

**Whitcher Wildlife Ltd.
Ecological Consultants.**



THE STABLES, GUNBY HALL.

OS REF: SE 710 353.

BAT SURVEY.

Ref No: 190457/Rev 1.

Date: 2nd August 2020.

TABLE OF CONTENTS.

	Page Number
1. INTRODUCTION.	3
2. SURVEY METHODOLOGY.	4
3. SURVEY RESULTS.	5
4. EVALUATION OF FINDINGS.	20
5. RECOMMENDATIONS.	21
6. REFERENCES.	23
Appendix I. BAT INFORMATION.	24
Toolbox Talk – Bats.	26

1. INTRODUCTION.

1.1. A Planning Application is to be submitted to convert the existing stables buildings at Gunby Hall to residential use. A bat survey report is required in support of that planning application.

1.2. Whitcher Wildlife Ltd was commissioned to carry out a bat survey of the site to establish whether there are any issues that may affect the proposed works.

1.3. The initial day time survey was carried out on 21st May 2019 followed by a dusk emergence survey on the same day. Following a delay, further surveys were commissioned for 2020 and a repeat daytime and dawn survey was carried out on the morning of 17th July 2020 with a final dusk emergence survey on 30th July 2020.

1.4. This report outlines the findings of those surveys and makes appropriate recommendations.

1.5. Appendices I and II of this report provide additional information on protected species and the protection afforded to them and are designed to assist the reader in understanding the contents of this report.

2. SURVEY METHODOLOGY.

2.1. The buildings were thoroughly checked internally and externally for potential bat roosting sites by looking for the following signs: -

- * Holes, cracks or crevices.
- * Bat droppings.
- * Prey remains.
- * Staining on external walls.

2.2. Unless otherwise stated, all lofts were accessed and inspected using a high-powered torch and where necessary an endoscope.

2.3. A thorough external inspection was carried out from ground level for any gaps or openings in the roof and ridge tiles, behind soffits and fascia's and in the walls of the structure for suitable roost access points and field signs to indicate possible use by bats.

2.4. All window cills, 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.

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

2.6. The subsequent dusk emergence survey was also conducted in accordance with Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd 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.

2.7. All surveyors were equipped with Batbox Duet bat detectors, or similar. The use of static recording devices such as Anabat SD2's and video cameras with infrared lights were also utilised where appropriate.

2.8. The survey was undertaken by a team of ecologists 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 survey licences for barn owl, bat, great crested newt and white clawed crayfish.

3. SURVEY RESULTS.

3.1. Data Search Results.

3.1.1. Two data search requests were submitted to East Yorkshire Bat Group and to North Yorkshire Bat Group for existing records of bat roosts within 2km of the site.

3.1.2. The EYBG data search results returned records of two Common Pipistrelle maternity roosts within Bubwith but neither refers to the site. The NYBG data search returned a further Soprano Pipistrelle roost in Bubwith but no records for the site.

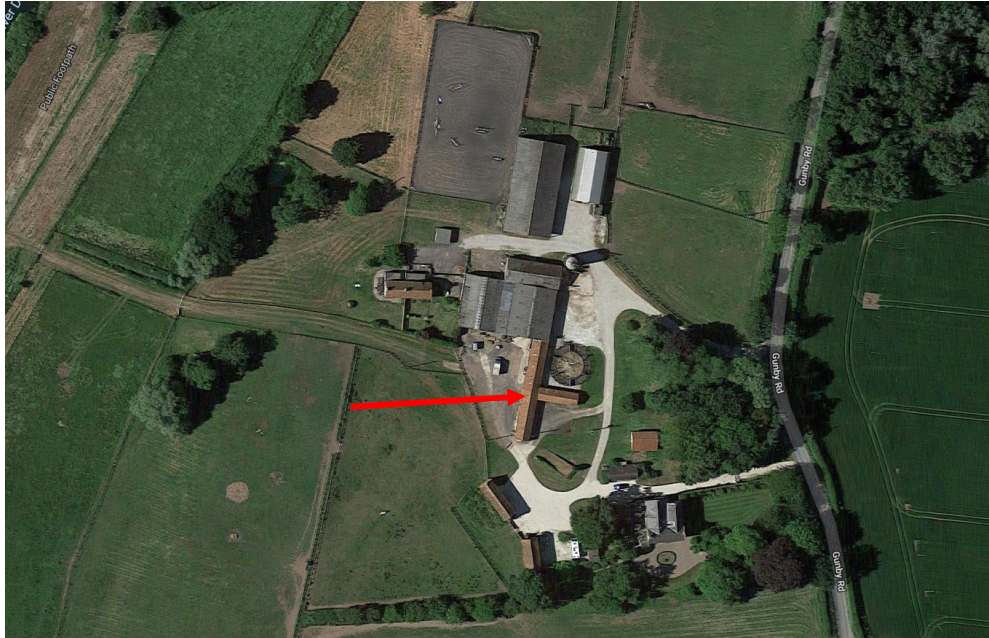
3.1.3. The full list of records can be provided as a separate document on request.

3.2. Site Description.

3.2.1. The site is located in a rural area to the south of Bubwith, surrounded by open farmland with the River Derwent to the west and a disused railway line forming a potential commuting corridor to the north. The site is shown by the red arrow on the aerial photograph below.



3.2.2. The stables are a T shaped single storey building that lie within a farm complex at Bubwith Hall, as shown below.



3.3. Daytime Bat Survey Results.

3.3.1. The stables are a single-storey brick building with solid brick walls and a pan tiles roof as shown in the photograph below this view shows the eastern side of the southern leg of the T shape. This arm of the building contains two stables and a corner workshop to the right.



3.3.2. The eastern arm of the building also contains two stables with an open section in the corner that connect to a passageway to the west of the building.



3.3.3. Between the eastern arm and the northern arm there is a horse exercise circle with access over ballast behind.



3.3.4. At the back of the buildings there is the access gate from the open area in the middle of the block and then a further stable area at the northern end accessible from the western side of the building. This section has been closed off with a concrete block wall.



3.3.5. The walls are all in good condition and are solid so there are no bat roosting opportunities in the walls. The eaves are well sealed with close fitting fascia boards.

3.3.6. Internally, many of the walls only extend to head height with open access above, that would enable bats to fly between stables.



3.3.7. The pan tiles roof has numerous gaps between the tiles. The underside of the tiles is lined with bitumastic felt although this finishes short of the ridge in all cases, as shown below



3.3.8. The photograph below looks south along the back section of the building, from the stables and this again shows access for flight lines over the walls.



3.3.9. At the far northern end of the building the stables adjoin a larger open barn and between there is a slatted timber wall as shown in the photograph below. At this point, the felt roof lining is in a poor state of repair with a section hanging. Behind this, a small bat was found in the location marked by the red arrow, with a small number of bat droppings on the floor underneath.



3.3.10. Further droppings were found on the concrete floor of the workshop area, as shown below.



3.3.11. In the stable at the northern end of the northern arm there is a bird loft access leading into the boxed off area shown below. There was no evidence of use of this by birds, but swallows were nesting in the buildings.



3.3.12. The building overall was assessed to have a LOW potential for roosting bats limited to gaps between the pan tiles and the felt lining.

3.3.1.13. A small number of barn owl pellets were found in the open section of the building suggesting occasional settling to feed and one barn owl was seen flying over the site during the dusk emergence survey.

3.3.1.14. Swallows were seen flying in and out of the buildings to active nests.

3.4. Dusk Emergence Survey Results.

3.4.1. Four surveyors carried out a dusk emergence survey on the evening of 21st May 2019.

3.4.2. The evening was warm, still and clear with a temperature of 14°C at 20:30. Sunset was at 21:09 and the survey commenced at 20:45. The temperature dropped away during the survey and by 22:40 the temperature had dropped to 11°C

3.4.3. The four surveyors were positioned so that they could see all aspects of the stables to be surveyed. The position of each surveyor (S) was as shown on the aerial photograph below. Each surveyor was equipped with a Batbox Duet detector and a two-way radio for communication and a static Anabat recorder was placed close by to

record bat activity for subsequent computer analysis using Anabook software. Two Anabat recorders were placed inside the building along with one camera with an infra-red light source and night sight (C).

3.4.4. Two of the surveyors hold a current Natural England bat survey licence and the other two surveyors were experienced assistants.



3.4.5. The following are the observations of the surveyors.

3.4.5.1. Surveyor 1.

21:39. Common Pipistrelle heard not seen.

21:52. Common Pipistrelle foraging in large barn adjacent to site.

21:54. Common Pipistrelle passed east to west over building.

22:03. Common Pipistrelle heard not seen continually foraging.

22:24. Noctule passed high over site.

Anabat 15 with Surveyor 1 recorded one Common Pipistrelle at 22:09 and a Noctule at 22:24.

3.4.5.2. Surveyor 2.

21:39. Common Pipistrelle heard not seen.
21:41. Common Pipistrelle heard not seen.
21:48. Common Pipistrelle heard not seen.
21:49. Common Pipistrelle heard not seen.
22:06. Common Pipistrelle heard not seen.
22:24. Noctule passed overhead.

Anabat 11 with Surveyor 2 recorded one Common Pipistrelle at 21:53 and a Noctule at 22:24.

3.4.5.3. Surveyor 3.

21:24. Barn owl from north circles west.
21:49. Common Pipistrelle from the north circled and west east.
21:56. Common Pipistrelle from the west, circled and left east.
22:11. Very faint bat heard not seen.
22:24. Noctule passed over the site.

Anabat 4 with Surveyor 3 recorded two Common Pipistrelles at 21:05 and at 21:55 and a Noctule at 22:23.

3.4.5.4. Surveyor 4.

21:24. Barn owl flew from the adjacent farm buildings and away to the SW.
21:54. Distant Common Pipistrelle heard not seen.
21:56. Common Pipistrelle flew from S3 over the building roof and away to the east.
22:30. Noctule passed overhead.

Anabat 13 with Surveyor 4 recorded two Common Pipistrelle calls at 21:55.

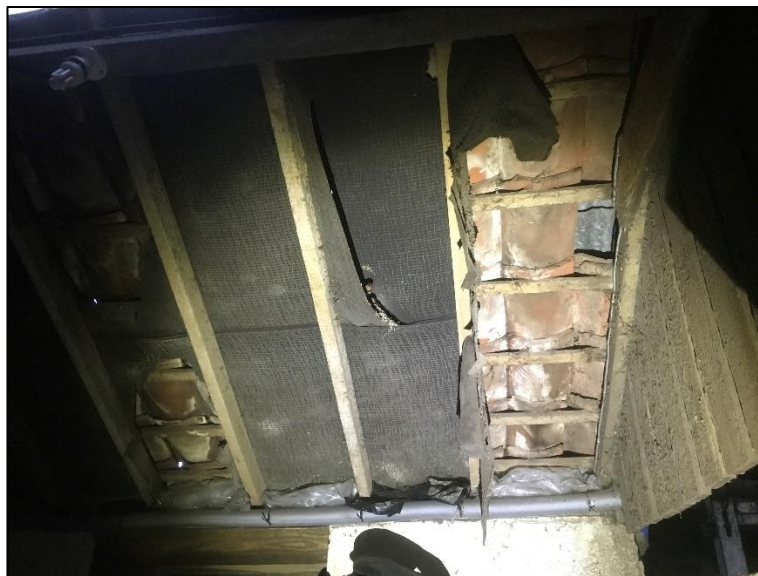
3.4.5.5. Anabat 12 with Camera 1 recorded a Common Pipistrelle at 21:55 and a Noctule at 22:30. There was no bat activity recorded on the camera.

3.4.5.6. Anabat 15 recorded one Common Pipistrelle at 22:09 and a Noctule at 22:30.

3.4.5.7. The level of bat activity over the site was low and confined to Common Pipistrelles except for occasional Noctules passing over the site later in the survey. No bats emerged from the buildings, but the bat seen during the daytime survey remained in the same place at the end of the survey.

3.5. Repeat Daytime Survey Results – 17th July 2020.

3.5.1. A repeat daytime survey showed that nothing has changed with the buildings. All remain as previously report from the 2019 survey. Where the Common Pipistrelle was originally found in 2019, there is a swallow's nest in 2020.



3.5.2. One barn owl pellet was found on the floor in the passageway through the buildings.

3.5.3. Abundant swallows were found nesting in all of the buildings.

3.6. Dawn Survey Results – 17th July 2020.

3.6.1. Four surveyors carried out a dawn survey on the morning of 17th July 2020.

3.6.2. The morning was mild still and clear with a temperature of 14^oC at 03:30. Sunrise was at 04:56 and the survey commenced at 03:30. The wind measured 0 on the BWS.

3.6.3. The four surveyors were positioned so that they could see all aspects of the stables to be surveyed. The position of each surveyor (S) was as shown on the aerial photograph below. Each surveyor was equipped with a Batbox Duet detector and a two-way radio for communication and a static Anabat recorder was placed close by to record bat activity for subsequent computer analysis using Analook software.

3.6.4. Two of the surveyors hold a current Natural England bat survey licence and the other two surveyors were experienced assistants.



3.6.5. The following are the observations of the surveyors.

3.6.5.1. Surveyor 1.

03:30. Common Pipistrelle heard not seen.

03:41. Common Pipistrelle heard not seen.

03:43. Common Pipistrelle foraged over the yard. This activity continued intermittently until 04:17.

03:50. Common Pipistrelle flew east over the roof.

04:09. Common Pipistrelle flew east through the central alleyway and back again.

04:17. Common Pipistrelle flew into the timber barn and back out.

04:17. Common Pipistrelle flew west

3.6.5.2. Surveyor 2.

03:30. Common Pipistrelle heard not seen foraging along trees to the east. This continued throughout the survey.

03:51. Common Pipistrelle foraging behind buildings. This continued until 04:21 when the last bat went north.

3.6.5.3. Surveyor 3.

03:44. Common Pipistrelle heard not seen foraging over the yard. This continued throughout the survey until last seen at 04:24.

3.6.5.4. Surveyor 4.

03:25 to 03:35. Common Pipistrelle foraging between trees and the buildings.

03:39. Common Pipistrelle flew from the northeast over the buildings.

03:46 to 04:14. Common Pipistrelle foraging between trees and buildings.

3.6.6. All recordings on the Anabat recorders were Common Pipistrelles with the exception of one Myotis call recorded at 03:39 on the Anabat with Surveyor 4.

3.6.7. Common Pipistrelles were continually foraging around the buildings and looked as though they would enter the buildings. In the event, all left and none entered the buildings to roost.

3.7. Dusk Emergence Survey Results – 30th July 2020.

3.7.1. Four surveyors carried out a dusk emergence survey on the evening of 30th July 2020.

3.6.2. The evening was mild with high cloud, a light breeze and with a temperature of 21°C at 20:45. Sunset was at 21:03 and the survey commenced at 20:45. The wind measured 0 on the BWS.

3.6.3. The four surveyors were positioned so that they could see all aspects of the stables to be surveyed. The position of each surveyor (S) was as shown on the aerial photograph below. Each surveyor was equipped with a Batbox Duet detector and a

two-way radio for communication and a static Anabat recorder was placed close by to record bat activity for subsequent computer analysis using Anabook software.

3.6.4. Two of the surveyors hold a current Natural England bat survey licence and the other two surveyors were experienced assistants.



3.6.5. The following are the observations of the surveyors.

3.6.5.1. Surveyor 1.

21:33. Common Pipistrelle flew over the building east to west.

21:37. Common Pipistrelle flew long the ridge south to north.

21:39. Common Pipistrelle heard not seen.

21:41. Common Pipistrelle briefly heard not seen overhead.

21:59. Common Pipistrelle heard not seen overhead.

Anabat 23 with Surveyor 1 recorded seven Common Pipistrelle calls between 21:35 and 21:59.

3.6.5.2. Surveyor 2.

21:30. Common Pipistrelle heard not seen from the trees to the east.

21:37. Common Pipistrelle heard not seen.
21:38. Common Pipistrelle heard not seen foraging over trees to the east.
22:05. Common Pipistrelle heard not seen.

Anabat 22 with Surveyor 2 recorded one faint Common Pipistrelle call at 22:09.

3.6.5.3. Surveyor 3.

21:31. Common Pipistrelle passed west to east over the site.
21:37. Common Pipistrelle heard not seen.
21:54. Common Pipistrelle heard not seen.

Anabat 19 with Surveyor 3 recorded one Common Pipistrelle call at 21:30.

3.6.5.4. Surveyor 4.

21:31. Common Pipistrelle passed west to east over the site.
21:34. Common Pipistrelle heard not seen along trees to the east.
21:37. Common Pipistrelle from the west, foraging in front of buildings.
21:39 to 21:46. Common Pipistrelles heard foraging along trees to the east.
21:51. Distant Common Pipistrelle heard not seen.
22:06. Common Pipistrelle heard not seen.

Anabat 12 with Surveyor 4 recorded two Common Pipistrelle calls at 21:34 and 21:37.

3.6.6. Only a very low level of Common Pipistrelle activity was observed during the survey and no bats emerged from the buildings.

4. EVALUATION OF FINDINGS.

4.1. The existing stables on the site was assessed to have a low potential for roosting bats during the daytime survey in line with the bat Conservation Trust Good Practice Guidelines. However, a small number of bat droppings were found and one bat was seen sheltering behind a hanging piece of roof felt liner.

4.2. A dusk emergence survey was undertaken on the stable buildings and during that survey no bats were seen to emerge from the stable building. The sheltering bat remained in place at the end of the survey. This may have been because the temperature dropped off during the survey although it did not fall below 11°C.

4.3. During a repeat day time survey in July 2020 no bats or bat field signs were found in the buildings and a swallow nest with chicks was found in the same location that the bat was previously seen.

4.4. During a dawn and a further dusk emergence survey during 2020 only low levels of Common Pipistrelle activity were identified and no bats emerged from the buildings.

4.5. A small number of barn owl pellets were found in the open section of the building during the 2019 survey suggesting occasional settling to feed and one barn owl was seen flying over the site during the dusk emergence survey. One owl pellet was identified during the 2020 surveys.

4.6. Swallows were seen flying in and out of the buildings to active nests during both 2019 and 2020.

5. RECOMMENDATIONS.

5.1. One Common Pipistrelle was identified in the buildings during the 2019 survey and no bats emerged during either of the 2020 surveys. It is therefore assessed that the buildings can provide temporary shelter for individual bats but not on a regular basis.

5.2. Therefore, no further surveys are recommended and there is no requirement for a mitigation strategy or for a Natural England Licence in connection with the proposed conversion works.

5.3. Nevertheless, individual bats can seek temporary shelter almost anywhere and therefore it is recommended that demolition of the existing buildings is undertaken with due care. In the unlikely event a bat is found, the bat should be covered and protected, work should cease at that location and the undersigned should be contacted for further advice.

5.4. It is recommended that replacement roosting opportunities are provided in the converted dwelling by providing bat access slates in the new roof. At least six such access slates should be provided s as shown below.



5.5. It is recommended that replacement swallow nest opportunities will be provided in the other open stables and barns on the site.

Prepared by:	
Derek Whitcher. BSc, MCIEEM, MCM	Date: 2 nd August 2020.

Checked by:	
Jenny Whitcher Roebuck MCIEEM.	Date: 3 rd August 2020.

6. REFERENCES.

Chartered Institute of Ecology and Environmental Management. 2013. *Guidelines for Preliminary Ecological Appraisal*. CIEEM, Hampshire.

Collins J. (ed.) 2016. *Bat Surveys for Professional Ecologist: Good Practice Guidelines*. 3rd edition. The Bat Conservation Trust, London.

1979. *Convention on the Conservation of European Wildlife and Natural Habitats*. <http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/104> (accessed 18/02/16)

2000. *Countryside and Rights of Way Act*. <http://www.legislation.gov.uk/ukpga/2000/37/contents> (accessed 18/02/16)

2010. *The Conservation of Habitats and Species Regulations*. <http://www.legislation.gov.uk/uksi/2010/490/contents/made> (accessed 18/02/16)

1979. *The Convention on the Conservation of Migratory Species of Wild Animals*. <http://www.cms.int/> (accessed 18/02/16)

1981. *Wildlife and Countryside Act*. <http://www.legislation.gov.uk/ukpga/1981/69> (accessed 18/02/16)

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 sills, 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 (SAC's) 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.

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.

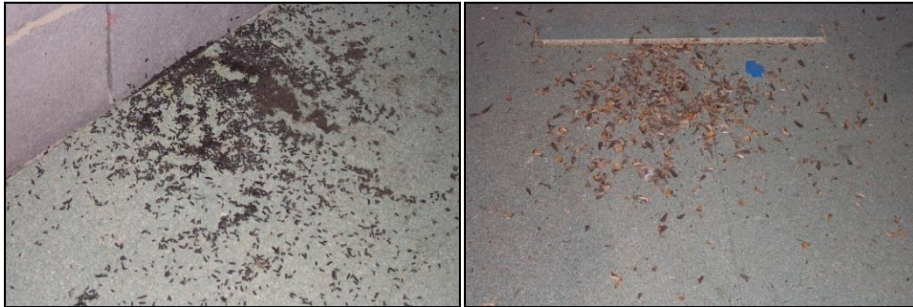
Identification.

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