Tel: 01782 313544 / 07881 882572
michael@michaelgavaghan.wanadoo.co.uk

MIKE GAVAGHAN
Wildlife Consultant

Bat Survey

Bolton Gate Saddlery

30th March 2010

Surveyor: Matthew Haydock (MIEEM)

Natural England Bat Licence No 20091044

Assistant: Mike Gavaghan

SPECIALISING IN ALL PROTECTED SPECIES



Executive Summary

This report has been prepared in relation to the identification and location of protected bat, barn owl and bird species at the proposed redevelopment of a stables at Bolton Gate saddlery, Leek Road, Stoke on Trent, Staffordshire (Grid Ref: SJ 9366 4456). The area surrounding the building consists of agricultural fields, Park Hall Country Park, housing estate with a significant number of mature trees, hedgerows and water bodies.

An initial site inspection was undertaken to evaluate the stables suitability for bats and barn owls/birds, by inspecting the exterior and interior of the buildings to identify suitable entry points and roosting/nesting sites. During the interior inspection time was also spent searching for signs to confirm bat and barn owls use such as nests and insect remains and pallets in the case of barn owls and oil staining, droppings, and insect remains for bats.

On the 30th March 2010 an internal and external survey was carried out on an existing stable block (access to all of the stables was obtained). While there were no signs of bat activity within the stables it did provide egress points in the form of gaps along the ridge tiles raised and dislodged tiles. All cracks and crevices within the brick work was internally considered by the surveyor as possible roosting spaces, they were probed with a wireless seesnake endoscope to ascertain if bats were using the building as a roost. The inspection was unable to confidently check between the roofing tiles and the roofing felt were bats could utilize and bat droppings gather.

As no bat detector survey was carried out due to the timing constraints with bats being in hibernation. It is normally advised, as a site safe guard measure, that a dusk & dawn bat detector survey is carried out between May – September (Optimal Bat Activity being June-August) when bats are active to fully confirm the presence & absence of bats.

During the survey no active birds nests were identified, also an assessment for barn owls was conducted which identified no barn owl evidence therefore no further mitigation will be required.

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1 INTRODUCTION

1.1 Site description

Bolton Gate Saddlery, Leek Road, Stoke on Trent, Staffordshire, is located in a semi rural setting; the landscape to the property consists of hedgerows, insect attracting plants and grassed lawns and horse ménages. The stable block is pre 20th century brick and tiled roofing. The surrounding landscape is of fields, Park hall Country Park, woodlands, hedgerows, commercial, residential properties and water bodies, all of which hold the correct resources for bats.

1.2 Proposed works

The proposed works that are to be carried out on the stables will be the conversion of the stables into a dwelling.

1.3 Aims of study

The aims and objectives of the documented surveys were to determine the following information:

Bats

- Establish the probability of roost sites and bats being present at the proposed redevelopment of the out building.
- The roost status.
- Suitable food resources and habitat requirements.
- If roost site found provide an impact assessment.

Barn Owls

- Establish whether or not barn owls were using the site.
- Locate nest sites if present.
- What types of activities were shown within the redevelopment site.
- Suitable food resources and habitat requirements.
- Provide an impact assessment if Barn Owls are present.

Birds

- Establish whether or not birds were using the site.
- Locate nest sites.
- What types of activities were shown within the redevelopment site.
- Suitable food resources and habitat requirements.
- Provide impact assessment.

The information was subsequently used in conjunction with the knowledge of the proposed redevelopment at the site to determine:

- What impact the redevelopment is likely to have on any protected species found at the site.
- The need for any licence application to be made in respect of activities concerning protected species.
- Recommendations for any mitigation measures that would be required.

2 METHODOLOGY

2.1 Desk study

A database search was carried out on the National Biodiversity Gateway, Park Hall Country Park Visitor Centre to establish the presence of species of bats locally.

2.2 Field survey

Mr Mathew Haydock, Ecologist. Natural England Bat Survey Licence Number: 200901044. Full Member of IEEM (Institute of Ecology and Environmental Management)

Table 1 – Weather Conditions and date of the Scoping Survey

30.02.2010 Dry, slight breeze, approx air temperature on completion of survey 7.1^{o}C, Cloud Cover 80%,

Day time inspection

An internal and external inspection of the building/s was carried out to identify any possible exit and entry points of bats and to search for evidence of bats such as bat droppings, urine staining or feeding signs on the ground or stuck to the external walls.

Within the buildings particular attention was paid to areas suitable to support roosting bats, including joints and crevices within the beams and gaps between roofing materials. Field signs that would indicate the presence of bats were searched for. These included:-

- bat droppings on the floor and walls of the buildings;
- feeding remains (particularly butterfly & moth wings) usually on the floor of buildings;
- Evidence of urine staining around possible roost entrances;
- Presence of areas cleared of cobwebs;
- Oily stains around possible roost entrances

An internal and external inspection of the building/s was carried out to identify any possible exit and entry points of barn owls and birds and to search for evidence of barn owls and birds such as pallets nesting new and old, feeding platforms and insect remains. Field Signs that would indicate the presence of barn owls or birds were searched for. These included:-

- White splashing or pallets on the floor and walls of the buildings.

- Nest debris. Barn owls do not build nests but nesting areas may contain nestling fluff and pellet debris.

- Potential entrance points. The minimum entrance hole size required for barn owls to gain access to a building is 7cm by 7cm or cracks, crevices missing windows.

- Suitable nesting platforms. Barn owls need a level area to lay their eggs usually over 3 metres in length and over 3 metres off the ground. Typical nesting places include tops of walls, between bales and attic floors.

- Barn Owls and bird sounds.

3 RESULTS

3.1 Desk study

The National Biodiversity Gateway and Park Hall Country Park Visitor Centre search revealed that species of bats has been recorded nearby.

3.2 Field survey

3.2.1 Habitat description

The immediate landscape around Bolton Gate Saddlery is semi rural consisting of agricultural fields, Park Hall Country Park, scattering mature trees, woodlands, water bodies, residential housing and commercial buildings (Farm buildings) which provide the correct resources for bats to survive.

3.2.2 Internal External survey

External Inspection

The exterior of the stables is a gable ended brick structure with tiled roofing. The brick structure was in fairly good condition providing little opportunity for bat to utilize as roosting opportunities. The roofing of the building did show raised and dislodged tiles providing sufficient access to the interior of the building. The stable doors all provided access to the internal building as half the doors were left open for the horses.

No bat droppings, scratch marks or oil marks from fur were evident during the external inspections (to note external environment can remove evidence of bat activity).

The inspection identified no barn owl or bird activity in the form of nests.

Internal Inspection

The internal inspection of the stable block is open plan with a queen post design, rafters and purling roofing with roofing felt between and partially brick walling and breeze block. Primarily the barn is currently used as a stable block for horses and storage for hay and straw.

The inspection of the walling identified a number of crevices which bats and birds could utilize these were examined by the use of a video endoscope to probe for signs of bird or bat activity during this no activity was identified. The roofing was unable to be checked for bat activity i.e. bat droppings, due to the roofing felt being connected between the rafters.

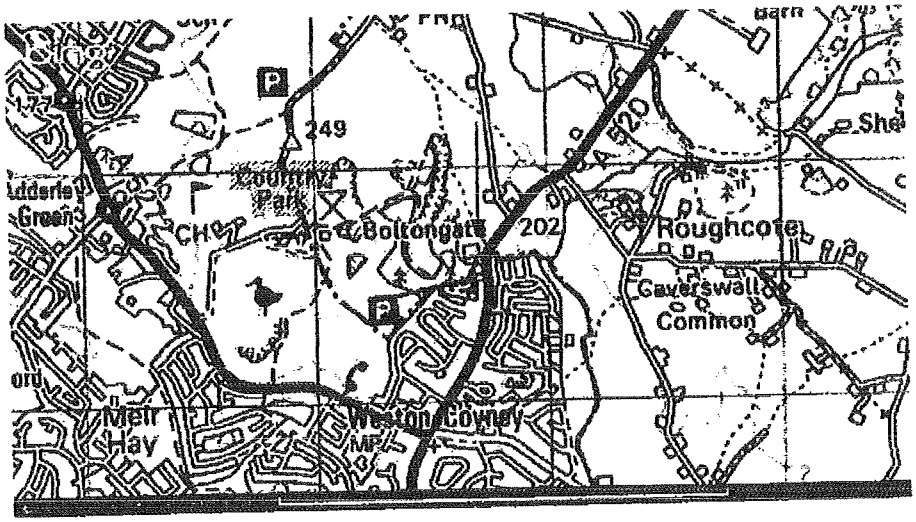
No bat droppings, scratch marks or oil marks from fur were evident during the external inspections.

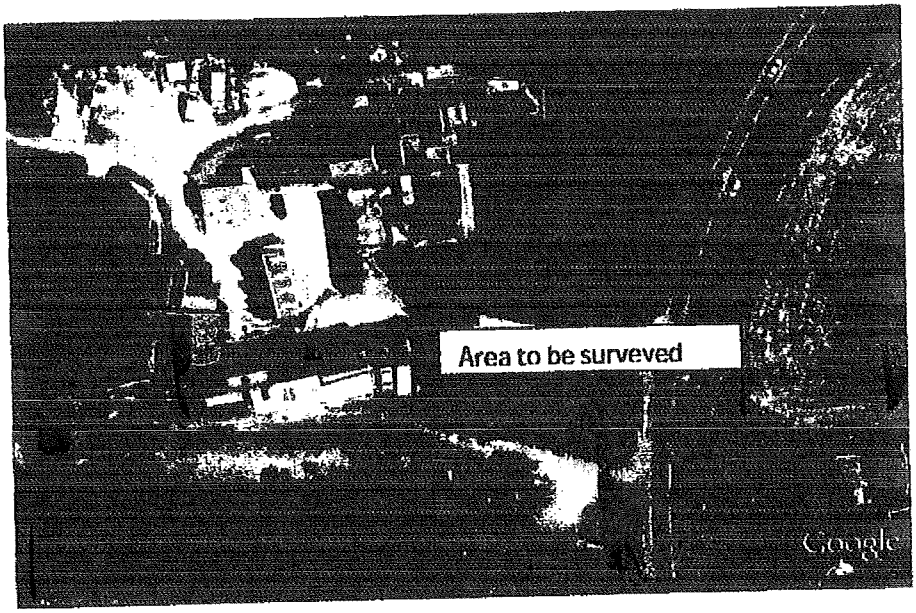
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3.2.3 Maps

Site location indicated by red arrow







3.2.4 Photographs

Plat 1: External view Stable

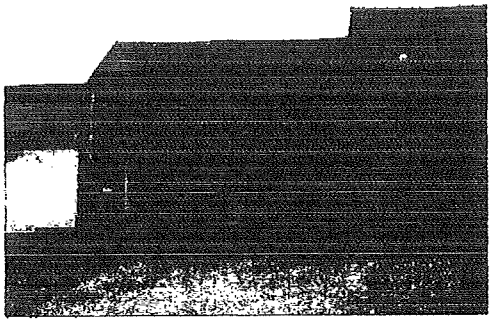
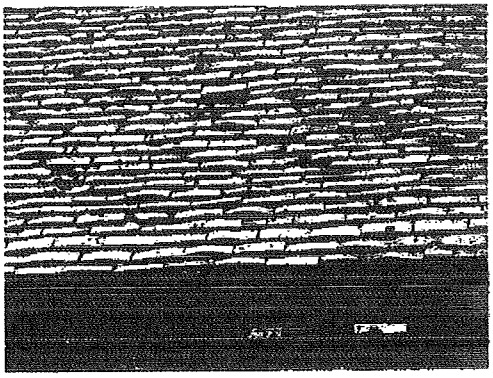
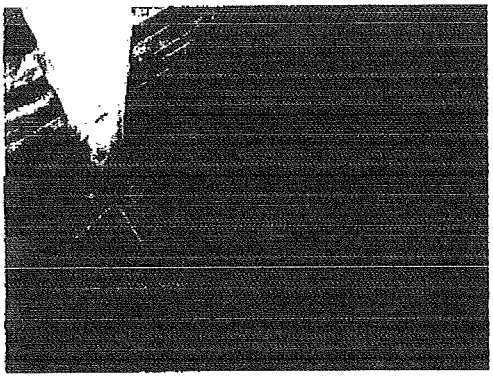


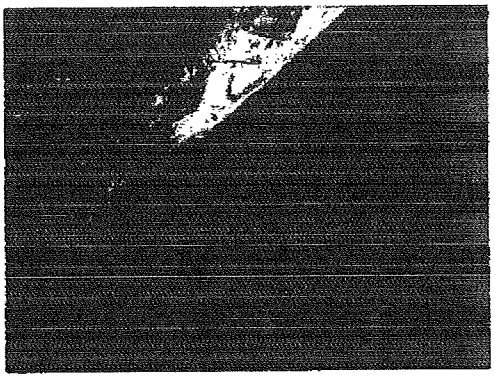
Plate 2: External View Showing raised tiles



Plat 3: Internal view stables



Plat 4: Internal view stables



4 ASSESSMENTS

4.1 Constraints on study information

As bats are in hibernation, it was not possible to undertake a bat detector activity survey.

4.2 Potential impacts

From the initial bat scoping surveys carried out on the 30th March 2010 to identify potential bat opportunities and physical bat evidence. The roofing of the building did show potential access opportunities for bats such as crevice along roofing ridge also the ecologist was unable to check between the roofing tiles and felt were bat droppings could gather. It is not considered that the work will have an impact on bats unless bats are present, however efforts must be undertaken to ensure that bats are not harmed and roosts not destroyed if present, during the redevelopment process, therefore to be able to evaluate in more detail if bats are present or absent it would be recommended to conduct a dusk & dawn bat detector survey (Bat Conservation Trust Best Practice Guidance) in the survey period May to September.

4.3 Legislation and policy guidance

Planning Policy Statement 9 makes it a requirement for local authorities to consider biodiversity and geological conservation when determining planning applications.

All species of bat are fully protected under the Wildlife and countryside Act 1981, the European Conservation (Natural Habitats &c.) Regulations 1994 and the Countryside and Rights of Way Act 2000. This legislation makes it illegal to possess or control any live or dead specimens, to damage, destroy or obstruct access to any structure or place used for shelter, protection or breeding, and to intentionally disturb a bat while it is occupying a structure or place which it uses for that purpose.

Most resident nesting birds are protected under the Wildlife and Countryside Act 1981 which protects the birds, nests, eggs and nestlings. Some rarer species such as Barn Owls are afforded extra protection.

If bat species are present at the proposed re/development site, the purpose of this report will only summarise the potential requirements for a bat mitigation/package project. A separate mitigation report/project will be required, which will include the necessary compensation measures to maintain the conservation status of a European Protected Species.

5 RECOMMENDATIONS AND MITIGATION

5.1 Further survey

From the internal and external inspections conducted on the 30th March 2010 of the stable block the inspections found no bat evidence in the form of droppings, stainage or corpses of bats, also the inspection of the building found no evidence of barn owls/birds. As no inspection could be conducted between the roofing tiles and roofing felt it is unclear if bats have utilized the roofing therefore as a site safe guard to bats a dusk & dawn bat detector survey (Bat Conservation Trust Best Practice Guidance 2007) in the survey period May to September to be conducted.

5.2.2 Compensations for foraging and commuting habitat.

Shrubs and Climbers

The introduction of native climbers and shrub planting within the proposed redevelopment site will create new habitats. Planting shrubs such as *Pyracantha rogersiana, Lonciera nililda,* which are fruit baring plants more examples can be found in *appendix B* these kinds of shrubs and climbers would provide fruit for mammal such as bats as these plants attract insects which are bats main food recourse also the plants would provide food towards birds and provide shelter from predators.

Plantation of Standard Size Trees

The plantation of native standard trees which can be found in *appendix B* could be incorporated into the redevelopment of the site which will provide food and nesting opportunities for birds and insects for the long term. The trees which could be planted in the long term would provide more roosting opportunities for bats and nesting for bird.

External Lighting

It would be recommended that any external lighting should be downward facing to minimise disturbance to bats this would also attract foraging bats into the area therefore increase bat activity and biodiversity..

5.2.3 Requirement for Habitats Regulations (EPS) licences

Until a further assessment is conduct by use of a bat detector survey it will be unclear if an impact will occur towards bats if any and that a Bat development licence to be required.

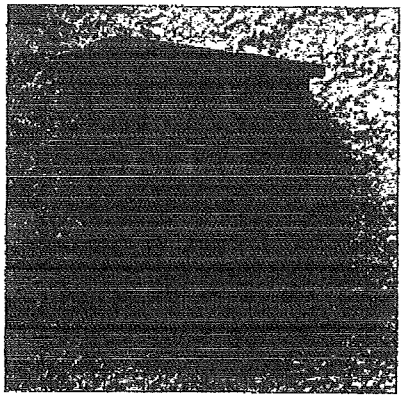
5.2 Biodiversity Improvements

5.2.1 Compensation for roost sites.

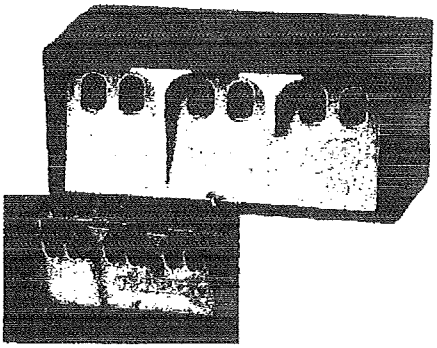
The erection of bat and bird boxes could be incorporated into the redevelopment, which would help maintain and even enhance the conservation status of the local bat and bird population. Bat and bird boxes can be supplied and/or erected by can be brought from Jacobi Jayne and Company

Examples of a bat roost, house martin nests and sparrow boxes.

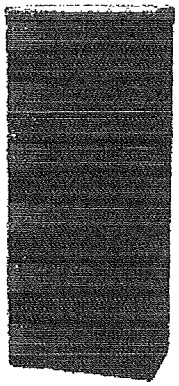
Bat Box



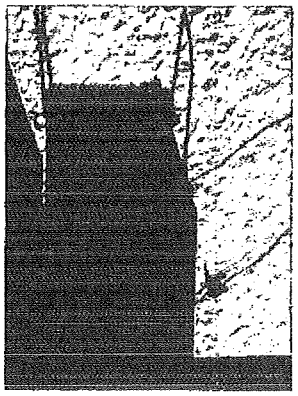
Sparrow Nest Box



Bat Box incorporates into wall Boxes



Insect Attracting



6 SUMMARY

During the survey of a stable block which does hold the correct recourses for bat to live, no evidence was identified in the form of bat droppings, stainage or carcasses. Though no evidence was identified the building itself did show potential for possible bat roosts between the roof and interior roofing felt, also the surrounding landscapes provides sufficient resources for commuting and foraging therefore it would be recommended to conduct a dusk & dawn bat detector survey as a site safe guard before any redevelopment works takes place.

7 REFERENCES

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