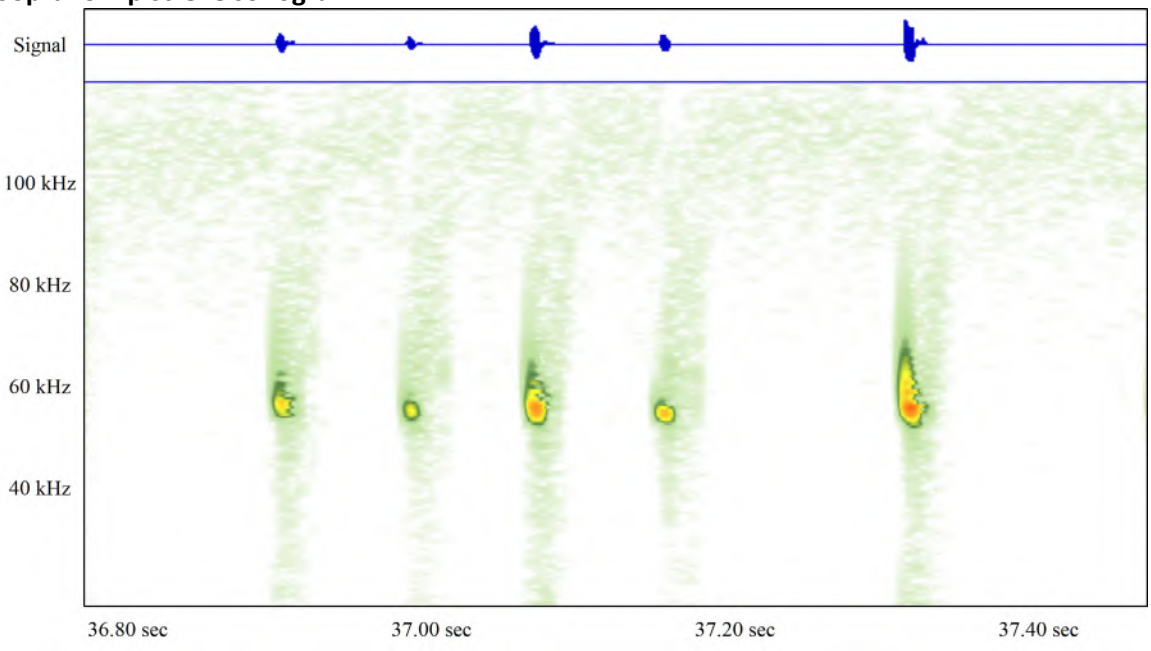


Common Pipistrelle peak frequency.

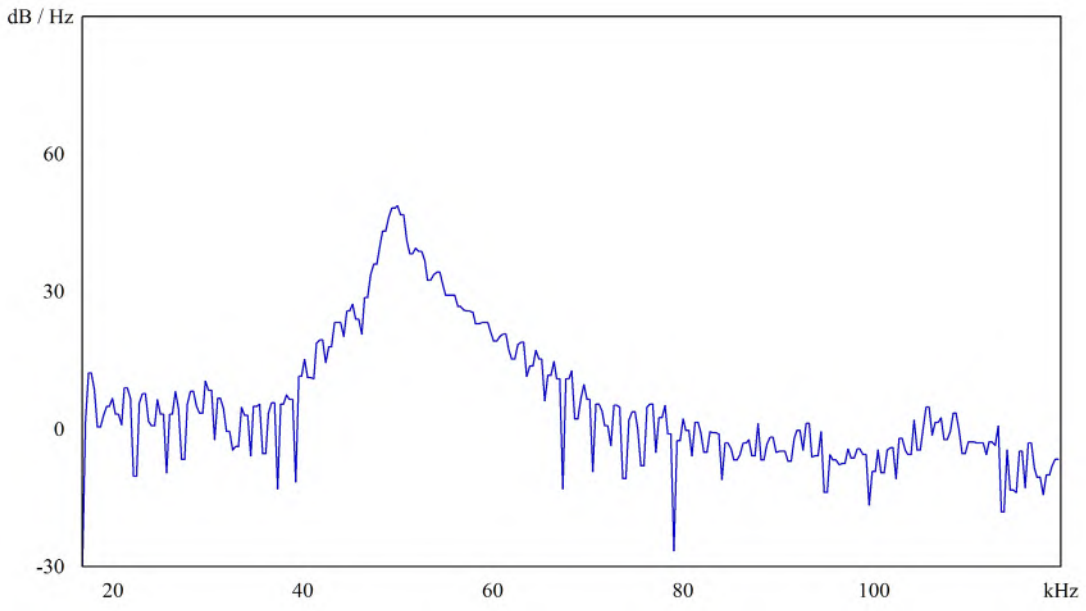


The Soprano Pipistrelle bats heard have also been confirmed by sound analysis with the peak frequency being around 55kHz.

Soprano Pipistrelle sonogram.



Soprano Pipistrelle peak frequency.



A number of Myotid bats have been heard on site, some with very fleeting echolocation calls. The calls were too fleeting and faint to be able to be analysed.

Conclusion.

There was no evidence of bats using the portacabin or timber shed as a place of shelter. There had been no change between 2017 and 2021.

There is droppings evidence of bats using the rear of the ridge tiles on the stables as a place of shelter. The number of droppings is small indicating use by a small number or an individual bat. The roost is not a maternity roost. The emergence survey of this area showed two Common pipistrelle bats emerging at 21.48 on the 21st May 2018. This area is being used as a Day Roost.

There was possible access under the ridge tiles of the two storey barn and a single Common pipistrelle bat was seen to emerge on the 7th May 2018. A further possible emergence from this building on the 21st May 2018 may have come from close to the verge on the southern elevation but there is no indication on site of a place of shelter at this point. This area is being used as a Day Roost.

There are temporary roosting opportunities for bats in the soffit of the portacabin where wet rot has caused the soffit to collapse. This area is small, exposed to weather and water penetration and would only be used by individual bats during periods of warm and dry weather. The bat consultant believes the likelihood of this space being used is very small and does not require emergence surveys to be undertaken.

The bat roosting opportunities still existed in 2021.

A license from Natural England will be required to undertake the demolition of the stables and the two storey barn. The number of bats is small, and of a common species, and because of this a Bat Mitigation License (BML) license can be obtained if planning permission is granted. Two additional emergence surveys will be required in order for the license to be applied for.

The demolition of the stables and two storey barn, if planning permission and a license from Natural England granted, must be undertaken following the method of working below so that harm to bats is avoided. The bat consultant must be present during the demolition to ensure any bats in the property are not harmed and are put into a new bat box roost on site.

The demolition of the portacabin, timber shed, two storey barn and stables will not affect nesting birds.

It is possible that birds could nest under the ridge tiles of the stables. In order that there is no disturbance to nesting birds this building is not to be demolished between March and the end of August in any year unless a survey for nesting birds has been undertaken and it can be clearly shown that birds are not nesting in the building.

Impacts on bats.

The demolition of the property will have a negative impact on bats due of the loss of the roosting behind the ridge tiles. A BML license will be required from Natural England before the demolition can proceed. The method of working below must be followed to ensure that the potential for disturbing or harming bats, however small, is minimized and avoided.

There is no loss of habitat from the proposed development and there will be no impact on habitat, forage or commuting routes from the proposed development.

Mitigation for bats.

Records show that there are populations of crevice dwelling bats locally and the emergence surveys have shown there are Commo pipistrelle bats roosting on site. New roosting opportunities for these 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 (2012).

A bat box must be positioned on a tree or pole on site before demolition to allow bats found during the demolition to be re-housed on site immediately.

A brick built bat box can be installed at the gable apex of one elevation on each of the new dwellings, 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 should be chosen so that droppings falling from the bat box will not cause a nuisance for the occupiers. A south facing elevation will also benefit from solar gain and will provide a warm roost for crevice dwelling bats.

There should be no direct illumination of the new bat roosting opportunities. 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.

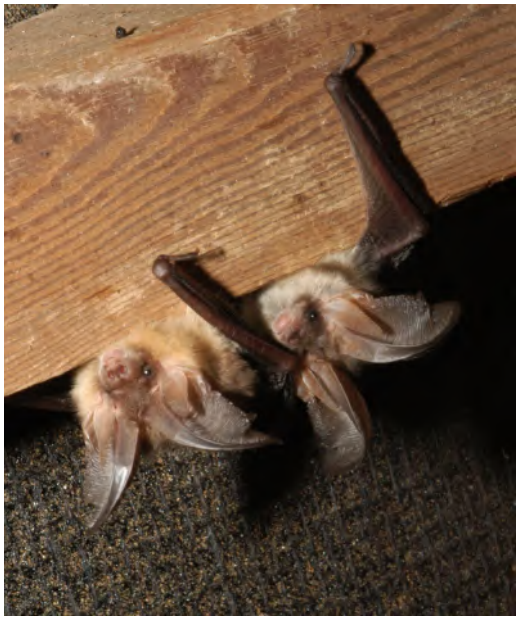
There is evidence of bats using the stables and two storey buildings as a place of shelter and it is possible that individual bats may use the possible temporary roosting sites at different times of year. Because of this possibility a method of working should be put in place when there are contractors 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.
- 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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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).