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BAT SURVEY
AND SITE ASSESSMENT

6 SPRINGFIELD AVENUE
MARKET BOSWORTH

Field Surveyor: **Susie Duke BSc**
(EN Licence No: 20081270)
Report/Job No: BS 454

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CONTENTS

1. INTRODUCTION **3**

1.1 Background **3**

1.2 General Site Description **4**

1.3 Site Location **4**

1.4 Date of Survey **5**

1.5 Description of Works **5**

2. DESK STUDY **6**

3. METHODOLOGY **7**

4. RESULTS **8**

5. EVALUATION **10**

6. RECOMMENDATIONS **11**

7. REFERENCES **12**

APPENDICES

APPENDIX 1 – SITE PLAN **13**

APPENDIX 2 – SITE PHOTOGRAPHS **14**

1. INTRODUCTION

1.1 Background

At the request of Mr and Mrs B Whitney, a bat survey and associated ecological assessment was carried out at 6 Springfield Avenue, Market Bosworth, Leicestershire, prior to proposed development works.

The brief of the survey was as follows:

- To determine whether the building was used by bats for roosting or as a place of shelter with consequent implications for development work with respect to the *Wildlife and Countryside Act 1981*, the *Conservation Regulations 1994,* and relevant Planning and Policy Guidelines;

- To assess the value of the site, including the built environment and garden areas, for use by bats for foraging, feeding, or as a place of shelter;

- To make proposals for mitigation measures to offset any environmental impacts caused by the development work, with recommendations as to any further survey or licensing requirements.

All species of bats and their roosts are fully protected under Schedule 5 of the *Wildlife and Countryside Act 1981*. Additional protection is offered under Schedule 2 of the *Conservation (Natural Habitats, &c.) Regulations 1994*, which defines "European protected species of animals". Under currently accepted interpretations of these two items of legislation, as outlined in the *Bat Workers' Manual, 3rd Edition, JNCC (2004)*, a bat roost is:

> "any structure or place which any wild animal … uses for shelter or protection".

Since bats tend to re-use the same roosts, legal opinion is that the roost is protected whether or not the bats are present at the time.

In the case of development work, activities involving the capture, disturbance and/or relocation of bats are subject to a licence from Natural England. Such licences are only granted:

> "… for the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment, to allow people to carry out activities which would otherwise be illegal. Applicants must be able to demonstrate that they have a suitable amount of expertise to achieve the objectives of the proposed work".

Under the Conservation (Natural Habitats &c.) Regulations 1994 licences can only be issued if Natural England are satisfied that:

- there is no satisfactory alternative;
- the action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

1.2 General Site Description

The site comprises a semi-detached bungalow of brick and tile construction together with associated garden areas. The property is located within a residential area in the village of Market Bosworth.

1.3 Site Location

The site is located off Springfield Avenue in Market Bosworth, Leicestershire, (OS grid reference SK 398 031).

1.4 Date of Survey

The survey was undertaken on 6th January 2009.

1.5 Description of Works

It is understood that the property is to be extended to provide additional accommodation and that changes to the roof structure of the current building are included in the scheme.

2. DESK STUDY

Information was gathered from Leicestershire Bat Group regarding any presence of bat species within 1km of the site and the *Distribution Atlas of Bats in Britain and Ireland*, (P.J. Richardson, BCT (2000)), was also consulted regarding bat species known from the region.

Leicestershire Bat Records. Common pipistrelle, (*Pipistrellus pipistrellus),* Daubenton's bat, (*Myotis daubentonii)*, and noctule, (*Nyctalus noctula)*, are recorded in the local area but no roost sites are identified.

Information from the *Distribution Atlas of Bats in Britain and Ireland*, (P.J. Richardson, BCT (2000)), regarding bat species known from the region indicates that the following bat species are locally present:

Common pipistrelle	*Pipistrellus pipistrellus*
Soprano pipistrelle	*Pipistrellus pygmaeus*
Brown long-eared bat	*Plecotus auritus*
Noctule	*Nyctalus noctula*
Natterer's bat	*Myotis nattereri*
Daubenton's bat	*Myotis daubentonii*

3. METHODOLOGY

Bat survey activities were carried out in accordance with the methodologies detailed in the *Bat Workers Manual, Third Edition*, (JNCC 2004), but evening survey work was not undertaken due to the time of year. The survey comprised the following elements:

- A daylight survey was carried out to assess areas of the site that may provide suitable bat roosting habitat;

- A detailed inspection of the bungalow, (including any accessible roof voids), was made to find any evidence of bats making use of the area for roosting or sheltering and the exterior of the building was assessed with regard to other potential roosting sites;

- An assessment of surrounding habitats in relation to potential bat foraging areas and commuting routes was also made.

4. RESULTS

The property at 6 Springfield Avenue is a semi-detached bungalow of brick and tile construction. A flat roofed garage is also annexed to the building and an extension of similar construction is present on the north side of the property. A timber built conservatory with a flat roof is also present at the rear of the building.

An examination of the exterior of the bungalow found a number of potential roosting opportunities for bats, particularly under roof tiles where pointing is damaged and also at the western gable end where a significant gap is present at the apex. Gaps were also noted behind barge boards on the garage and the flat roofed extension. No evidence of use of these areas by bats could be seen on the outside of the buildings, but this was to be expected given the time of year.

The roof void to the bungalow was also subject to survey and was found to be a large open area which is insulated and part boarded. The roof is lined and the area is generally considered suitable to provide roosting sites for bats. Droppings indicating the presence of house mouse, (*Mus musculus)*, were found throughout the roof void and a large nest of common wasp, (*Vespula vulgaris)*, and some smaller nest structures were also noted. A closer investigation of the western gable wall found several bat droppings consistent with those associated with common pipistrelle, (*Pipistrelus pipistrellus)*. This indicates that the cavity at the apex of this wall has previously provided a roost site for bats and it is considered likely that this may represent a maternity colony. Further survey work will however be required in order to properly establish bat species usage of the site. Evening emergence monitoring would enable a more accurate assessment to be made and should determine the numbers of bats using the building as a roost site.

The property is situated in a village location and is surrounded by residential properties with associated garden areas. Farmland comprising arable and pasture land occurs close to the site and small pockets of woodland are also present within a kilometre of the survey area. It is therefore anticipated that a number of bat species may be present in the local area.

The proposed development scheme will extend the current property into the rear garden which currently comprises a lawned area with a Leyland cypress hedgerow, (*Cupressocyparis leylandii*), and ornamental planting around the boundaries. It is however understood that the proposals do not include any changes to these boundaries and therefore flight lines and commuting routes for bats are unlikely to be affected. No mature trees suitable to provide bat roosting habitat are present in this area.

5. EVALUATION

The survey site at 6 Springfield Avenue comprises a semi-detached bungalow of brick and tile construction with several flat roofed extension buildings. Lawned gardens are present to the front and rear of the property which is located within a residential area in the village of Market Bosworth.

A daytime survey undertaken on the site revealed a number of potential roosting opportunities for bats on the exterior of the building including under roof tiles where pointing is damaged and also behind barge boards. A significant gap at the apex of the western gable wall was also noted.

An examination of the interior of the roof void to the bungalow found a small number of bat droppings consistent with those associated with common pipistrelle, (*Pipistrellus pipistrellus)*, on the interior of the western gable wall and which indicates that this area has provided a roosting site for bats in the past. Droppings indicating the presence of house mouse, (*Mus musculus),* and nest sites used by common wasp, (*Vespula vulgaris)*, were also found in the roof void.

The evidence discovered indicates that the building does provide a roosting site for bats but survey work undertaken is not considered to be sufficient to properly establish bat usage of the site and further survey work is therefore recommended. Survey work should include evening emergence monitoring in order that bat species present on the site can be accurately identified.

It is however considered that the current development plan could easily incorporate the provision of suitable replacement bat roosting sites without any significant changes to the scheme. In these circumstances, development of the bungalow and the implementation of a successful mitigation strategy to encourage continued use of the site by bat species is considered to be a realistic proposal.

6. RECOMMENDATIONS

Survey work carried out at 6 Springfield Avenue indicated that the bungalow has provided a roosting site for bats. It was not however possible to make a more detailed assessment of bat species usage of the site, as evening emergence monitoring was not undertaken. The following recommendations are made:

- Further specialist survey work to properly establish bat species usage of the site should be undertaken. This work should include evening emergence monitoring and must be carried out during the bats' active season, (May – September).

- A mitigation strategy to safeguard bats which may be present on the site should be incorporated into the proposed development plan. This strategy should include:

  The timing of destructive works to avoid the bats' active season.

  Supervision of destructive works by a licensed ecologist in any areas found to be used by bats.

  The provision of replacement bat roosting habitat if the works will require that identified roosting sites are lost or modified.

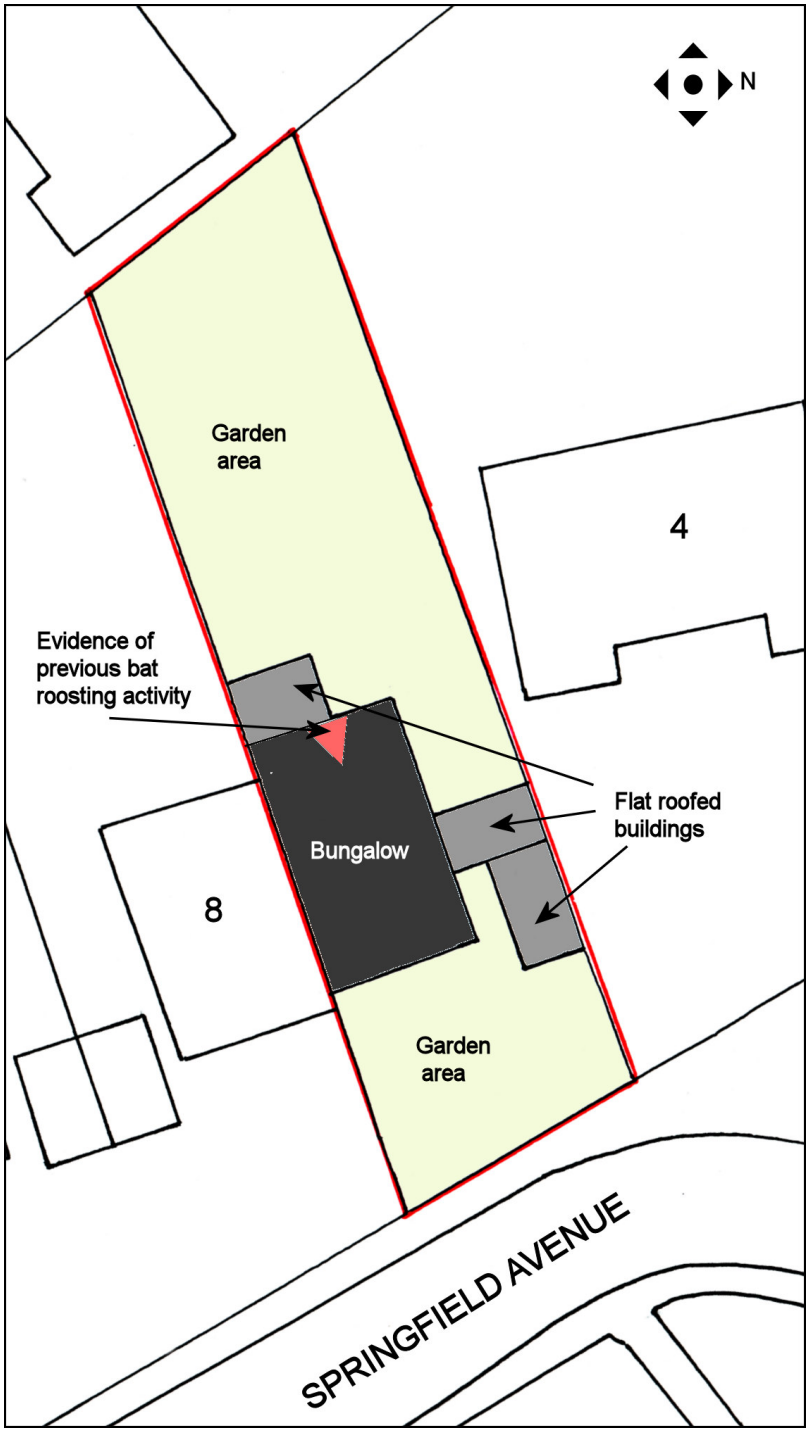
- It is understood that no natural habitats are to be affected by the proposed development plan and changes to the scheme in this regard are to be avoided.

7. REFERENCES

1. *The Bat Workers' Manual*, 3rd edition, A.J. Mitchell-Jones and A.P. McLeish, JNCC (2004).

2. *Distribution Atlas of Bats in Britain and Ireland*, P.J. Richardson, Bat Conservation Trust, (2000).

APPENDIX 1 – SITE PLAN



KEY TO SITE MAP

Survey area

Garden areas

Bungalow

Flat roofed buildings

Evidence of previous bat roosting activity is shown on the plan above.

APPENDIX 2 – SITE PHOTOGRAPHS





The bungalow subject to survey is a semi-detached building of brick and tile construction. Several flat roofed buildings are also present on the site.





Examination of the front of the building found potential roosting opportunities for bats under roof tiles where pointing is damaged and also behind barge boards.





Potential roosting sites for bats were also found at the rear of the building and a significant gap at the apex of the bungalow was noted. Gaps behind barge boards on flat roofed buildings may also provide suitable roosting sites.





The roof void over the bungalow is lined, insulated and part boarded. Evidence of the presence of house mouse and common wasp was found and a small number of bat droppings were also noted on the gable wall at the rear of the building.





The property has lawned gardens to front and rear with a Leyland cypress hedgerow and ornamental planting forming the boundaries at the rear. No trees suitable to provide bat roosting habitat are present on the site.