

Bat Survey Report

Wilderness, Harbottle Village, Morpeth, Northumberland, NE65 7DQ

Survey undertaken May 2015



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EXECUTIVE SUMMARY

A bat survey was commissioned for Wilderness, Harbottle Village, Morpeth, Northumberland for fulfilment of planning approval for redevelopment of the former redundant building to a small residential dwelling.

The purpose of the survey is to determine if bats are present within the building and if they are utilizing the structure for roosting potential. The report will also demonstrate how they utilize the site in terms of commuting foraging and assess the connectivity of the site. Based on the results from the survey, mitigation and recommendations are provided to increase optimum habitat potential for bats.

A desk top survey and risk assessment was initially undertaken for the site. Historic records of bat activity was obtained from the Environmental Records Information Centre North East (ERIC), information is included below. Bat roosts are confirmed in Harbottle village of crevice dwelling species, which the sandstone properties can provide. The nearest roost was identified as being within 200m of the building identified for survey.

An assessment as to the bat potential was made and the building was placed at low risk for bats. This was based on a classification of the site as negligible to low, low to medium or medium to high potential for bat species, based on the lack of field signs identified within the building. The building is sited in an area which is considered to have excellent connectivity, foraging potential and is in close proximity to an existing bat roost near to the site.

One emergence survey was carried out in line with Bat Conservation Guidelines to support the classification of the building as having low potential for bats.

Potential holes were identified during the bat risk assessment by both surveyors which highlighted the main areas of concern for the emergence survey. No bats emerged or re-entered the building. Bat activity commenced approximately 10 minutes prior to sunset

indicating the close proximity of existing bat roosts. Species identified include common pipistrelle and soprano pipistrelle.

There were no constraints to the emergence survey or restrictions to the assessment in any way. Conditions were optimal when the survey was undertaken, with clear views of all aspects of the building and all surveying equipment was in full working order. Both surveyors were on site at the appropriate time and remained in their surveying locations for the duration of the survey and Bat Conservation Trust Guidelines were followed at all times.

While no bats were recorded emerging from the Wilderness, bats were seen to emerge from the property to the north of the site (Holly's Cottage) and mainly commuted past the eastern elevation of the survey building following the tree lined canopy towards foraging areas of woodland and watercourses. Bats were also noted to travel north from Holly's Cottage. It was estimated 80 bats were identified travelling in a southerly direction crossing the site to the foraging areas.

Redevelopment of the site will include works to the interior and exterior of the building with the building being extended to the southern elevation and disturbance to the gable end and roofline. Bats are opportune species and if a worst case scenario is identified, whereby bats are found at the building recommendations have been included for mitigation which reflects the low risk and level of activity as identified.

Recommendations (section 6.0) and Method Statement (Appendix 1) demonstrates to the home owner and contractors that works should follow a soft strip method for removal of the building fabric. The report is valid for a 12 month period from the date of issue and a copy of the report to be made available for the duration of the renovation of the building for reference to contractors and property owner.

Building and roofing contractors to be made aware of bats foraging in the vicinity of the building and to be offered a 'toolbox talk' regarding bats if not familiar with bat ecology and legislation which governs bats.

If bats are identified, all works must stop immediately and licensed Ecologist called (in the first instance - DHB). Bats should be left in-situ and gently covered over to allow the bat to freely emerge during dusk. If safety is compromised then bat(s) should be removed to a safe place (small ventilated box); wearing gloves at all times until advice is obtained. Evidence of remnant bird's nests were identified to the west and east elevations. A bird checking survey should be carried out by a competent ecologist if works are to take place during the bird nesting season (March – August).

Mitigation and enhancement of the site due to the presence of foraging and commuting bats, recommends 2 external bat boxes attached to trees within the grounds of the site in order to provide additional crevice roosting potential. Bat boxes can be erected prior to commencing works and choice of bat box includes either a purpose build Shweglar bat box or an easily constructed Kent Bat Box of untreated timber – information relating to construction is included within in Appendix 2.

1.0 INTRODUCTION

A bat survey was commissioned for Wilderness, Harbottle Village, Morpeth, Northumberland for fulfilment of planning approval for redevelopment of the former redundant building to a small residential dwelling.

The purpose of the survey is to determine if bats are present at the building and if bats are utilizing the building for roosting potential. The report will also demonstrate (If bats are present) how they utilize the site in terms of commuting foraging and assessing the connectivity of the site. Based on the results from the survey, mitigation and recommendations are offered to increase optimum habitat potential for bats.

The decision to undertake a bat survey must be based on a reasonable likelihood (from the outcomes of a bat risk assessment) that bats may be present in any given structure, tree, feature, site or area under consideration. The Bat Conservation Trust offers guidance with the 'Good Practice Guidelines' as to when a bat survey should be undertaken.

2.0 BACKGROUND INFORMATION

In the UK there are seventeen species of bats. Each bat species utilises a variety of roost types and has certain ecological requirements. To determine which bat species are on site it is necessary to identify the species, bat roosts, the nature of the roost and how bats are using the site. This information will allow informed decision making on the potential impact to bats and provide a baseline for project planning, timing of works and potential mitigation/protection measures.

A bat roost is defined as “any place that a wild bat uses for shelter or protection” (The Wildlife and Countryside Act 1981; as amended). Bats usually choose roosts close to good feeding areas and these feeding areas are where there is a good abundance of ‘prey’ insects. All British bats are insectivorous and each bat species eats a range of insect species. Bats will fly some distance to forage the optimum areas and this can sometimes create the situation where the roost is up to 1km or more from foraging areas. Bats are also affected by climatic conditions with poor weather affecting insects and their ability to hunt them.

2.1 *Current Legislation and Status of Species*

As population numbers have fallen, all bats and their roosts are protected.

All European species of bat are listed on Annex IVa of the EC Habitats Directive 1992 (EC Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora). In the UK the Directive has been transposed into national laws by means of the Conservation of Habitats and Species Regulations 2010. These are known as the ‘Habitats Regulations’. Under this legislation a person commits an offence if they:

- Deliberately capture, injure or kill any bat
- Deliberately disturb any species in such a way to be likely significantly to affect;
- The ability of any significant group of animals of that species to survive, breed or rear or nurture their young.

- The local distribution or abundance of that species
- Damage or destroy a breeding site or resting place

All British bats are included in Schedule 5 of The Wildlife and Countryside Act 1981 (as amended) Section 9 of the act.

It is illegal to:

- Deliberately or recklessly capturing, injuring, taking or killing of a bat;
- Deliberately or recklessly harassing a bat;
- intentionally or recklessly disturbing a bat in its place of rest (roost), or which is used for the protection or rearing of young;
- Deliberately or recklessly damaging, destroying or obstructing access to any resting place or breeding area used by bats;
- Deliberately or recklessly disturbing a bat in any way which is likely to significantly affect the local populations of the species, either through affecting their distribution or abundance, or affect individuals ability to survive, reproduce or rear young;
- Possession or advertisement / sale / exchange of a bat (dead or alive) or any part of a bat.

In addition the Natural Environment and Rural Communities (NERC) Act (2006), Section 40 requires all public bodies to have regard to biodiversity conservation when carrying out their functions.

The act states

“Any public body or statutory undertaker in England and Wales must have regard to the purpose of conservation or biological diversity in the exercise of their functions.... And that decisions of public bodies work with the grain of nature and not against it.”

In addition to this statutory duty, public bodies must also carry out their function in accordance with the law.

Bats are also protected by Wild Mammals (Protection) Act 1996, as well as the UK BAP (Biodiversity Action Plan) and are identified as species target as part of the Northumberland Local BAP.

If the site is identified as a roost site for bats then application for a licence to undertake work at the property will be required. The licence is issued through Natural England and a licensed Ecologist to oversee the work will be required.

2.2 Bat Ecology

Disturbance of bats at any time of the year can create a significant impact, but some times of the year are more sensitive than others, as highlighted below:

1. When bats are hibernating between December and February they are vulnerable to being woken at a time of year when there will be little food available. The energy used to wake up and move may require a few days' worth of feeding before the bat can hibernate again. Such food is unlikely to be found in the winter, and the cold may kill the woken bat first.
2. The other time of year is during the breeding from June to August. Young bats are suckled after birth for six weeks, and are left in the roost while the adult feeds.

2.3 Indicators when Surveying for Bats

Indicators when conducting a visual survey for bat species are listed below, this criterion is used when assessing buildings and trees.

- Obvious holes, cavities or splits within the tree
- Dark staining on the bark of the tree or below any holes. This staining effect is derived from the natural oils within the bats' fur.
- A maze of tiny scratch marks around the hole from the bats' claws.
- Droppings below a hole - they look similar to those of rodents, but crumble to a powder of insect fragments.
- Noise (squeaking or chittering) coming from a hole - especially on a hot day or at dusk

3.0 SITE SURVEY AND ASSESSMENT

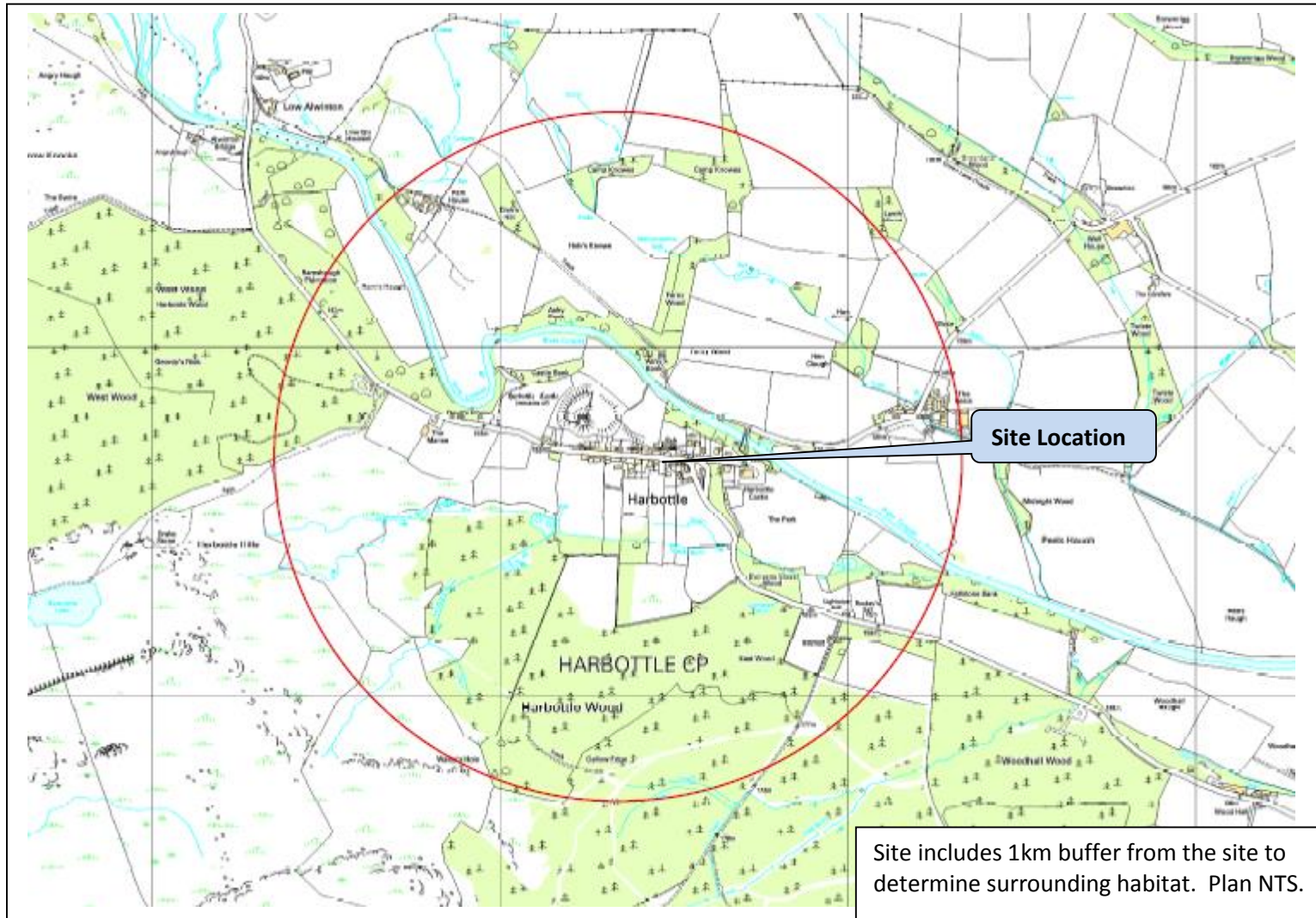
3.1 *Survey Objective*

The objective of the risk assessment is to ascertain whether there is any potential for bats to roost within the building(s) identified for redevelopment. Should any potential for bats be discovered, the survey should then classify the potential on a scale of; (negligible, low, medium or high). Furthermore, following identification of potential for bats, the survey aims to identify any evidence of bat occupation and make recommendations as to how to proceed with due regard for bats as a legally protected species.

3.2 *Site Location*

The Site is situated on Greenside Bank which is the main high street which runs east - west through the small rural village of Harbottle, Northumberland. The village lies to the west of the nearest town which is Rothbury, approximately 9 miles away and is 10 miles south east of the Scottish Borders. Harbottle Village is a linear village with, residential housing aligning the main thoroughfare through the village, which is nestled within Northumberland National Park. The OS grid reference for the site is NT934046.

3.2.1 Wilderness, Harbottle, Site Location



3.3 *Redevelopment of the site:*

The small out building / barn is to be redeveloped to provide a residential dwelling. The building is to be extended to the south and include a new roof and windows. Interior works will also be provided to make the building habitable.

3.4 *Desktop Survey:*

A desk top search was carried out via the following web sites to determine site information;

- Environmental Records Information Centre (North East) ERIC
- DEFRA Multi Agency Geographic Information for the Countryside 'MAGIC' website. This site provides statutory site designation information.
- Google earth which provides aerial photography to help determine habitats within the surrounding area.

3.5 *Criteria for Submission of a Bat Survey:*

Suitability of the site for bats is made using the following criteria from the Bat Conservation Trust Guidelines. This is identified within Table 3.5.1 and is included below.

Table 3.5.1 – Criteria for Submission of a Bat Survey:

<p>(1) Conversion, modification, demolition or removal of buildings (including hotels, schools, hospitals, churches, commercial premises and derelict buildings) which are:</p> <ul style="list-style-type: none"> ○ agricultural buildings (e.g. farmhouses, barns and outbuildings) of traditional brick or stone construction and/or with exposed wooden beams; ○ buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water; ○ pre-1960 detached buildings and structures within 200m of woodland and/or water; ○ pre-1914 buildings within 400m of woodland and/or water; ○ pre-1914 buildings with gable ends or slate roofs, regardless of location; ○ located within, or immediately adjacent to woodland and/or immediately adjacent to water; ○ Dutch barns or livestock buildings with a single skin roof and board-and-gap or Yorkshire boarding if, following a preliminary roost assessment, the site appears to be particularly suited to bats.
<p>(2) Development affecting built structures:</p> <ul style="list-style-type: none"> ○ tunnels, mines, kilns, ice-houses, adits, military fortifications, air-raid shelters, cellars and similar underground ducts and structures; unused industrial chimneys that are unlined and brick/stone construction; ○ bridge structures, aqueducts and viaducts (especially over water and wet ground).
<p>(3) Floodlighting of:</p> <ul style="list-style-type: none"> ○ churches and listed buildings, green space (e.g. sports pitches) within 50m of woodland, water, field hedgerows or lines of trees with connectivity to woodland or water; ○ any building meeting the criteria listed in (1) above.
<p>(4) Felling, removal or lopping of:</p> <ul style="list-style-type: none"> ○ woodland; ○ field hedgerows and/or lines of trees with connectivity to woodland or water bodies; ○ old and veteran trees that are more than 100 years old; ○ mature trees with obvious holes, cracks or cavities, or that are covered with mature ivy (including large dead trees).
<p>(5) Proposals affecting water bodies:</p> <ul style="list-style-type: none"> ○ in or within 200m of rivers, streams, canals, lakes, reed beds or other aquatic habitats.
<p>(6) Proposals located in or immediately adjacent to:</p> <ul style="list-style-type: none"> ○ quarries or gravel pits; ○ natural cliff faces and rock outcrops with crevices or caves and swallets.
<p>(7) Proposals for wind farm developments of multiple wind turbines and single wind turbines (depending on the size and location) (NE TIN 051 – undergoing updates at the time of writing).</p>
<p>(8) All proposals in sites where bats are known to be present¹ This may include proposed development affecting any type of buildings, structures, feature or location.</p>
<p>Notes:</p> <p>1. Where sites are of international importance to bats, they may be designated as SACs. Developers of large sites 5–10km away from such SACs may be required to undertake a HRA.</p>

Based on the criteria below, further assessment can be made as to how many emergence and pre-dawn surveys are to be undertaken in order to satisfy planning procedure and working to BCT Guidelines. Bats are highly mobile animals and will utilise different habitats at different times of the year. The recommended optimal time for surveys is May through to September. Survey work in this instance will consist of one vantage point emergence survey to be undertaken during May with two surveyors located at opposite gable ends of the building so all elevations are covered.

One emergence survey was undertaken May 8th 2016. Any potential entry / exit holes identified during the building survey are noted for additional vigilance for the emergence survey. Please refer to plan 3.5.2 for surveyor locations for each survey.

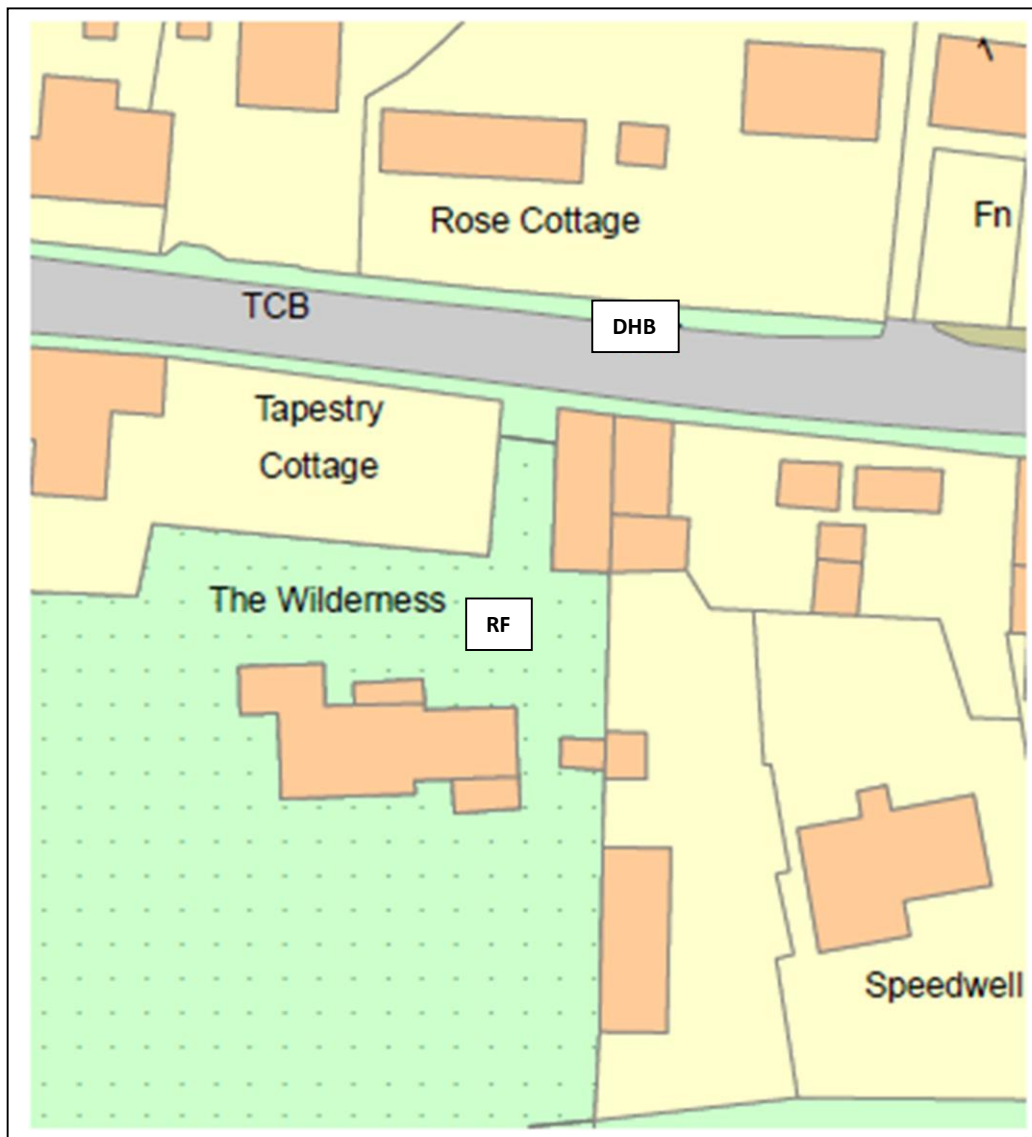
The initial external assessment and subsequent bat survey was undertaken by bat surveyors Derek Hilton Brown (Natural England license No CLS 2277) and Rachel Flannery, both Ecologists have over 10 years each experience of undertaking bat surveys and are members of the Chartered Institute of Ecology and Environmental Management (CIEEM). Report undertaken by R. Flannery.

3.5.2 Surveyor locations at Wilderness

Below is the location of the surveyors in relation to the building. All elevations were visible with two surveyors. Grid references for the two surveyors are identified below:

RF – 393346, 604665

DHB - 393356, 604690



Bat activity is then recorded on sheets including location of surveyor, direction of flight, flight height, bat emergence/ re-entry, number of bats, species, weather conditions, and bat activity such as foraging, commuting, social calling were also noted.

The equipment used for the survey includes;

- Batbox Duet
- Edirol recorder
- Head torch with filter
- Ridged - Endoscope

3.5.3 Bats Identified within Northumberland

As the survey and bat risk assessment is based upon a building it is expected that crevice dwelling bats will be the species of bats which will be encountered as part of the survey. Such species include common and soprano pipistrelle, brown long eared and possibly myotis species such as daubentons, given the close location to watercourse which this species favours.

4.0 RESULTS

4.1 Desktop Survey

From diagram 3.2.1. – 1km buffer is included around the property to determine the extent of designations which impact upon the site. The site is located within the Northumberland National Park. There are 15 National Parks throughout the UK, there are two statutory purposes to a National Park,

- To conserve and enhance the natural and cultural heritage of the area
- To promote understanding and enjoyment of the special qualities of the national park by the public.

Land to the south east and south west of the site is designated as Harbottle Moors SAC (Special Area of Conservation) and Harbottle Moors SSSI (Site of Special Scientific Interest). Both designations are considered statutory and demonstrates through scientific analysis the value in terms of flora and fauna value.

Harbottle Moor SAC – (Special Area of Conservation) Designated Annex I under EC Habitats Directive as European Dry Heath on Carboniferous Rocks with high species diversity suggesting historically un-intensive management in relation to grazing and burning.

Harbottle Moor SSSI (Site of Special Scientific Interest) notified under section 28 of the Wildlife and Countryside Act 1981 (As amended). The site includes River Coquet and Black Burn as well as small bodies.

Historic records of bat activity was obtained from the Environmental Records Information Centre North East (ERIC), information is included below. Bat roosts are confirmed in Harbottle village of crevice dwelling species which the sandstone properties can provide. The nearest roost was identified as being within 200m from the building identified for survey.

Plan 4.1 Historic Records from ERIC in Relation to Wilderness location

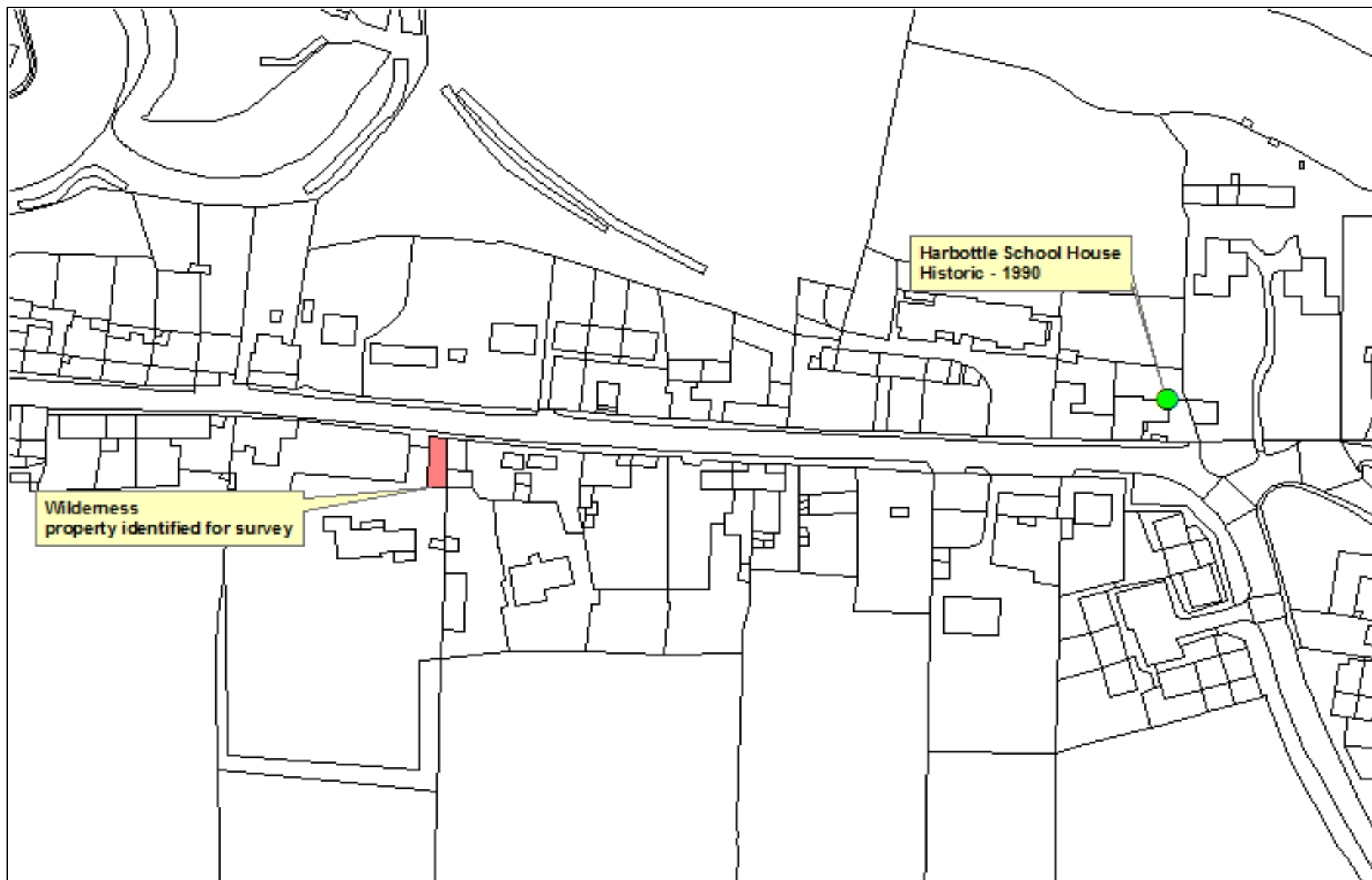


Table 4.1 Historic Bat Records, (Information obtained from ERIC)					
Species	Determination Type	Location	Comments	Date	Grid Reference
Natterer's Bat	Unconfirmed		from sound file,3 passes recorded	08/08/2013	NT9377003798
Pipistrelle Bat species	Unconfirmed		from sound file	08/08/2013	NT9382603859
Common Pipistrelle	Considered Correct	HARBOTTLE	Roost in House	21/08/2012	NT9304
Common Pipistrelle	Unconfirmed		from sound file	08/08/2013	NT9382603859
Common Pipistrelle	Unconfirmed	Harbottle School House	Mammal pipistrelle bat. via EJS max count 20 pipistrelle	01/08/1990	NT934047
Pipistrelle	Unconfirmed	Light Pipe Hall	Mammal pipistrelle bat. via EJS - max count 6 pipistrelle	01/09/1994	NT940043
Soprano Pipistrelle	Considered Correct	HARBOTTLE	Roost in House	21/08/2012	NT9304
Soprano Pipistrelle	Unconfirmed		from sound file,3 passes recorded	08/08/2013	NT9393804117
Bats	Considered Correct	HARBOTTLE	Maternity Roost in House, Possible Brown Long Eared or Natterer's Bat	2012	NT9304

4.2 Habitat Assessment

The building is located within the grounds of the residential property known as the 'Wilderness' and directly adjacent to the road (Greenside Bank) which connects Harbottle with Alwinton in the west and Rothbury to the east.

The immediate site consists of a sandstone wall to the boundary with mature Ash and Oak trees which align the entrance to the adjacent property to the east. To the west and periphery of the extended Wilderness site the boundary is tree lined- once again with mature trees and mown lawn. Beyond the site boundary to the south is a linear line of trees which provides connectivity for foraging potential leading to Harbottle Woods. Harbottle Woods also provides connectivity

to the east - Woodhall Woods for further foraging potential. In close proximity to the woods to the south of the site is Drakestone Burn and Back Burn. Both small watercourses also increase the foraging potential of the site.

The north of the site also provides good connectivity and foraging potential for bats. Scattered vegetation leads to the River Coquet and further north Ferny Woods.

Overall connectivity for foraging and commuting bats is considered to be excellent. There is a variety of habitats ranging from open standing water, running water, high canopy of tree lined field boundaries which offers connectivity to woodland.

4.3 Building Survey

The building is single storey, with pitched tiled roof and of sandstone construction, potentially double skin with rubble interior and dressed stone to the exterior. Internally the walls have been capped off with brick and concrete in order to provide a ledge for which the open rafters of the building is sitting upon. The brickwork does have cracks mainly identified to the southern gable end of the building with missing mortar. The north, west and east elevations have been previously re-pointed. Upon closer inspection of the crevices it was noted that the gaps did not have the field signs to suggest bat was present at the building. The majority of holes were dismissed due to the amount of spiders webs identified within the gaps suggesting no recent entry or exit to these crevices. Gaps were also checked with an endoscope for further clarification. Closer inspection was also given to the small gap to the lintel above the doorway and door frame to the building – which did not show any field signs for bats.

The building has a pitched roof and internally includes open rafters. The roof section is fairly recent and possibly the building was re-roofed within the last 10 years (as this work was undertaken by the previous owner).The roof section is a tile construction secured to batons and with felt underneath. There are a number of tiles which have slipped; mainly to the north west which was the result of vehicle damage. These slipped tiles have created small gaps providing some bat roosting potential. The gable end have cracks within the mortar where the roof tiles

meet the sandstone gable. There has previously been a chimney which is now blocked with no field signs evident. Between the top of the wall and the eaves creates a small ledge – evidence of four remnant bird's nests are identified externally to the west and east elevations. A bird checking survey should be carried out by a competent ecologist if works are to take place during the bird nesting season (March – August).

There are two wooden window frames to the north and west elevations sitting flush with dressed sandstone with minimal gaps. The frames have wooden lintels and are boarded up. Access to the building is via a wooden door and frame to the south west elevation. The frame sits flush with the dressed stone with only small gaps to the top of the door frame which on closer inspection included spider webs and no field signs of bats.

Internally the rafters are exposed and a thorough inspection was undertaken which identified no field signs for bats. Internal cracks within the walls and the blocked chimney was also inspected which again did not provide field signs for bat. Photographs for the site are included below.

During the risk assessment it was brought to the surveyors' attention that a maternity roost was present at Holly's Cottage which is located immediately to the north of the site. The roost was within the apex of the gable end of a modern extension facing west. This property is approximately 30m from the site. Field signs of extensive amount of droppings and staining to the brick work was identified via invitation from the homeowner.

Given all the information from the desktop survey and inspection of the building. The building was considered to be classified as low risk for bat potential based on the lack of field signs identified during the building inspection. Classification for bat potential is based on a scale of negligible to low, low to medium or medium to high potential for bat species. Additional roosts have been identified which bats are noted to favour within the village of Harbottle. Works undertaken would be subject to a method statement (Appendix 1) to demonstrate good working practice within the vicinity of known bat roost.

From this it was considered that one dusk emergence survey would be undertaken in order to confirm the bat potential of the building and advise any appropriate mitigation and method statements.

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4.3.1 Photographs – Wilderness, Harbottle, Northumberland

Internal – demonstrating the open rafters and roof of recent construction and capping to the walls of the building



Roof Section – with gaps to the mortar to the southern gable end



South west corner roof section with slipped tiles



Northern elevation – with boarded window



Gap above the doorframe



Southern elevation



Eastern elevation showing repointing



4.4 Bat Activity Survey :

Table 4.4 – Climatic Conditions Experienced during Survey								
Date	Sunrise Sunset	Start Time	End Time	Start / End Temp °C	Conditions	Wind (Beaufort Scale)	Cloud Cover	No. of Surveyors
08/05/2014	Dusk 20.59	20.35	22.23	10°C – Start 12°C - End	Dry	0-1	10%	2

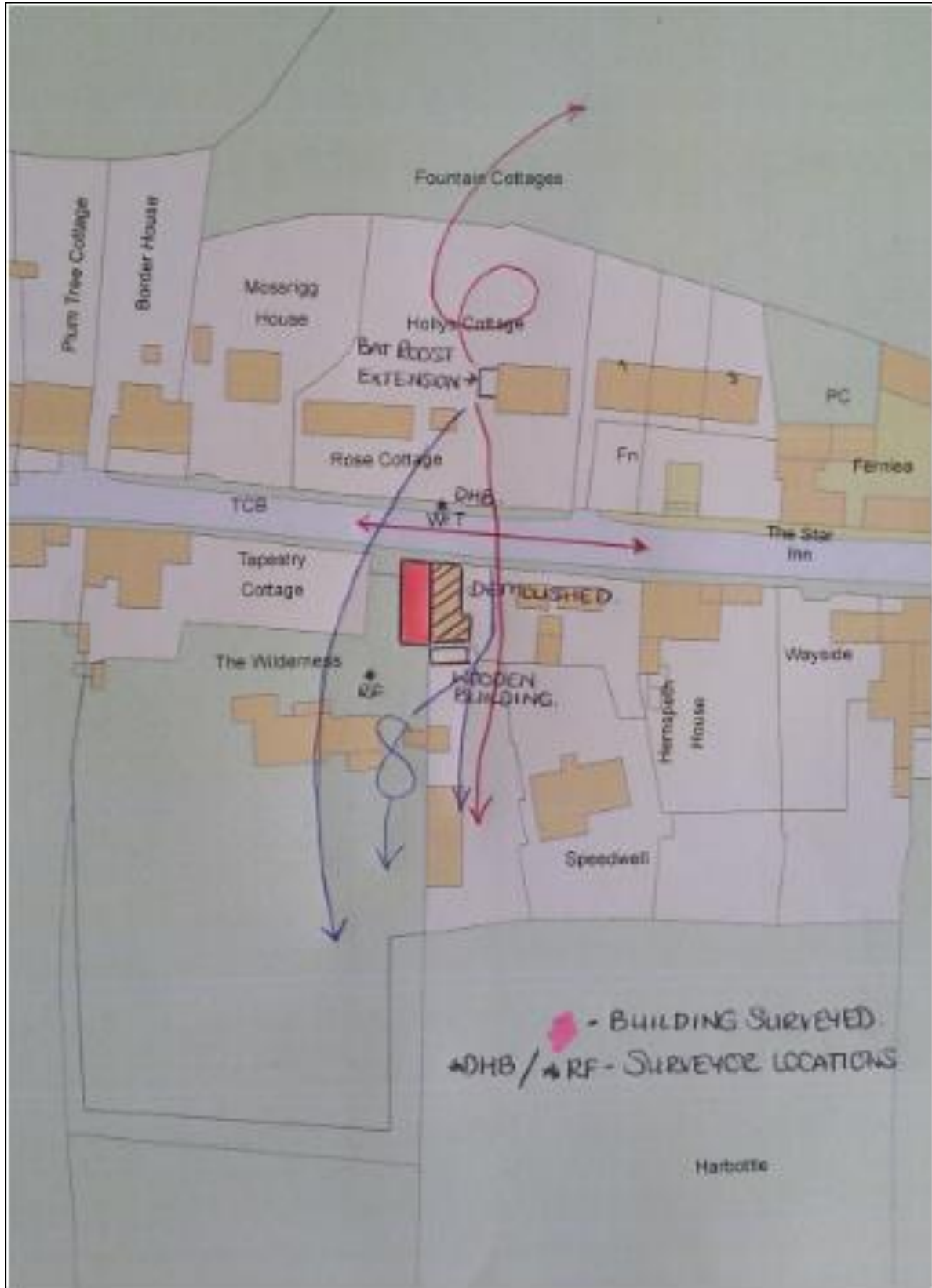
Summary of activity identified the first bats emerged at 20.49pm from beyond the site boundary to the north of the site at Holly’s Cottage. Two species of bat were identified common pipistrelle and soprano pipistrelle, confirmed via recordings undertaken with Batbox Duet and Edirol recording equipment.

For Surveyor DHB – between 20.49pm and 21.23pm bat activity was emergence from Holly’s Cottage and commuting at canopy height – approximately 12 – 15m heading south. Approximately 80 bats were counted emerging and entering the site from the north and existing south towards the woodland, ponds and stream to the south of the south. It was also noted by surveyor DHB – bats also headed further to the north (numbers are not known). There was also limited activity along the highway in an east – west direction with approximately 2 – 4 passes. No bats emerged from the north or eastern elevations of the building

For Surveyor RF – bat activity commenced at 20.49pm and was constant for the duration of the survey. No bats emerged from the southern or western elevations of the building. The main activity was focused to the trees located to the east of the building. Bats commuted from the north of the site and exited to the south of the site. A smaller number of bats would commute and forage via the western elevation of the building from the north to exit south.

Please refer to plan 4.4 which identifies the main bat activity for the site. The red line indicates the summary activity for surveyor DHB and the blue lines the main summary activity for RF.

Plan 4.4 Summary of Bat Activity



5.0 SITE ASSESSMENT

Over-all the report was not constrained or restricted in any way. The building was subject to one emergence survey. Conditions were optimal when the survey was undertaken. There were clear views of all aspects of the building subject to survey. All surveying equipment was in full working order. Both surveyors were on site at the appropriate time and remained in their surveying locations for the duration of the survey. There was no reason for the surveyors to leave their position and Bat Conservation Trust Guidelines were followed at all times.

The building as it currently stands was considered to be low risk irrespective of the gaps which have been identified within the building survey (including – slipped tiles, cracks within the stonework, gap above the doorframe and the windows being boarded). The property was identified within close proximity to existing maternity roost at Holly's Cottage to the immediate north of the site and also from ERIC records to the east of the site (approximately 200m away) and the site does have good connectivity to the woodlands, open water and watercourse to the south of the site and to the River Coquet to the north. However overall there was a lack of field signs identified during the bat risk assessment and from the emergence survey undertaken to support the building as having low potential for bats.

The report is valid for a period of 12 months from date of issue. In conclusion it is considered that the building at Wilderness, Harbottle, placed as Low Risk potential based on bat risk assessment and the undertaking of one emergence survey to support this assessment. The building is located within an area which has excellent foraging and connectivity and two roosts within the local vicinity of the site. No bats emerged during survey and no field signs.

Survey sheets for the bat report can be made available upon request. Bats are opportune species and if a worst case scenario bats are identified recommendations have been included for mitigation which reflects the low risk and level of activity as identified within section 6.0.

6.0 RECOMMENDATIONS

Recommendations are offered in order to prevent an offence being committed. The recommendations are for the home owner as well as appointed contractors.

To fulfil the requirements for potential roofing works - contractors and property owner should follow the Bat Conservation Trust guidance with regards choice of materials. Materials should allow for potentially roosting and be rough (for grip), preservatives should be non-toxic.

Please refer to the Bat Friendly Timber Treatment – Natural England

Technical Information Note TIN092 and Bat Roosts and Insecticide Pest Control

Products TIN 146 included with this report.

<http://publications.naturalengland.org.uk/publication/31005>

Insulation of the property should address the following;

- The risk of entanglement of potential bats
- Microclimate – felt lined roof will have different thermal properties to a breathable roof membrane
- Longevity of a membrane if bats are present

Choice of product should prevent the entanglement of any potential bats.

- A copy of the report should be made available throughout the duration of the renovation of the building for reference to contractors.
- This report is valid for a 12 month period from the date of issue. If works do not commence within 12 months of this report, further assessment will be required to update the report, to ensure that conditions have not changed.
- Building and roofing contractors to be made aware of bats foraging in the vicinity of the building and to be offered a ‘toolbox talk’ regarding bats if not familiar with bat ecology and legislation which governs bats.
- All Contractors working on the building are to undertake a soft strip – hand removal of:-
 - Ridge tiles and tiles to the roof
 - Boards to the two windows to the west and northern elevations,

- Roof tiles, window frames and door frames are to be removed with checks for bats as work proceeds
- If bats are identified, all works must stop immediately and licensed Ecologist called (in the first instance - DHB). Bats should be left in-situ and gently covered over to allow the bat to freely emerge during dusk. If safety is compromised then bat(s) should be removed to a safe place (small ventilated box); wearing gloves at all times until advice is obtained.
- Bats should not be unnecessary handled and gloves should be work at all times.
- Two external bat box to be attached to trees within the grounds of the site in order to provide additional crevice roosting potential given the close proximity of the site to existing roosts. Bat boxes can be erected prior to works to be undertaken and choice of bat box can be that of either a purpose built Shweglar bat box or an easily constructed Kent Bat Box of untreated timber – information relating to construction is included within in appendix 1. The bat boxes are to be located at a height of approximately 4m at a south east and south west elevation.

APPENDIX 1

METHOD STATEMENT FOR CONTRACTORS

METHOD STATEMENT FOR CONTRACTORS
WILDERNESS, HARBOTTLE, MORPETH, NORTHUMBERLAND,

A bat survey for the above mentioned property has shown that bats are present within the local vicinity of the site. Where bats are present within the local area there is the potential for bats to be present in building as they are mobile and opportune creatures. Bats will favour gaps in the stonework, under ridge tiles, behind barge boards and at window and door frames.

All bat species are protected by law. Deliberate and reckless disturbance of bats is a legal offence (as outlined within the report) and is punishable by fines and/or imprisonment.

Working method to avoid harm to wildlife:

To fulfil the requirements for potential roofing works - contractors and property owner should follow the Bat Conservation Trust guidance with regards choice of materials. Materials should allow for potentially roosting and be rough (for grip), preservatives should be non-toxic. Please refer to the Bat Friendly Timber Treatment – Natural England

Technical Information Note TIN092 and Bat Roosts and Insecticide Pest Control

Products TIN 146 included with this report.

<http://publications.naturalengland.org.uk/publication/31005>

Insulation of the property should address the following;

- The risk of entanglement of potential bats
- Microclimate – felt lined roof will have different thermal properties to a breathable roof membrane
- Longevity of a membrane if bats are present

Choice of product should prevent the entanglement of any potential bats.

- A copy of the report should be made available throughout the duration of the renovation of the building for reference to contractors.

- This report is valid for a 12 month period from the date of issue. If works do not commence within 12 months of this report, further assessment will be required to update the report, to ensure that conditions have not changed.
- Building and roofing contractors to be made aware of bats foraging in the vicinity of the building and to be offered a 'toolbox talk' regarding bats if not familiar with bat ecology and legislation which governs bats.
- All Contractors working on the building are to undertake Soft strip – hand removal of:-
 - Ridge tiles and tiles to the roof
 - Boards to the two windows to the west and northern elevations,
 - Roof tiles, window frames and door frames are to be removed with checks for bats as work proceeds
- If bats are identified, all works must stop immediately and licensed Ecologist called (in the first instance - DHB). Bats should be left in-situ and gently covered over to allow the bat to freely emerge during dusk. If safety is compromised then bat(s) should be removed to a safe place (small ventilated box); wearing gloves at all times until advice is obtained.
- Bats should not be unnecessarily handled and gloves should be worn at all times.

Mitigation and Enhancement

Mitigation and enhancement of the site due to the presence of foraging and commuting bats, recommends 2 external bat boxes attached to trees within the grounds of the site in order to provide additional crevice roosting potential. Bat boxes can be erected prior to commencing works and choice of bat box includes either a purpose built Shweglar bat box or an easily constructed Kent Bat Box of untreated timber – information relating to construction is included within in Appendix 2. The bat boxes are to be located at a height of approximately 4m at a south east and south west elevation.

APPENDIX 2
KENT BAT BOX DESIGN

The Kent bat box

Simple to construct, self-cleaning and low maintenance.

The only critical measurement is the width of the crevices—these should be no larger than suggested. Other measurements are approximate.

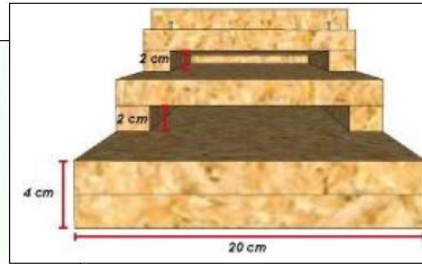
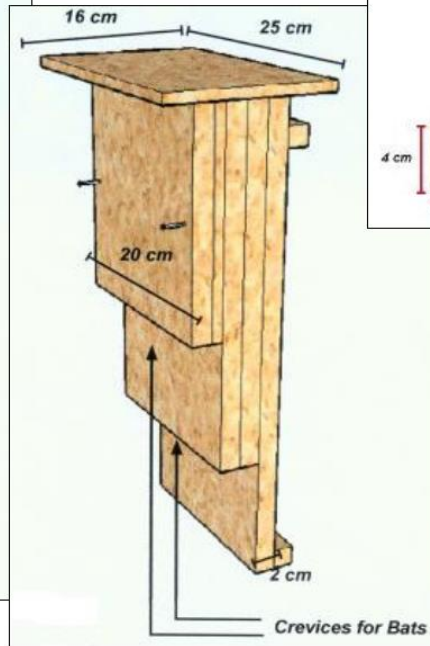
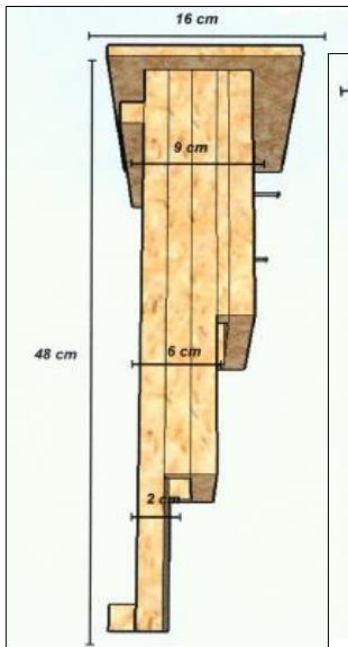
Materials and construction

Box to be made from untreated rough-sawn timbers
Timber should be c.20mm thick
The box should be rainproof and draught-free
Crevices can be between 15 and 25 mm wide
Fixing may be by use of brackets, durable bands or wires

Location

Boxes are best fixed as high as possible in a sheltered wind-free position, exposed to the sun for part of the day.
They can be fitted to walls, other flat surfaces or trees
A clear flight line to the entrance is important





This design has been developed by Kent Bat Group

We'd like to know how successful it is. Please send any comments or records of bats seen using it to: records@kentbatgroup.org.uk

With thanks to Glen Sharman for help in producing the prototype and Lloyd Bore for providing plans.

Kent Bat Group
www.kentbatgroup.org.uk
 Reg Charity No. 1079767

