Bat Survey Report

Sibson Mill Cottage Sibson Leicestershire

A Report to Ian Ritchie



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1. INTRODUCTION

Location

1.1 The site is located at Sibson Mill, Sibson in Leicestershire. A map of the site location is given in appendix 1. Central OS grid ref: **SK 344 024**.

Site description

1.2 The site represents a detached cottage. Local habitats include unimproved grassland, semi improved grassland adjacent to the River Sence and pockets of broadleaf woodland also occur nearby. Immediately adjacent to the house is a sizeable pool lined with trees and there is a complex of old agricultural barns where one building is known to support a soprano pipistrelle *Pipistrellus pygmaeus* maternity roost. In the wider environment habitats are dominated by arable fields bounded by hedgerow.

Scope of survey

1.3 It is understood that the owner of the house wishes to extend the building at the northern elevation and this will involve breaking into the roof of the house. A previously commissioned survey under other ownership identified evidence of the presence of bats within adjacent buildings. Ian Ritchie commissioned Martin Ecology to undertake a pre-determinative initial inspection of the house to see if the proposals would impact upon bats. This report details the findings of the surveys and makes future recommendations.

Legislative context-bats

1.4 All species of bats are protected under national and European legislation and it is an offence to deliberately kill, injure, recklessly disturb or take bats, obstruct access to their roosts (or place of rest), damage or destroy bat roosts, possess, sell bats (or any parts of bats) unless acquired legally. Bats often tend to re-use roosts after periods of vacancy, so bat roosts are afforded protection whether or not bats are present.

2. METHODOLOGY

2.1 Building inspection

2.1.1 A daylight visit was made to the site and the interior of the building was searched for bats and evidence of bats (such as droppings, fur, feeding remains and roost exits). All roof voids present were examined, and the inspection was made using a ladder and with the assistance of a one million candlepower torch. All accessible features where bats might roost were inspected for bats, or evidence of bats.

2.1.2 An inspection was then made of the exterior of the building for signs of bats such as: staining, grease marks, urine, fur, feeding remains and droppings on windowsills and walls, or features that might offer access for bats into the building (such as cracks and fissures on or around roof and ridge tiles, soffits, barge boards or brickwork). A one million candlepower torch and an extendable ladder were used to undertake the external inspection and all accessible features were inspected for bats or evidence of bats.

2.1.3 A photographic record was made of the site.

2.1.4 Dean Martin of Martin Ecology conducted the survey work on 16th May 2011. Natural England bat licence number: 20110344.

2.1.5 Two separate evening activity survey were carried out using Batbox duet detectors. The evening survey began thirty minutes prior to sunset and continued for ninety minutes after sunset.

2.1.6 Weather conditions during the nocturnal surveys were recorded.

2.1.7 Dusk bat activity at the site was mapped (see appendices 2 and 3).

2.1.8 Dean Martin (Natural England bat license number: 20110344) conducted the activity survey work on 16th and 23rd May 2011.

3. RESULTS

3.1 Building inspection

3.1.1 The building appeared to be from the Victorian period and was a detached brick house with traditional slate hip roof. Two areas were noted that appeared to allow potential access for bats and theses were where a ridge tile had broken and where a tile was missing on the eastern pitch and also where some lead flashing was raised (see plates 3 and 4). The house was fitted with timber soffits, and these appeared to be generally well sealed offering no visible access points for bats. No evidence of bats was apparent on the exterior of the building.

3.1.2 The loft void was access via a loft ladder. It was apparent when entering the loft the area had not been disturbed in many years and the loft floor was insulated. The roof was unlined and the natural slate tiles could be easily viewed from within the loft space. Cobwebs were abundant along the light weight roof timbers and this indicated that no bats or animals had disturbed these areas recently. Many rodent droppings were present on the floor of the loft (thought to be house mouse *Mus musculus*). A single very old dropping that appeared to one of a bat was found on the loft floor. The sample was aged to the extent that no preliminary assessment to gauge which species the dropping belonged to was possible because there were no discernible morphological characteristics to do this. No other evidence of bats was apparent within the roof void.

3.2 Dusk survey 16th May 2011

3.2.1 A single soprano pipistrelle bat *Pipistrellus pygmaeus* observed flying from the west towards the house fifteen minutes after sunset. The bat then foraged over the small pond in the rear garden of the cottage where it remained for several minutes. Over the next few minutes several more bats of the same species entered the survey area from the west and foraged along the banks of the adjacent pool (see appendix 4 for whole site plan for location of the pool) and also within the fruit trees to the front of the cottage.

3.2.3 All activity noted arrived at the survey area from the west. No bats were seen to exit the cottage.

3.2.4 The air temperature at the beginning of the survey was 15°c and at the end had dropped to 14°c. The breeze was light and no rain fell thus making survey conditions good. In the weeks leading up to the surveys weather had been unseasonably warm for April and bats in many areas of England had become active earlier than usual.

3.3 Dusk survey 23rd May 2011

3.3.1 At around fifteen minutes after sunset bats were again noted to arrive across the site

from the west and forage in association with the pool and its banks. A single *P. pygmaeus* bat was noted to briefly forage over the garden pond to the rear of the cottage. The bat then to the west where it joined other bats foraging along the banks of the lake. No bats were seen to emerge from the cottage.

3.3.3 The air temperature at the beginning of the survey was 14°c and at the end had dropped to 13°c. The breeze was moderate and no rain fell thus making survey conditions good.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Although a single aged dropping was found within the loft void the building does not appear to be a bat roost and the evidence found suggests that a bat from a nearby roost may have spent a brief period there, perhaps over a single night several years ago. The roof is not lined and so an inspection of the roof fabric was unconstrained and any recent bat activity within the loft would have been quite apparent. Therefore it is not thought that a derogation license from Natural England is required in this case.

4.2 When the northern roof section is stripped to extend the house this should be done carefully by hand under supervision of a qualified bat worker and in the unlikely event a bat is found Natural England should be contacted immediately for advice before any work can lawfully proceed.

5. BIBLIOGRAPHY

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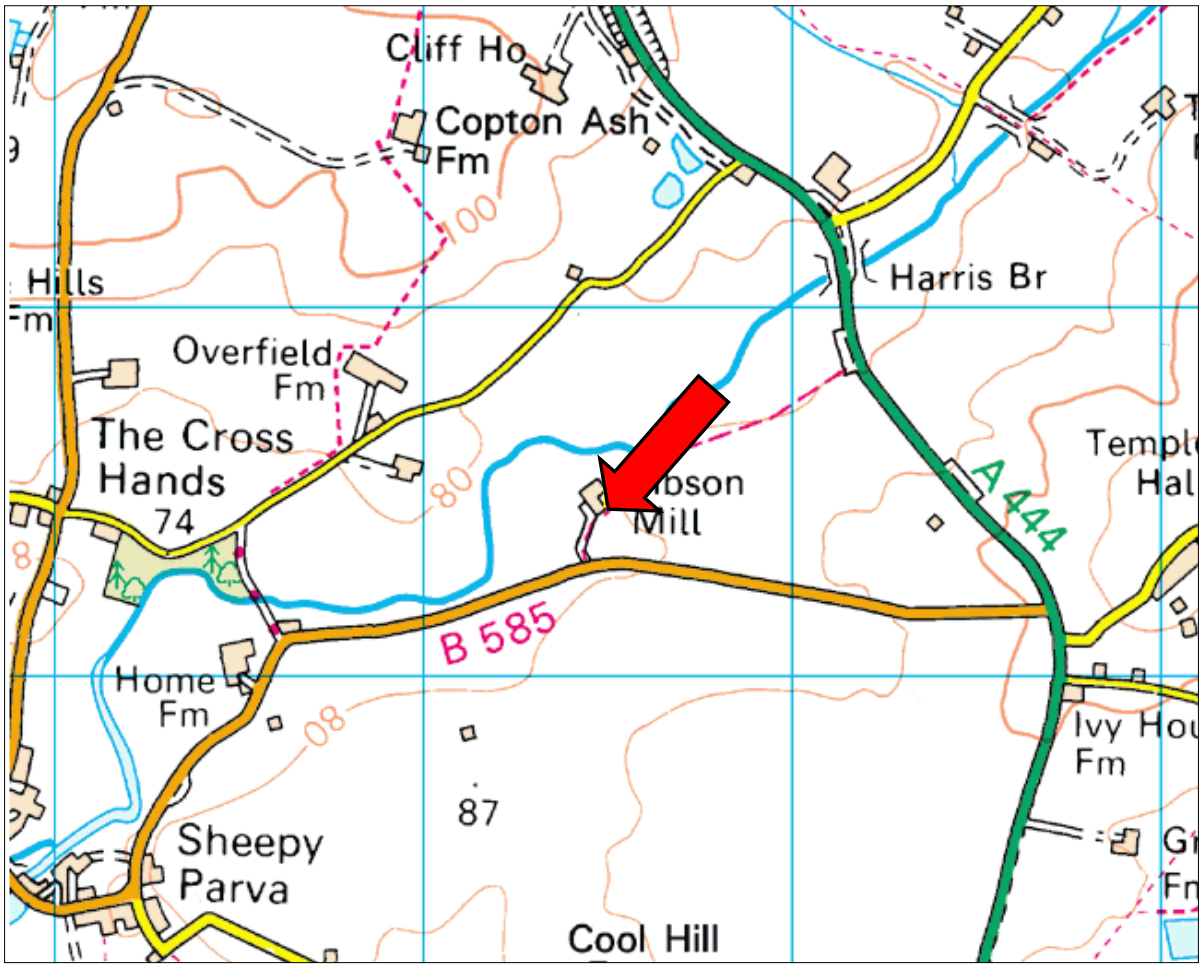
Appendix 1



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Appendix 2



Plate 1 South elevation



Plate 2 North elevation



Plate 3 Potential gap at ridge



Plate 4 Missing tile and gap at flashing



Plate 5 Mouse droppings loft floor

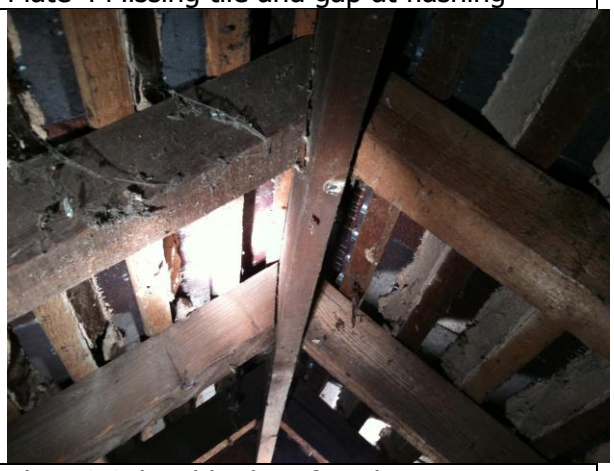
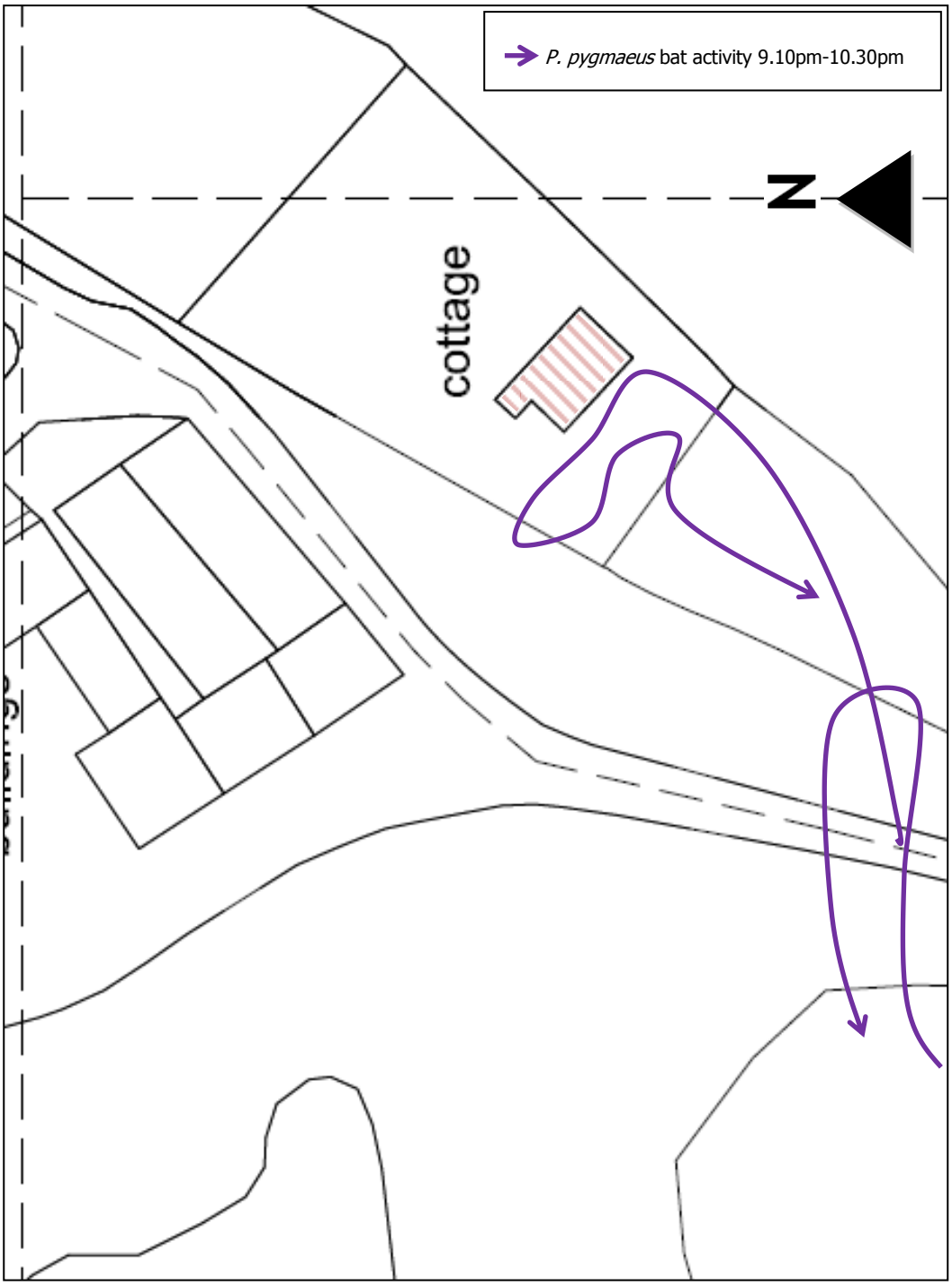
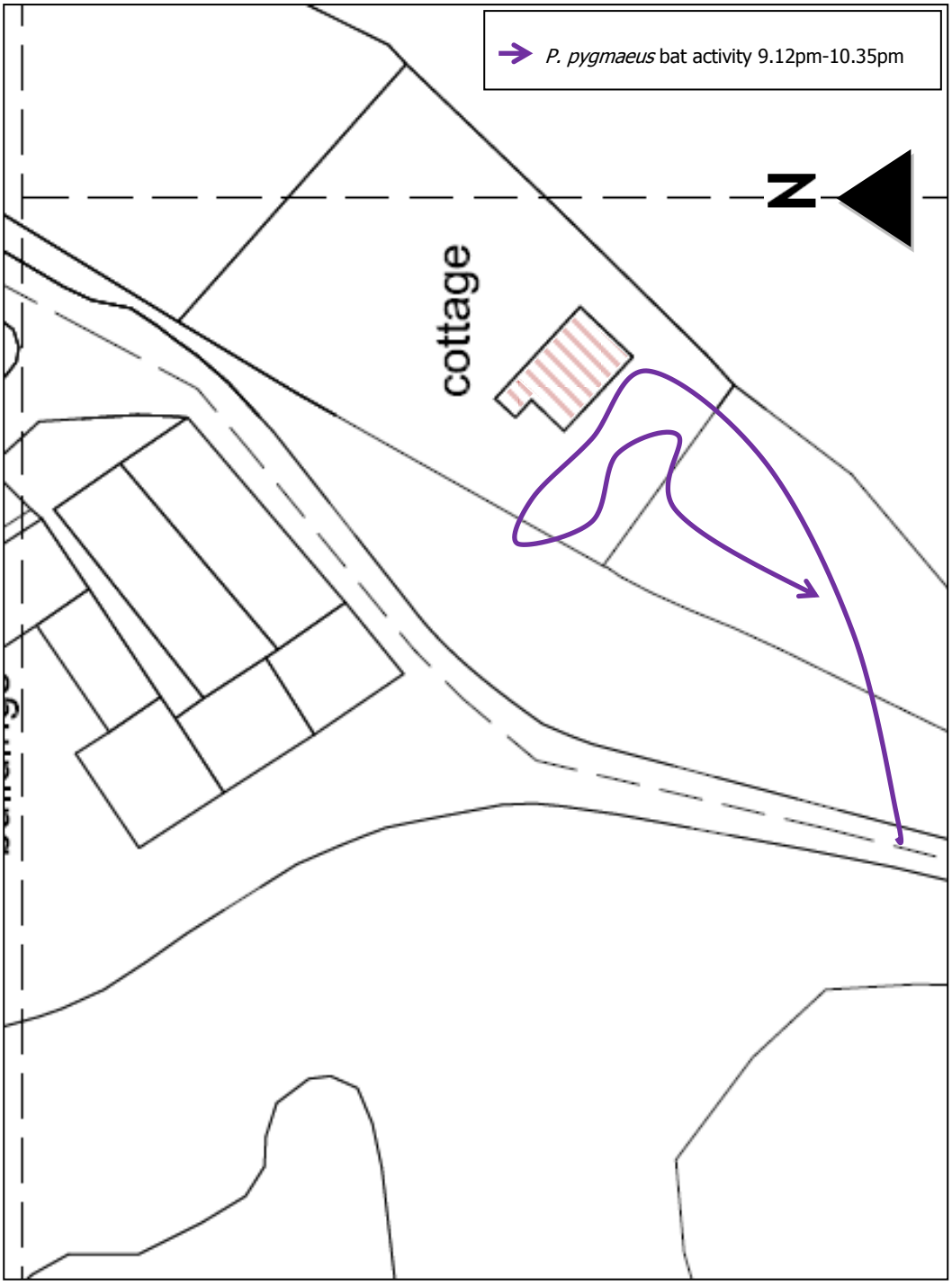


Plate 6 Cobwebbed roof void

Appendix 3



Appendix 4



Appendix 5

