Whitcher Wildlife.
Wildlife Consultants.

GOSLING MOOR FARM.

BAT SURVEY AND MITIGATION STRATEGY.

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1. INTRODUCTION.

1.1. Chris Carr Associates plan to submit a planning application to convert the barn and outbuildings at Gosling Moor Farm for residential use. A bat survey will be required in support of that planning application.

1.2. Derek A Whitcher Ltd has therefore been commissioned to carry out a bat survey. The initial survey was carried out on 30th August 2007. Access was not available to the house on that occasion and therefore a repeat survey was carried out on 27th September 2007. This report outlines the findings of both surveys and makes appropriate recommendations.

1.3. Appendix I of this report provides back ground information with respect to bats and the legal protection afforded to them.

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2. SURVEY METHODOLOGY.

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

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

2.2. During the first visit this was followed by a dusk emergence survey by one surveyor using a Batbox Duet detector. In addition a video camera was set up in the two storey barn with an infra red light and night sight.

2.3. During the second visit this was followed by a dusk emergence survey by three surveyors using Batbox Duet detectors plus two static Anabat detectors and a video camera equipped with an infra red light source and night sight..

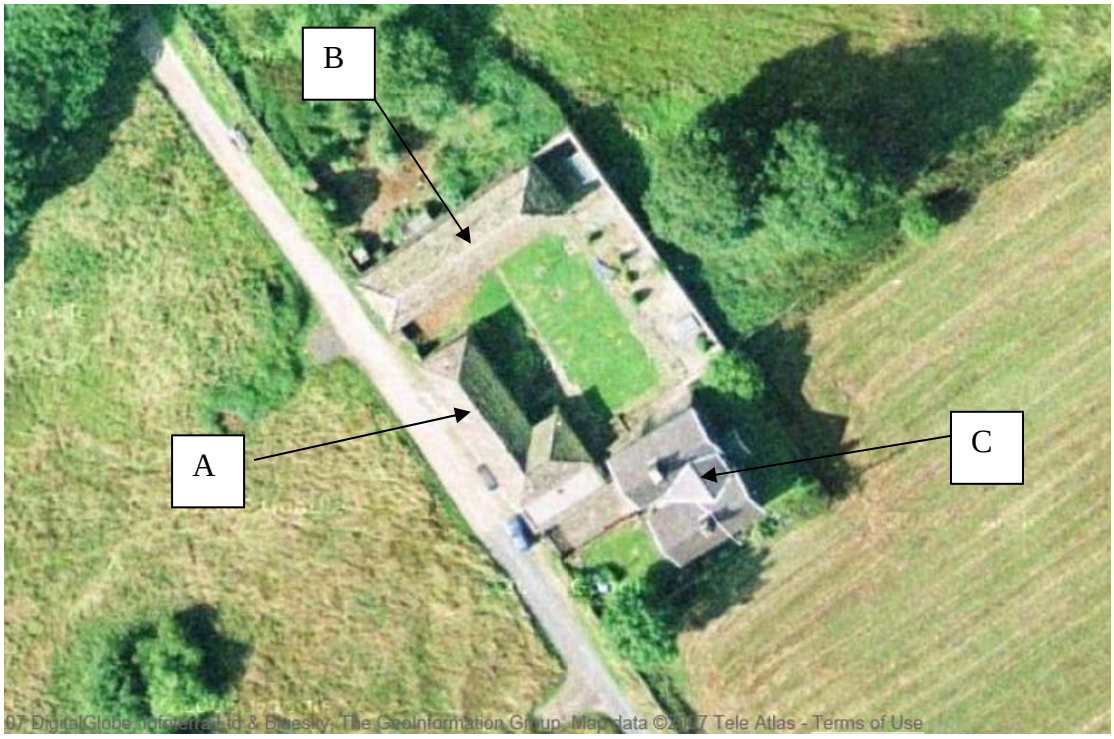
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3. SURVEY RESULTS.

3.1. Site Description.

3.1.1. Gosling Moor Farm is located in an isolated position to the south of the Stocksbridge Bypass.

3.1.2. The farm is surrounded by open countryside, grazing land and mature woodlands, which represent ideal bat foraging territory.



3.1.3. There are two buildings that will be directly affected by the plans. These are A, the single storey barn and B, the two storey barn. The third building on the site is C, the two storey farmhouse.

3.2. Description of the Buildings.

3.2.1. A, The Single Storey Barn.

3.2.1.1. The barn walls are solid stone and the hipped pitched roof is stone slate covered. The building has recently been converted into dog kennels and therefore the walls have been completely re-pointed and the roof refurbished.

3.2.1.2. Internally the walls are sealed with no cracks or crevices and the ceiling is under drawn and sealed.

3.2.1.3. There are therefore no open cracks or gaps to provide a potential roost site for bats and no field signs were identified.



3.2.2. B, The Two Storey Barn.

3.2.2.1. The barn walls are solid stone and the hipped pitched roof is stone slate covered. Whilst much of the external stonework has been pointed and sealed, there are open joints between the stonework around the tops of the walls that provide potential bat roosts.

3.2.2.2. The stone slates of the roof are supported on a king post timber structure. The roof has been refurbished at some point in time as the stone slates are lined underneath with felt.

3.2.2.3. Internally the bulk of the building is open to the underside of the slates. At the south western end there is a two storey section with a set of stone steps up to a separate top floor room. Underneath this is to a storage area accessed from the outside of the building.

3.2.2.4. There are broken windows with glass missing along the back of the barn, particularly one leading into the top floor room with many broken panes.



3.2.3. C, The Farmhouse.

3.2.3.1. The farmhouse is a two storey stone building with two ridges and a central linking cross ridge covered with Welsh slates.



3.2.3.2. The stone walls are well pointed and sealed with no opportunities for roosting bats although there are some gaps around the eaves.

3.2.3.3. The slate roof is in a good condition with no loose or missing slates and the ridge slates are well pointed and sealed. The slates are underlined with felt.

3.2.3.4. The loft space of the building is continuous with a brick wall with large gaps in separating the front and back of the house. The roof is double hipped with each hip comprising a king post roof construction.

3.3. First Day Time Survey Results.

3.3.1. No bat field signs were identified anywhere around the outside of the farmhouse or anywhere inside or outside of the single storey barn.

3.3.2. Bat droppings and insect wings were identified on the floor of the top floor room at the south western end of the barn. These were scattered generally along the central area of the floor, beneath the ridge.



3.3.3. Above the droppings there were flaps of polythene hanging from the roof timbers. It appears that polythene has been fastened to the underside of the roof rafters at some time. This has hardened with time and is now cracked and hanging in shreds beneath the hipped end of the ridge.

3.3.4. A sample of the droppings was collected and compared to library samples and was confirmed to be brown long eared bat droppings.

3.3.5. The floor of the main room of the barn was cluttered with materials and was not very clean. Two droppings were found on the floor but there may have been more that could not be found because of the dirty floor.

3.4. First Dusk Emergence Survey.

3.4.1. The first dusk emergence survey was carried out by one surveyor. The evening was warm with a temperature of 13°C at 9-00pm but there was quite a stiff breeze blowing.

3.4.2. One noctule was seen and recorded flying very low across the site at 8-15pm. The bat appeared flying fast and direct from around the south eastern end of the farmhouse and flew away to the west.

3.4.3. Between 8-24pm and 8-53pm, seven pipistrelle 45 bats were seen and recorded flying out of the south western corner of the two storey barn. The bats emerged and flew directly along the lane to the north west.

3.4.4. The video camera was set up in the top room of the two storey barn. No bats were recorded on the camera.

3.5. Second Day Time Survey Results.

3.5.1. The second survey was carried out by three surveyors and the survey included access to the farmhouse loft.

3.5.2. Bat droppings were identified under the entire length of the ridge beams of both hips of the farmhouse roof.



3.5.3. A sample of the droppings was collected and compared to library samples and was confirmed to be brown long eared bat droppings.

3.5.4. Brown long eared bat droppings were again identified on the floor of the top floor room at the south western end of the barn.

3.6. Second Dusk Emergence Survey.

3.6.1. The second dusk emergence survey was carried out by three surveyors, each equipped with a Batbox Duet detector. In addition, two static Anabat detectors were

used and one video camera equipped with an infra red light source and night sight. These were placed in the two storey barn. The evening was mild with a temperature of 11°C at 8-30pm.

3.6.2. The following bat activities were identified:

- 19:10 hrs – A pipistrelle bat was seen and heard flying past the two storey barn and proceeded to forage along the lane adjacent. This continued for 5 minutes before the bat left the site.

- 19:24 hrs – A pipistrelle was seen to emerge from the north east gable end of the farm house. This immediately proceeded north east away from the site.

- 19:42 hrs – A bat was identified emerging from the north east gable end of the farm house. This was then fleetingly heard passing over the west end of two storey barn.

- 19:56 hrs – A bat was heard flying near the north east gable end of the farm house. It is possible that the bat emerged from the farm house but it was too dark at this point to see. This again was fleetingly heard flying over the west end of the two storey barn.

3.6.3. The last two bats flew directly away from the buildings and the calls fleeting calls were too short to identify the species of bat.

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4. EVALUATION OF FINDINGS.

4.1. The presence of a brown long eared bat roost was established in the two storey barn. The main area of activity in the barn suggests that the bats are roosting in the ridge in the top floor room at the south western end of the barn but they may also be roosting along the ridge of the main barn.

4.2. The presence of a brown long eared bat roost was also established in the loft of the farm house. Roosting activities were identified along both ridge beams of the roof. The number of droppings suggests this is a significant roost.

4.3. A pipistrelle roost was identified in the roof of the two storey barn, at the south western corner. Seven pipistrelles were seen and recorded emerging from the roost. However, with only one surveyor during the first survey and the fact that the emerging bats were turning north west and flying directly up the access drive, there may have been more that were missed when the surveyor was elsewhere on the site.

4.4. The single noctule bat was seen and recorded very early in the first survey and it flew directly around the farm house as though it had just emerged. However, noctules are tree roosting species and therefore it must be assumed that this bat was merely passing over the farmhouse.

4.5. At the present time there is no work proposed for the farmhouse. It was included within the site survey because there was a possibility that the farmhouse could form an essential part of a mitigation strategy for the site.

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5. RECOMMENDATIONS.

5.1. Brown long eared and pipistrelle 45 bat roosts have been identified in the two storey barn on the site, the subject of a planning application for conversion to two residential properties.

5.2. Attached are two documents, each part of the Natural England Bat Licence Application process.

5.3. These have been prepared in support of the planning application for the site. Once the planning consent has been approved for the site, these will need to be brought up to date and submitted as part of the Natural England licence application.

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Derek A Whitcher.
21.11.2008.

Appendix I. BAT INFORMATION.

It is necessary to understand a little about bats, their basic nature, ecology and legal protection in order to evaluate the findings of this report.

Over 15 species of bat have been recorded in Britain. These fall into two families, the horseshoe bats and the 'ordinary bats'. 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 shortage of food, caused by pesticides, as insects are their sole diet, and habitat change.

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.

Bats are protected under the Wildlife and Countryside Act 1981, The Habitats Regulations 1994 and the Countryside & Rights of Way Act 2000.

It is an offence to intentionally or recklessly kill, injure or capture or disturb bats or to damage, destroy or obstruct access to any place used by bats for shelter or protection.

A breeding or resting site of any bat is known as a bat roost. A bat roost is therefore any structure a bat uses for shelter or protection. Because bats tend to use the same roosts each year, legal opinion is that the roost site is protected whether or not the bats are present at that time.

Bat roosts can be identified by looking for:-

- Suitable holes, cracks and crevices.
- Bat droppings.
- Prey remains.
- By carrying out night observations using a bat detector.

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

The person applying for that licence has to be suitably qualified and experienced in bat matters. That person is then responsible for ensuring that the measures contained in the licence are carried out.

Appendix II.

DOCUMENT 1.
BACKGROUND AND SUPPORTING INFORMATION.

Appendix III.

DOCUMENT 2. DELIVERY INFORMATION.