

**Whitcher Wildlife Ltd.  
Ecological Consultants.**



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**THE MONKEY, THURGOLAND.**

**OS REF: SE 29986-02143.**

**BAT SURVEY REPORT.**

**Ref No: 210625/1.**

**Date: 16<sup>th</sup> August 2021.**

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# **1. INTRODUCTION.**

1.1. The owners of The Monkey propose to apply for planning to demolish the existing building and construct two residential properties.

1.2. Whitcher Wildlife Ltd was therefore commissioned to carry out an initial daytime and dusk emergence bat survey of the building to establish whether there are any issues that may affect the proposed works. This survey was carried out on 10<sup>th</sup> June 2021. The survey identified bat roost potential in the buildings and bats roosting in the main building and further bat dusk and dawn swarming surveys were recommended.

1.3. A bat dawn swarming survey was carried out on 22<sup>nd</sup> July 2021 and a further dusk emergence survey on 4<sup>th</sup> August 2021. This report outlines the findings of all surveys and makes appropriate recommendations.

1.4. Appendices I and II of this report provide additional information on specific species and are designed to assist the reader to understand the contents of this report.

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## 2. SURVEY METHODOLOGY.

2.1. The structure was checked for potential bat roosting sites in line by looking for the following signs: -

- \* Holes, cracks or crevices.
- \* Bat droppings.
- \* Prey remains.

2.2. A thorough external inspection was carried out from ground level for any gaps or openings of the structure which may provide suitable roost access points and field signs to indicate possible use by bats.

2.3. All walls and the ground around the structure were checked for signs of bat droppings or staining to indicate possible use by bats. Where necessary, ladders were utilised to gain access within the limits of health and safety. Any access constraints encountered are outlined within the following report.

2.4. All survey work was carried out in line with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edition)*, with an assessment of the structures suitability for roosting bats made in accordance with these guidelines.

2.5. The subsequent dusk emergence survey was also conducted in accordance with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edition)*. It was conducted by a sufficient number of surveyors to cover all areas of roosting potential, in suitable weather conditions from fifteen minutes before sunset to at least an hour and half after.

2.6. The initial survey was carried out by a team of Whitcher Wildlife Ltd surveyors lead by James Campbell MCIEEM. Since 2003 James has had experience in a professional capacity as a Wildlife Consultant carrying out Ecology Surveys and Phase 1 Habitat surveys and is a full member of CIEEM. James holds licences with several licensing bodies including: -

- Natural England Survey Licences in respect of bats, great crested newts, white clawed crayfish and barn owls.
- Scottish Natural Heritage Licences in respect of bats and great crested newts.

- Countryside Council for Wales Licences in respect of bats and great crested newts.

He has also successfully completed numerous courses run by CIEEM, BCT and FSC regarding protected species and in carrying out Phase 1 Habitat surveys. He is also confined spaces trained and qualified to NVQ Level 2 in tree climbing and aerial rescue.

2.7. Subsequent surveys were led by a team of ecologists from Whitcher Wildlife Ltd led by Derek Whitcher who has over twenty years' experience of surveying for wildlife and has run his own wildlife consultancy since 1998. He has extensive experience of a wide variety of survey techniques for a variety of species of protected wildlife supplemented by attendance on a wide range of training courses through CIEEM, FSC and BCT. As a member of CIEEM he is committed to continuous professional development, a continual process of learning and career development, a condition of CIEEM membership. He holds current Natural England, CCW and NRW survey licences for, bat, great crested newt and white clawed crayfish.

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### **3. SURVEY RESULTS.**

#### **3.1. Data Search Results.**

3.1.1. A data search for records of bats was submitted to South Yorkshire Bat Group for records of bat roosts within the survey area and up to 2km in the surrounding area.

3.1.2. There were no records of roosting bats or bats foraging within the survey area or the immediate surrounding area. However, there were extensive records of bat sightings and roosts within the extended surrounding area.

3.1.3. A data search for records of bats was submitted to Barnsley Biological Records Centre for records of bat roosts within the survey area and up to 2km in the surrounding area.

3.1.4. There were no records of roosting bats or bats foraging within the survey area or the immediate surrounding area. However, there were extensive records of bat sightings and roosts within the extended surrounding area.

3.1.5. A full copy of the data searches can be made available on request.

### 3.2. Site Description.

3.2.1. The surveyed buildings comprised a two-storey section with multiple single-storey extensions on all elevations. A single-storey garage building and plant room was identified to the west of the main building. The buildings were set in a large, overgrown garden.

3.2.2. The photographs below show a general view of the buildings.



3.2.3. The aerial photograph below shows the location of the survey area and the immediate surrounding area.



3.2.4. The surrounding area comprised open grazing land, arable land, woodland and occasional residential dwellings.

### 3.3. Daytime Survey Results.

3.3.1. For the purposes of this survey the surveyed buildings have been separated and allocated a letter. The aerial photograph below shows the location of each of the buildings.



### 3.3.2. Building A.

3.3.2.1. Building A comprised a main two-storey building with multiple extensions. The main building comprised rendered brick cavity walls, which were generally in a good condition with no access for roosting bats. However, there was a broken window on the northern elevation of the building providing access inside the building.



3.2.2.2. Internally there were scattered peacock butterfly wings but no concentrations and no bat droppings.

3.3.2.3. The roof of the building had two pitched sections with a valley between and four gable ends, which were well pointed with no gaps or crevices suitable for roosting bats. The roof comprised a rafter and purlin design wooden frame covered with blue slate with no lining. There had been fire damage in the second-storey kitchen that had extended into the loft space, which made some of the building inaccessible for health and safety reasons.

3.3.2.4. There was a wooden fascia and plastic guttering at the eaves that was generally tight fitting with no access for roosting bats.

3.3.2.5. The extensions comprised single-storey rendered brick and breeze block cavity walls, which were generally in a good condition with no access for roosting bats.

3.3.2.6. The roofs of the extensions comprised both pitched and flat roof sections with six gable ends, which were well pointed with no gaps or crevices suitable for roosting bats. The roof comprised a rafter and purlin design wooden frames covered with blue slate, some of which had a tight-fitting lining, other sections it was absent. The flat roofed sections were covered with tight fitting bitumen. Lead flashings had been

removed from the majority of the valleys and tie ins on the single-storey sections leaving access into the building for bats.

3.3.2.7. There was a wooden fascia and plastic guttering at the eaves and along the flat roofed sections that was generally tight fitting.

3.3.2.8. No bat field signs were identified internally or externally during this survey.

3.3.2.9. The building was assessed as having a **moderate potential** for roosting bats.

3.3.2.10. Numerous disused nests were identified during this survey. However, no active nests were identified.

### 3.3.3. **Building B.**

3.3.3.1. The building comprised a single-storey garage with solid brick walls, which were tight fitting with no gaps or crevices suitable for roosting bats. However, the doors were missing providing access into the building.



3.3.3.2. The pitched roof comprised a king post wooden structure. The roof was covered with blue slate with no lining. The roof was generally in a good condition. However, there was an area of missing slate. There was a wooden fascia board on both the eaves, which was tight fitting with no gaps or crevices suitable for roosting bats.

3.3.3.3. No bat field signs were identified internally or externally during the original day time survey.

3.3.3.4. The building was assessed as having **low potential** for roosting bats.

3.3.3.5. Two swallow cups were identified inside the building. However, they were disused during this survey. The photograph adjacent shows one of the swallow cups.



### 3.3.4. Building C.

3.3.4.1. The building comprised a single-storey-plant room constructed from tight fitting breeze block with no gaps or crevices suitable for roosting bats. However, the doors were open providing access into the building.



3.3.4.2. The flat roof comprised wooden purlins covered with bitumen felt. The roof was generally in a good condition. There was a wooden fascia board on all aspects of the building, which was tight fitting with no gaps or crevices suitable for roosting bats.

3.3.4.3. No bat field signs were identified internally or externally during this survey.

3.3.4.4. The building was assessed as having **low potential** for roosting bats.

3.3.4.5. No nests or nesting birds were identified during this survey.

3.3.5. A comprehensive assessment of the bat foraging habitat on the site could not be undertaken during this daytime survey. However, the surrounding woodland would provide suitable foraging habitat for bats. Therefore, the survey area and the immediate surrounding area was assessed to provide a **high value** bat foraging habitat.

#### **3.4. Dusk Emergence Survey Results – 10<sup>th</sup> June 2021.**

3.4.1. Four surveyors from Whitcher Wildlife Ltd carried out a dusk emergence survey on the evening of 10<sup>th</sup> June 2021. One of the surveyors holds an existing Natural England Class Licence for surveying bats and the remaining surveyors are experienced assistants.

3.4.2. All surveyors were equipped with Batbox Duet detectors and two-way radios. Four Anabat recorders were deployed around the site to record bat activity for subsequent computer analysis using Analook software.

3.4.3. The aerial photograph below shows the building letters, where the Surveyors (S) and Anabats (AB) were positioned.



3.4.4. The evening was warm and clear with a temperature of 15°C at 21:33 with a light breeze 2 on the Beaufort Scale. Sunset was at 21:33.

3.4.5. The following are the observations of the surveyors.

3.4.5.1. Surveyor 1.

22:38. Common Pipistrelle bat heard and not seen.

22:39. Common Pipistrelle bat heard and not seen.

22:45. Common Pipistrelle bat heard and not seen.

Anabat 1 with Surveyor 1 recorded no bat activity.

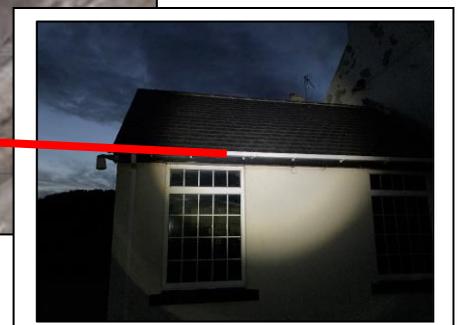
3.4.6.1. Surveyor 2.

**22:39. Common Pipistrelle emerged from the eaves in a single-storey section to the south of the building.**

22:45. Common Pipistrelle foraging from west to the east over the site.

22:49. Common Pipistrelle foraging from west to the east over the site.

The aerial photograph below shows the location of the eaves to the south of the building where the bat emerged.



Anabat 2 with Surveyor 2 recorded a noctule bat at 22:57 and two Common Pipistrelle calls between 22:38 and 22:46.

3.4.7.1. Surveyor 3.

**22:28. Common Pipistrelle emerged from the eaves in a single-storey section to the west of the building.**

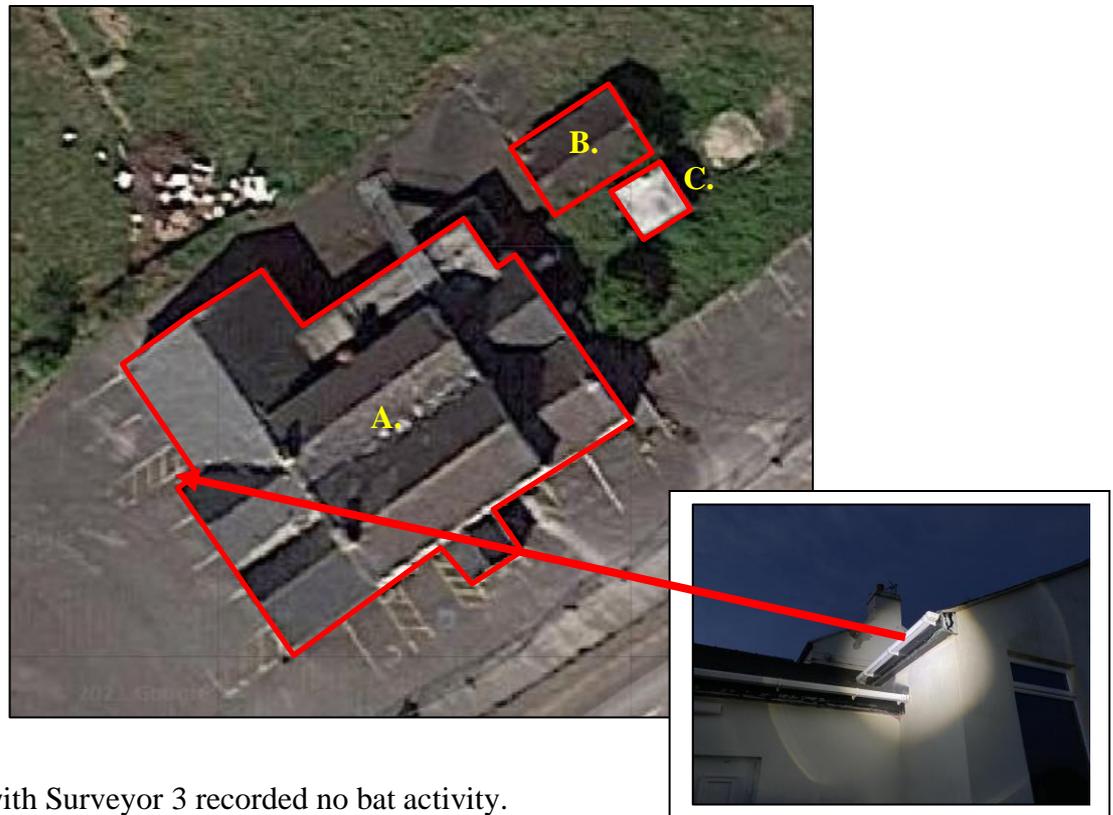
22:33. Common Pipistrelle heard and not seen.

22:39. Common Pipistrelle heard and not seen.

22:48. Noctule passing over the site.

22:53. Common Pipistrelle heard and not seen.

The aerial photograph below shows the location of the eaves to the west of the building where the bat emerged.



Anabat 3 with Surveyor 3 recorded no bat activity.

3.4.8.1. Surveyor 4.

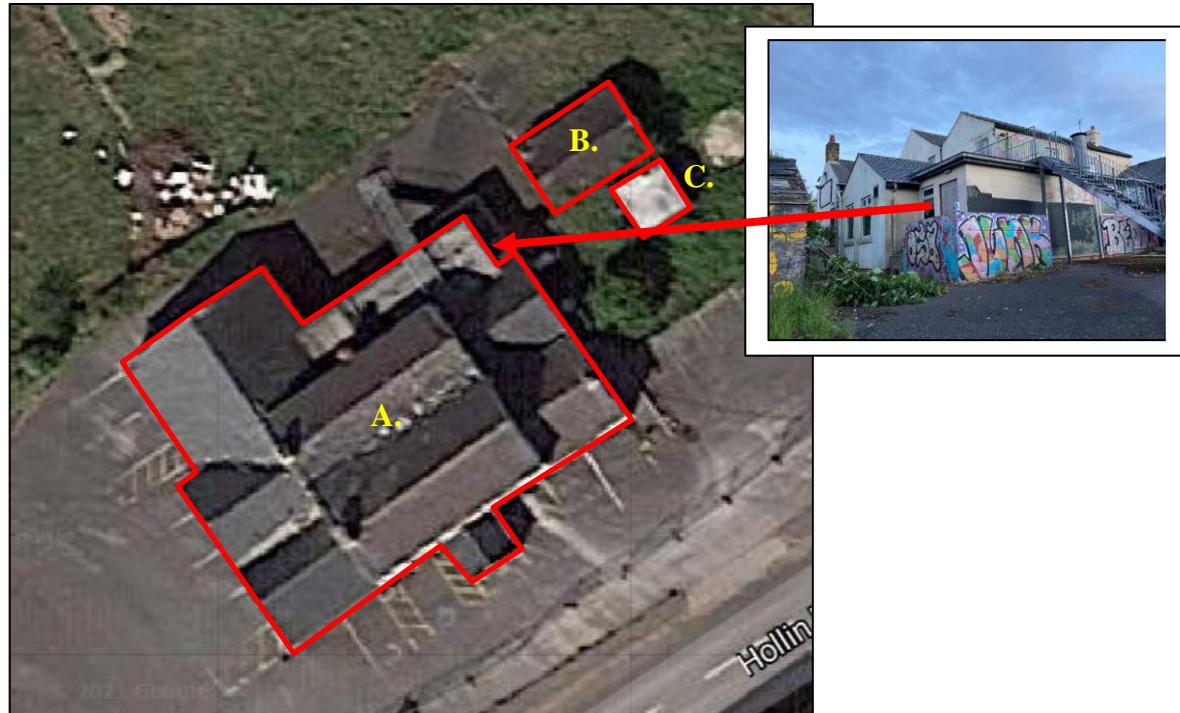
22:10. Quiet bat (Brown Long eared) seen flying inside Building A.

**22:19. Quiet bat (Brown Long eared) emerged from the broken window to the north of Building A and left site to the east.**

22:26. Quiet bat (Brown Long eared) seen flying inside Building A.

**22:34. Quiet bat (Brown Long eared) entered through the broken window, foraged inside the building and re-emerged through the broken window.**

The aerial photograph below shows the location of the broken window where the bat emerged.



Anabat 4 with Surveyor 4 recorded two Noctules at 21:23 and 22:57, one Common Pipistrelle at 22:46 and two myotis bats calls at 22:38 and 22:50.

### **3.4.7. Summary of the Dusk Emergence Survey Results.**

3.4.7.1. Three bats were seen to emerge from three different locations. Two of the bats were Common Pipistrelles and one was a brown long eared bat.

3.4.7.2. The level of foraging around the site was low, with low levels of Common Pipistrelle bats and myotis bats.

### **3.5. Daytime Survey – 21<sup>st</sup> July 2021.**

3.5.1. Prior to the dawn swarming survey an additional internally inspection of Building A was carried out on a visit to the site to gain access for the dawn survey.

3.5.2. Since the dusk emergence survey was carried out the broken window on the north of Building A has been boarded up for insurance purposes and to prevent vandals accessing the building.

3.5.3. Internally one bat dropping was found on the window cill inside the boarded up broken window. No other bat field signs were identified internally, although debris on the floors and fire damage make it difficult to search all areas of the building.

### **3.6. Dawn Swarming Survey Results – 22<sup>nd</sup> July 2021.**

3.6.1. Four surveyors from Whitcher Wildlife Ltd carried out a dawn swarming survey of Building A on the morning of 22<sup>nd</sup> July 2021. Three of the surveyors hold an existing Natural England Class Licence for surveying bats and the remaining surveyor is an experienced assistant.

3.6.2. All surveyors were equipped with Batbox Duet detectors and two-way radios. Four Anabat recorders were deployed around the site and two inside Building A to record bat activity for subsequent computer analysis using Analoook software.

3.6.3. The aerial photograph below shows the building letters, where the Surveyors (S) and Anabats (AB) were positioned.



3.6.4. The morning was warm, clear and still with a temperature of 18°C at 03:30. Sunrise was at 05:05.

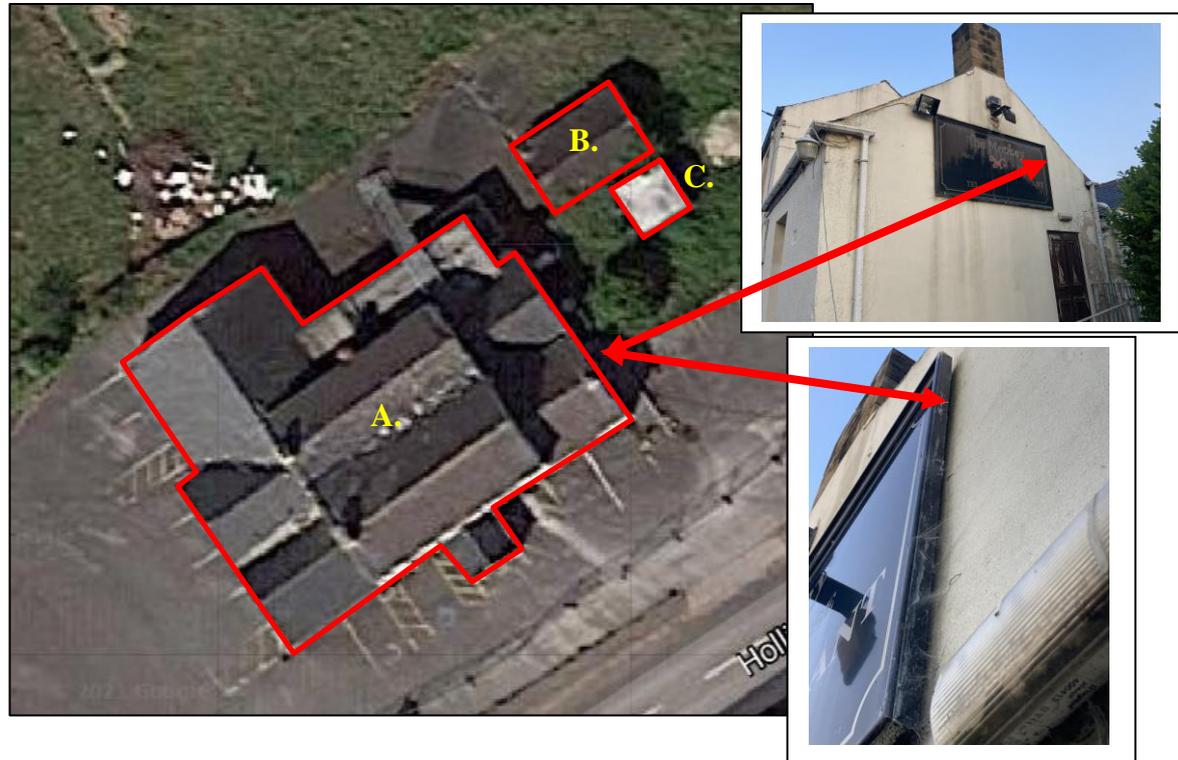
3.6.5. The following are the observations of the surveyors.

3.6.5.1. Surveyor 1.

- 03:40. Common Pipistrelle foraging from west to east to west along the southern side of the building.
- 03:44. Two Common Pipistrelle foraging along the southern side of the building.
- 03:45. Two Common Pipistrelle foraging to the east until 03:49 when both flew east.
- 03:50. Common Pipistrelle flew from east to west, foraging.
- 04:02. Common Pipistrelle flew past from west to east.
- 04:04. Common Pipistrelle flew from east to west, foraging.
- 04:05. Common Pipistrelle flew from east to west.
- 04:10. Common Pipistrelle foraging around the site.
- 04:15. Two Common Pipistrelle foraging until 04:22.
- 04:26. Common Pipistrelle swarming and touching up to a sign on east end of building then flew north.

- **04:28. Common Pipistrelle entered a roost behind the sign on the east end of the building.**
- **04:31. Common Pipistrelle entered a roost behind the sign on the east end of the building.**

The aerial photograph below shows the location of the sign on the building and the location behind the sign where the two bats entered.



Anabat 11 with Surveyor 1 recorded fifty-three Common Pipistrelle calls between 03:30 and 04:31, two Noctule calls at 04:13 and 04:45, two myotis call at 03:39 and 03:40.

#### 3.6.5.2. Surveyor 2.

- 03:35. Common Pipistrelle flew past from northwest to south then flew east.
- 03:37. Common Pipistrelle heard briefly, not seen.
- 03:39. Bat seen over building, not echolocating.
- 03:40. Common Pipistrelle foraging around and over the building.
- 03:44. Common Pipistrelle foraging over the roof then flew north.
- 03:46. Common Pipistrelle foraging to the northeast.
- 03:47. Two Common Pipistrelle foraging, circling round the building.

- 03:51. Common Pipistrelle flew east to west then flew northeast over the building.
- 03:54. Common Pipistrelle heard in the distance, not seen.
- 03:57. Common Pipistrelle flew over the roof from the northeast then flew east.
- 03:59. Common Pipistrelle foraging along the southern side of the building.
- 04:02. Common Pipistrelle occasional foraging continues until 04:24.

Anabat 6 with Surveyor 2 recorded thirty-six Common Pipistrelle calls between 03:30 and 04:24, seven Noctule calls between 04:13 and 04:45 and two myotis calls at 03:31 and 03:37.

#### 3.6.5.3. Surveyor 3.

- 03:35. Common Pipistrelle flew past from south to north.
- 03:37. Common Pipistrelle flew past from west to east.
- 03:40. Common Pipistrelle foraging along the west side of the building then flew south.
- 03:43. Common Pipistrelle foraging around the site.
- 03:45. Common Pipistrelle heard pass, not seen.
- 03:46. Common Pipistrelle flew past from south to north.
- 03:47. Common Pipistrelle flew past from south to north.
- 03:51. Common Pipistrelle flew past from south to north over the building.
- 03:56. Common Pipistrelle heard pass, not seen.
- 03:59. Bat flew past from west to east, not echolocating.
- 04:00. Common Pipistrelle flew east to west over the building.
- 04:01. Common Pipistrelle flew from south to north then flew east.
- 04:03. Common Pipistrelle flew from south to north.
- 04:05. Common Pipistrelle flew from south to northwest.
- 04:08. Two Common Pipistrelle flew from the south, foraging.
- 04:09. Common Pipistrelle flew past from north to south.
- 04:12. Common Pipistrelle flew from east to west then flew south.
- 04:14. Common Pipistrelle flew from south to north then flew east.
- 04:16. Common Pipistrelle heard pass, not seen.
- 04:24. Bat flew past from north to south, not echolocating.

Anabat 4 with Surveyor 3 recorded twenty Common Pipistrelle calls between 03:34 and 04:15 and five Noctule calls between 04:12 and 04:31.

#### 3.6.5.4. Surveyor 4.

- 03:35. Common Pipistrelle heard pass, not seen.
- 03:37. Common Pipistrelle heard pass, not seen.
- 03:39. Common Pipistrelle foraging over the roof towards northeast corner.
- 03:43. Two Common Pipistrelle flew west to east to the north of the building.
- 03:46. Common Pipistrelle heard briefly, not seen.
- 03:47. Common Pipistrelle foraging over the roof towards northeast corner.
- 03:53. Common Pipistrelle heard briefly, not seen.
- 03:56. Common Pipistrelle foraging around the building.
- 04:00. Common Pipistrelle heard pass, not seen.
- 04:01. Common Pipistrelle foraging to north, flew southeast.
- 04:03. Two Common Pipistrelle flew past from north to southeast.
- 04:06. Common Pipistrelle flew from southeast to north, foraging.
- 04:10. Common Pipistrelle flew from north to southeast.
- 04:11. Two Common Pipistrelle flew from southeast to north.
- 04:12. Common Pipistrelle flew past from southeast to west.
- 04:14. Bat flew from southeast to north, not echolocating.
- 04:16. Two Common Pipistrelle flew from southeast to north.
- 04:25. Two Common Pipistrelle flew from past from southeast to north.
- **04:37. Bat seen to enter the open door on the west end of Building B, not echolocating. The bat was seen swarming inside the building. This bat continued to swarm inside the building, touching up to the rear wall of the building until 04:53. The bat was no longer flying inside and was not seen to exit the building. Therefore, the bat entered a roost inside Building B on the rear wall where it was seen to be touching up to the wall. This bat was not echolocating**

The aerial photograph below shows the location inside Building B where the bat was touching up and swarming.



Anabat 1 with Surveyor 4 recorded twenty-seven Common Pipistrelle calls between 03:35 and 04:25, two Noctule calls at 04:12 and 04:18 and one Myotis call at 03:42.

3.6.5.5. Anabats 10 and 20 were placed inside Building A during the survey and no bat calls were recorded on either Anabat.

### **3.6.6. Summary of the Dawn Swarming Survey Results.**

3.6.6.1. Two Common Pipistrelle bats were seen to enter a roost behind a sign on the eastern wall of Building 1.

3.6.6.2. One bat was seen to enter Building B and was seen swarming inside the building and touching up to the rear internal wall. This activity continued from 04:37 to 04:53. The bat did not leave the building and is therefore roosting inside Building B. The bat was not echolocating, and Surveyor 4 pointed the Anabat inside the building while the bat was swarming but no calls were recorded. Therefore, the species of bat is not known.

3.6.6.3. An inspection inside Building B at the end of the survey could not identify the location of the bat but there are numerous opportunities for the bat to enter a gap and roost inside the building. No droppings could be seen on the floor of the building but

there is a buildup of dead leaves and debris on the floor making it difficult to find droppings.

3.6.6.4. No bat activity was recorded on the two Anabats inside the building.

3.6.6.5. The level of foraging around the site was moderate, with Common Pipistrelle bats foraging around the site throughout the survey, a myotis bat passed the site and numerous Noctule calls were recorded passing the site.

### **3.7. Daytime Survey – 4<sup>th</sup> August 2021.**

3.7.1. Prior to the dusk emergence survey an additional internal inspection of Buildings A and B was carried out.

3.7.2. No signs of bats were found anywhere inside or outside Building A,

3.7.3. Inside Building B, a group of bat droppings was found beneath the ridge and at the end of the floor pit. The size and shape of the droppings were indicative of Brown Long-eared bats. A sample of these droppings was collected for subsequent analysis.

### **3.8. Dusk Emergence Survey Results – 4<sup>th</sup> August 2021.**

3.8.1. Four surveyors from Whitcher Wildlife Ltd carried out a dusk emergence survey of Buildings A and B on the evening of 4<sup>th</sup> August 2021. Two of the surveyors hold an existing Natural England Class Licence for surveying bats and the remaining two surveyors are experienced assistants.

3.8.2. All surveyors were equipped with Batbox Duet detectors and two-way radios. Four Anabat recorders were deployed around the site and two inside Building A to record bat activity for subsequent computer analysis using Analook software.

3.8.3. The aerial photograph below shows the building letters, where the Surveyors (S) and Anabats (AB) were positioned.



3.8.4. The evening was fine and dry but overcast with a temperature of 16°C at 20:47. Sunset was at 20:56.

3.8.5. The following are the observations of the surveyors.

3.8.5.1. Surveyor 1.

- 21:17. Common Pipistrelle briefly heard not seen.
- 21:33. Common Pipistrelle foraging over trees across road.
- 21:49. Common Pipistrelle heard not seen.
- 22:07. Common Pipistrelle heard not seen.

Anabat 11 with Surveyor 1 recorded one Common Pipistrelle call at 22:07.

3.8.5.2. Surveyor 2.

- 21:08. Common Pipistrelle passed south to north from over the road.
- 21:13. Common Pipistrelle passed south to north from over the road.
- 21:40. Noctule heard not seen.
- 21:50. Common Pipistrelle heard not seen.
- 21:53. Common Pipistrelle heard not seen.

Anabat 2 with Surveyor 2 recorded three Common Pipistrelle calls between 21:07 and 21:52.

#### 3.8.5.3. Surveyor 3.

- 21:08. Common Pipistrelle passed east to west.
- 21:13. Common Pipistrelle passed south to north.
- 21:35. Common Pipistrelle passed east to west.
- 21:35. Common Pipistrelle foraging round trees in the field behind.
- 21:37. Two Common Pipistrelles passed east to west.
- 21:39. Noctule, heard not seen.

Anabat 6 with Surveyor 3 recorded no bat activity.

#### 3.8.5.4. Surveyor 4.

- 21:24. Common Pipistrelle passed east to north.
- 21:43. Quiet bat foraging east of buildings, went northeast.

Anabat 15 with Surveyor 3 recorded no bat activity.

3.8.5.5. Anabats 8 and 16 were placed inside Buildings A and B during the survey and no bat calls were recorded on either Anabat.

3.8.5.6. No bats emerged from any of the buildings on site.

### **3.8.6. Summary of the Dusk Emergence Survey Results.**

The evening was very quiet with few bats moving about and no bats emerging from any of the buildings.

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## 4. EVALUATION OF FINDINGS.

4.1. Buildings B and C were assessed as having a **low potential** for roosting bats. Therefore, after one dusk emergence survey with no bats seen to emerge from the buildings there are no further bat surveys required.

4.2. Building A was assessed as providing a **moderate potential** for roosting bats. However, during the dusk emergence survey two Common Pipistrelle bat roosts were identified and two quiet bats (Brown Long Eared) were seen to emerge from the building.

4.3. Prior to the dawn swarming survey, it was found that the broken window on the northern side of the building where a bat was seen to emerge from during the dusk survey has been boarded up due to insurance purposes and to prevent vandals accessing the building.

4.4. During the dawn swarming survey Two Common Pipistrelle bats were seen to enter a roost behind a sign on the eastern wall of Building 1.

4.5. One bat was seen to enter Building B and was seen swarming inside the building and touching up to the rear internal wall. This activity continued from 04:37 to 04:53. The bat did not leave the building and is therefore roosting inside Building B. The bat was not echolocating. Therefore, the species of bat is not known although it is suspected to be the brown long-eared bat.

4.6. Prior to the second dusk emergence survey a further day time inspection was undertaken and a pile of dropping was found in Building B. Samples were collected for e-DNA analysis.

4.7. During the second dusk emergence survey, a low level of bat activity was seen and recorded over the site with no bats emerging from the buildings.

4.8. In summary, during the surveys, four Common Pipistrelle Day roosts have been found in Building A and one brown long eared bat day roost inside Building B. Works to these buildings without a Natural England licence could lead to the loss of all of these roosts. In line with the Natural England Bat Mitigation Guidelines this represents a low impact to roosting bats as the species involved are common species and the roosts are intermittently used day roosts.

4.9. Buildings A and B contained numerous nests, none of which were active during the surveys. Building C contained no nests. Works to Buildings A and B during the nesting season, which extends from March to September each year could have a **high impact** on nesting birds. However, if the proposed works were carried out outside the nesting season, they would have a **low impact**.

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## **5. RECOMMENDATIONS.**

5.1. As **four** Common Pipistrelle day roosts and one brown long-eared day roost have been found, a mitigation strategy will be required in support of the planning application and that mitigation strategy will be used as the basis of a Natural England licence application on receipt of planning consent.

5.2. Section 6 of this document contains that mitigation strategy.

5.3. The buildings provide a suitable habitat for nesting birds and all works should be carried out outside the nesting bird season which extends from March to September. If any of the vegetation is to be affected during the nesting bird season the works should be preceded by a thorough nesting bird survey carried out by a suitably experienced person. If an active nest is identified during this survey the nest should be left undisturbed until the young have fledged.

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## 6. MITIGATION STRATEGY.

6.1. Before any development commences on the site, two bat boxes will be erected on trees on the site boundary. These will provide accommodation during the development of the site and provide a location to move any bat that may be found into.

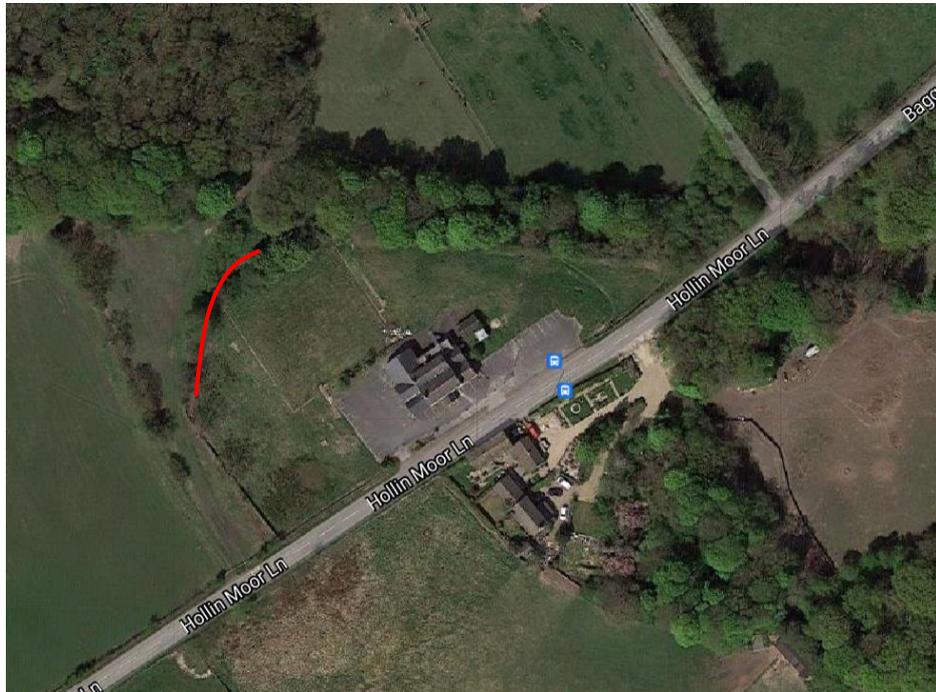
6.2. One box will be a Miramare Woodstone box as shown below.



6.3. One will be a Chillon Woodstone box as shown below.



6.4. These will be erected on trees on the site boundary, shown by the red line below at a location to be agreed by the ecologist.

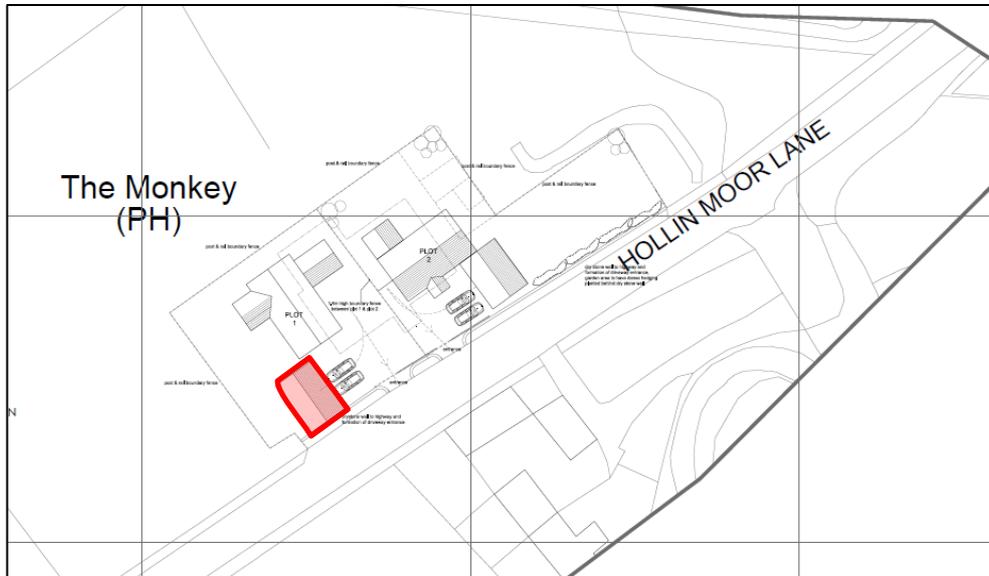


6.5. On receipt of the Natural England licence, the roof of the existing public house buildings will be carefully stripped by the developer under the direct supervision of the ecologist who will check beneath all tiles for roosting bats. In the event a bat is found, it will be carefully rescued and moved into the replacement roost in the bat boxes provided on the site boundary. This work will be carried out at a time of year when bats will have moved into their winter hibernation roosts, between late October and March.

6.6. Once the ecologist is satisfied that all bats have been found, he will release the buildings for demolition and development to proceed but will ensure the developer knows what to do if a bat is later found.

6.7. During the subsequent development works, a new brown long eared bat roost will be created in the loft of one of the new garages to be built on site. The location is shown shaded in red on the drawing below.

6.8. The roost dimensions will 6m x 6m x 2.8m high.



6.9. The roof will be lined with a hessian type roof felt. This will not be tight but allowed to sag very slightly between rafters. Holes will be cut in the felt at different levels, approximately 40mm x 60mm cut on three sides with the fourth side left to hang down to provide a range of roosting opportunities.

6.10. The top slate batten will be placed 20mm from the ridge board. At about 2m intervals along the ridge the membrane and under felt will have 30mm x 100mm slots cut out beside the ridge boards to allow bats access to the ridge tiles for roosting. The ridge ends will be well pointed to avoid through draughts.

6.11. The loft will be enhanced by adding six new bat roosting opportunities on the existing rafters. The additional roosting locations will be provided by fixing false rafters approximately 600mm long to the side of the rafters with 15mm spacers forming a narrow slot butted up to the ridge board at the top end and with the upper half bridged over with 75mm x 15mm untreated sawn timbers, or equivalent, to form a long narrow cavity, as shown below.

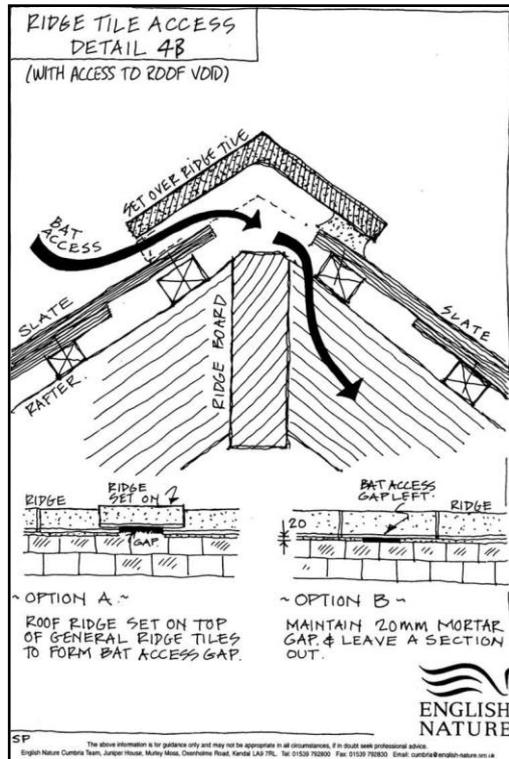


6.12. Internal partitioning of the loft apex will be provided with triangular shaped pieces of rough faced ply boards, fastened to the rafters and hanging down 600mm below the ridge. A second piece of ply board will be fixed onto this hanging down 400mm below the ridge, to provide a cavity between the two boards and an area for the bats to land on before crawling up into the cavity. These will be fixed on using 25mm spacers between the boards and will be provided at three locations approximately half way between each of the internal partition walls in the roof. Examples of these features are shown in the photograph below.



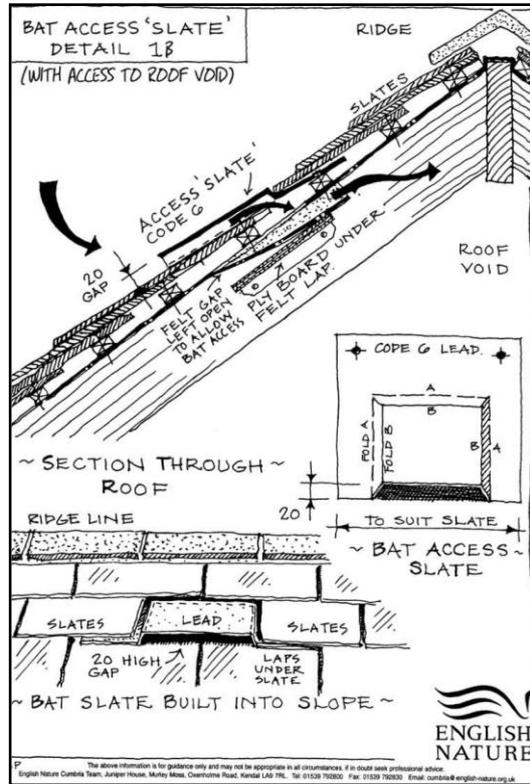
6.13. Access to the loft will be created by installing two ridge tile access points and two tile access points in the loft, as shown below. These should all be in the west facing sides of the roof.

6.14. The ridge tile access points will be created either by placing one ridge tile on top of the adjacent ridge tiles or by creating a gap in the pointing holding the ridge tile in place. In either case, the ridge tile should be held in place with a fillet of cement along the two outer edges and the middle of the ridge tile should be left as a void to permit access for the bats. There will also be a gap in the felt beneath the access point to permit bat access into the loft space itself, as shown below.



6.15. Two access tiles will be installed in each roof to provide additional access to the roost, as shown below.





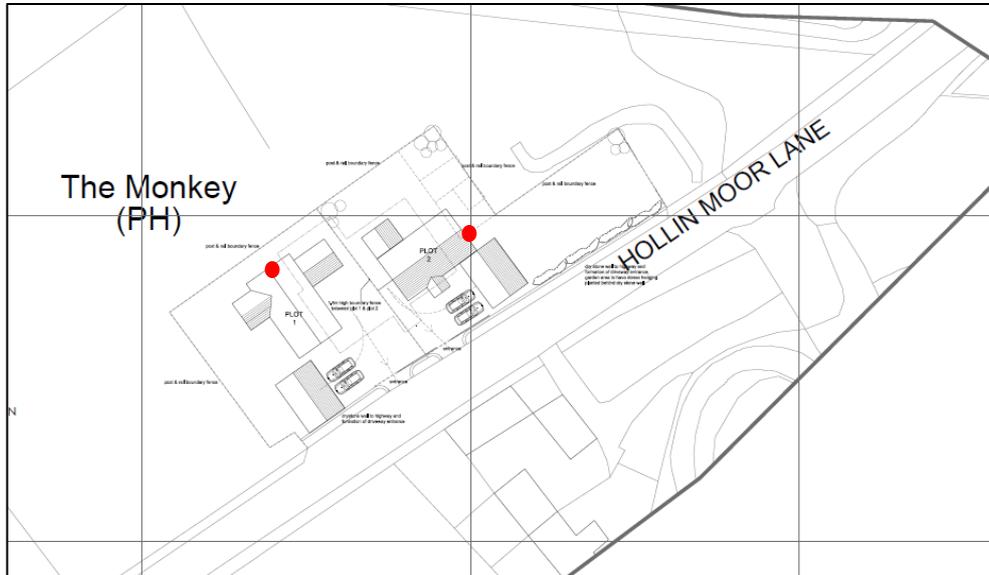
6.16. On completion of the development, the ecologist will check all mitigation measures to ensure that they have been created in line with this document.

6.17. When the house and garage are sold, there will be a clause in the deeds stating that the bat roosts must be retained undisturbed.

6.18. In addition to the new BLE roost, two integrated bat bricks will be built into the walls of the two new houses to provide continued opportunities for Common Pipistrelles to roost. The bat bricks will be as shown below or equivalent in a finish that will match the walls of the new buildings.



6.19. The two bat bricks will be placed high in the gable ends shown by the red dots in the drawing below, but preferably not above a window or door to avoid future problems with bat droppings.



#### 4.6.3. Residual Effects.

By following the above mitigation strategy no bats will be killed or injured, there will be continuity of bat roosting opportunities throughout the development and on completion, there will be a replacement brown long eared bat roost to replace the one lost during the demolition of the public house buildings and two integrated bat bricks to provide roost opportunities for Common Pipistrelles. There will be No Negative Residual Impact on roosting bats as a result of the development.

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Derek Whitcher, BSc, MCIEEM, MCI	13 <sup>th</sup> August 2021.
Checked and Approved by:	
Derek Whitcher BSc, MCIEEM, MCI.	Date: 19 <sup>th</sup> August 2021.

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## **Appendix I. BAT INFORMATION.**

### ***Ecology***

There are currently 18 species of bat residing in Britain, 17 of which are known to breed here. They are extremely difficult to identify in the hand and even more so in flight.

All appear to be diminishing in numbers, probably due to habitat change and shortage of food, caused by pesticides, as insects are their sole diet.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and the roofs of buildings.

Certain species, particularly the pipistrelle (the commonest and most widespread British bat) can quickly adapt to man-made structures and will readily use these to roost and to rear their young.

### ***Surveys***

During walkover surveys, bat roosts can be identified by looking for:

- Suitable holes, cracks and crevices within any building, tree or other structure.
- Bat droppings along walls, window cills, or on the ground.
- Prey remains, such as insect wings.

Further investigations can be made using endoscopes, by carrying out aerial inspections of trees or by conducting bat activity surveys during dusk and dawn over summer months.

### ***Legislation***

Bats are protected under Appendix II and III of the Bern Convention (1982), Schedule 5 and 6 of the Wildlife and Countryside Act (1981), Annex IV of the Habitats Directive (some species under Annex II), Annex II of the Conservation of Habitats and Species Regulations (2010) and EUROBATs agreement. Numerous species are

also listed under section 41 of the Natural Environment and Rural Communities Act (2006) making them species of principal importance.

All bats and their roosts are therefore protected in the UK. This makes it an offence to kill, injure or take any bat, to interfere with any place used for shelter or protection, or to intentionally disturb any animal occupying such a place.

The UK has designated maternity and hibernacula areas as Special Areas of Conservation (SACs) under the Habitats Directive. Implementation of the UK Biodiversity Action Plan also includes action for a number bat species and the habitats which support them.

Where development proposals are likely to affect a bat roost site, a licence is required from Natural England.

## **Appendix II. NESTING BIRD INFORMATION.**

### *Ecology*

The nesting season will vary according to the weather each year but generally commences in March, peaks during May and June and continues until September. It is also worth remembering that some birds nest in trees and scrub, but others are ground nesting or prefer man-made structures or buildings.

### *Surveys*

Nesting bird surveys search for potential nest sites in vegetation, buildings etc. Potential nesting sites are observed over a suitable period of time for bird movements or calling male birds that would indicate the presence of a nest. The presence of a nest can be identified from the field signs without the necessity to see the nest itself, thereby avoiding any disturbance of the nests. The best way to avoid this issue is to plan for vegetation clearance to be carried out outside the bird-nesting season.

### *Legislation*

Nesting birds are protected under The Wildlife and Countryside Act 1981.

Part 1. -(1) Of the Act states that: - If any person intentionally: - kills, injures or takes any wild bird; takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Part 1. -(5) of the Act states that: - If any person intentionally: - disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on, or near a nest containing eggs or young; or disturbs young of such a bird, he shall be guilty of an offence and liable to a special penalty.

The Countryside and Rights of Way Act 2000 amends the above by inserting after “intentionally” the words “or recklessly”.

## Toolbox Talk: Bats

Whitcher Wildlife Ltd

Ecological Consultants



18 species of bat have been recorded in Britain, 17 of which are known to breed here.

### Identification.

Some species can be extremely difficult to identify in the hand and even more so in flight.

Species such as the Brown Long Eared bat pictured above can be more easily identified in the hand. Whereas, the Common Pipistrelle and Soprano Pipistrelle are more difficult to identify.



Bats are more easily identified by field signs such as droppings or feeding remains.



### Habitat.

Bats are highly specialised creatures and require a relatively narrow range of suitable conditions in order to sustain a viable population. Bats require an abundant supply of flying insect food in places where they can easily be caught and they need safe and reliable roosting sites, particularly during breeding and hibernation.

Bats are heavily dependent on buildings and trees for their roost sites and therefore extremely susceptible to disturbance from human activities. Development schemes can also isolate bat populations and sever roost sites from favoured feeding areas by removing hedgerows or other features used as commuting routes.

Bats are susceptible to disturbance and have been known to abandon roost sites after instances of disturbance. The effects of disturbance are more pronounced at different times of year. Serious disturbance during breeding can result in the breeding females being killed or the abandonment and subsequent starvation of dependant young. Repeated disturbance during winter hibernation can result in the death of adult animals from starvation.

The level of protection afforded to bats in the UK and European legislation reflects the fact that it is now generally accepted that bats have declined substantially, maybe by as much as 60%, over recent years. Most species are declining and vulnerable with all species being protected.

As their diet consists solely of insects, bats hibernate during the winter when their food source is at its most scarce. They will spend the winter in hollow trees, caves, mines and occasionally the roofs of buildings.

Certain species, particularly Pipistrelle, can quickly adapt to manmade structures and will readily use these to roost and to rear their young.

### Legislation.

Bats and their roosts are fully protected at all times (whether the bats are currently present or not). This protection comes from the Wildlife & Countryside Act 1981 (updated by the Countryside Rights of Way Act 2000) and the Habitats Regulations 1994. Under this legislation it is an offence to intentionally or recklessly kill, injure, capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

Under the Habitats Regulations, where bats may be affected by development proposals, a licence is required from Natural England. Natural England's published guidelines on the licence procedure indicate that if, on the basis of survey information and specialist knowledge of the species concerned, the proposed activity is reasonably likely to result in an offence then a licence is required. If, on the other hand the proposed activity is reasonably unlikely to result in an offence, then a licence is not required.

**If bats or bat field signs are identified during works, stop all works and contact Whitcher Wildlife Ltd directly on 01226 753271 or at [info@whitcher-wildlife.co.uk](mailto:info@whitcher-wildlife.co.uk)**