

Bat, Breeding Bird and Barn Owl Scoping Survey

Dry Hill Farm, Lower Denby

February 2016



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Bat Scoping Survey: Dry Hill Farm Feb 2016

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Status	Date	Checked by:
Scoping	04/02/2016	Ione Bareau MCIEEM
Final		
Revisions		

Bat Scoping Survey: Dry Hill Farm Feb 2016

Sites:

Dry Hill Farm
Dry Hill Lane
Lower Denby
Huddersfield
HD8 8YN

Dates:

Scoping survey: 1st February 2016

Scoping report: 25th February 2016

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Planning Authority:

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2016-30

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1. Summary

A bat, breeding bird and barn owl scoping survey has been carried out on a range of sheds and agricultural outbuildings at Dry Hill Farm, Lower Denby. Permitted development rights are being sought for the conversion of outbuildings into residential use.

A visual assessment in February did not reveal any signs of bat roosting or high potential roosting habitat. Buildings on site all have low or negligible bat roosting potential.

Minor crevice roosting habitat was identified within some outbuildings where there are cracks and crevices in the breezeblock walls and around roofing timbers. The current conditions (exposed, draughty and damp) and the style of buildings makes any use other than by very low numbers or solitary bats unlikely, but to take account of this low risk bat habitat it is recommended that an updated visual assessment is carried out in the summer survey season when bat signs will be visible, and in suitable weather conditions.

The open-sided buildings have been used previously by nesting birds; a check should be made for the presence of any active nests prior to any work. There was no evidence of use by barn owl.

To mitigate for the loss of bird nesting and bat roosting opportunities, and as general biodiversity enhancement, it is recommended that bat and bird boxes are incorporated into the proposed re-development scheme.

2. Introduction

MAB Environment and Ecology Ltd was commissioned to carry out a bat, breeding bird and barn owl scoping survey on a range of farm buildings and sheds. Outbuildings are to be converted into residential use under permitted development rights. The existing site layout plan is shown on Figure 1.

The report's primary objective is to provide an impact assessment for the development on bats, define any necessary mitigation proposals, and to assess the requirement for a Protected Species Licence. A secondary objective is to assess potential impact on breeding birds.

Bat Scoping Survey: Dry Hill Farm Feb 2016

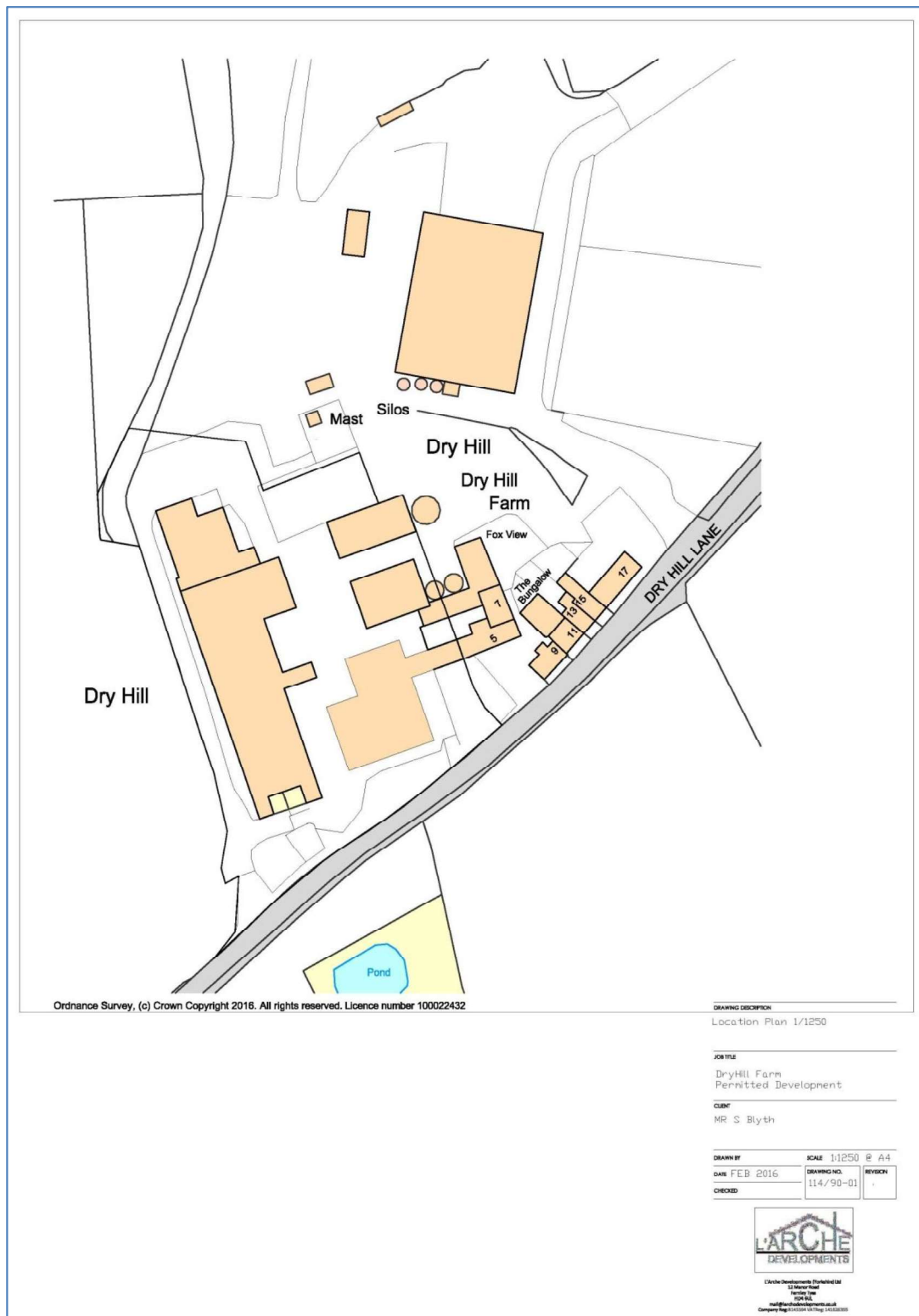


Figure 1 - Site location plan as existing.

3. Methodology

3.1 The site was surveyed and report written by Rachel Midgley MCIEEM, of MAB Environment & Ecology Ltd. Rachel has four years experience of conducting bat surveys, and has been an ecologist for eight years, previously with City of York Council; she holds a Class Survey Licence WML-A34 (Bat Survey Level 2) registration number 2015-11726-CLS-CLS and also holds a class licence WML-A34 (Volunteer Bat Roost Visitor Level 1) registration number 2015-17135-CLS-CLS. Rachel received training in bat mitigation on a BCT course in 2013.

3.2 The interior and exterior of the buildings were inspected during the day using halogen torches (500,000 candle power), binoculars, and a flexible endoscope (a Sea Snake LCD inspection scope). All normal signs of bat use were looked for, including bats, bat droppings, feeding waste, entry and exit holes, grease marks, dead bats, and the sounds / smells of bat roosts.

3.3 The buildings were assessed for their degree of potential to support roosting bats. This includes assessing the building design, materials and condition. The location of the site and the surrounding habitat were also assessed for value to bats. This includes proximity of the site to good bat foraging habitat such as woodland and water bodies and if the site is linked to such habitats by linear features like hedgerows, woodland edges or rivers which bats use to commute around the environment.

3.4 Any trees marked for removal or directly affected by the development scheme were assessed during the day from the ground using close focusing binoculars and a halogen torch (500,000 candle power). Features such as woodpecker holes, splits, cracks, rot holes, dense ivy, and peeling bark were looked for which are commonly used by bats for roosting and for shelter. Any features were then inspected for any signs of bat use, including scratches or staining around potential access points, bat droppings bats, and the sounds / smells of bat roosts.

3.5 Other trees within the site and areas of vegetation were also assessed for value to bats and their importance as foraging and commuting habitat.

3.6 Bat roost records for a 2km radius around the site were commissioned from the West Yorkshire Bat Group (WYBG).

3.7 All signs of breeding bird activity and barn owl (*Tyto alba*) activity were looked for. Signs looked for included white droppings, often vertical down walls or beams; active nests and nesting materials; (birds flying into and out of barns: generally summer only); bird feathers, particularly swift (*Apus apus*), swallow (*Hirundo rustica*) and house martin (*Delichon urbica*), bird corpses, feeding waste (including pellets), and the sound/smell of birds.

4. Constraints

The floors of the outbuildings were damp, and/or covered in straw or debris, and disturbed; therefore this may obscure signs of use such as bat droppings.

5. Site Description

Dry Hill Farm is located to the north of Lower Denby and to the south east of Denby Dale (central grid reference: SE 239 082). The site is an active agricultural yard and is bordered to the east by a dairy farm and to the north by industrial units. To the west and south are large fields of permanent pasture. Fields are enclosed by thick and mature boundary hedgerows which contain boundary trees. Within the wider area, there are patches of woodland and parkland close by and within bat commuting distance. These areas offer high quality bat foraging habitat.

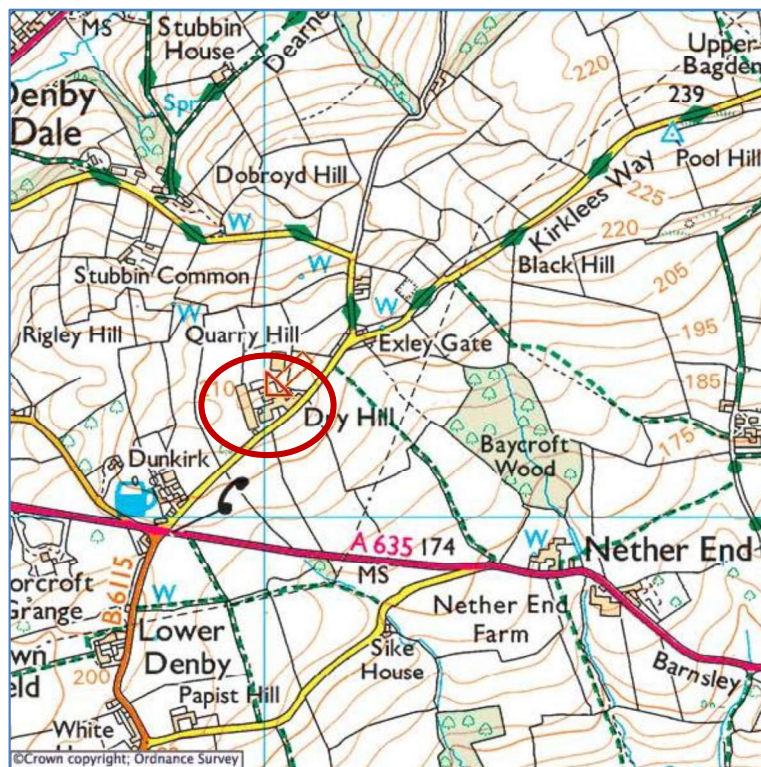


Figure 2 - Site location plan.

Bat Scoping Survey: Dry Hill Farm Feb 2016



Figure 3 - Aerial image of the site and surrounding landscape.

6. Results

6.1 Desktop study

West Yorkshire Bat Group (WYBG)

WYBG have provided all records currently held from within a 2km search radius of the survey site. The full results are included in Appendix 3. None of the roost records relate to this site but there are some from the nearby villages of Denby Dale and Skelmanthorpe. The closest record is 450m away to the north. All records are of pipistrelle sp. or unidentified bats.

6.2 Visual inspection

Buildings on site include a range of modern agricultural outbuildings and cattle sheds. With the exception of building 10, all are open-sided on at least one elevation. The building layout, building reference numbers and a summary of the scoping survey results are shown on Figure 4 below.

Building 1 (Photos 1-5)

Open-sided. Breezeblock walls with corrugated asbestos sheet roofing on a concrete frame. Corrugated sheet cladding to the walls with some timber Yorkshire boarding. Skylights present. The internal space is filled with rubble and full access was restricted. Open, exposed ridge line, no ridge beam. 1x old bird nest. No potential for barn owl. To the south and west elevation, there are some crevices within the block-work but on closer inspection these areas appear to be very damp and exposed. *Negligible/very low bat roosting potential.*

Building 2 (Photos 6-7)

Construction as building 1. Some minor crevices where the building connects with building 1. 2x old bird nests present inside. *Negligible bat roosting potential.*

Building 3 (Photo 8)

Breezeblock construction with corrugated asbestos roof, timber frame. Mono-pitch roof. Used as a wood store. No access right to the back (internally). 1x old bird nest. Roofing timbers are densely cobwebbed. *Negligible bat roosting potential.*

Building 4 (Photo 9)

Breezeblock construction with corrugated asbestos roof, supported on a timber frame. The floor internally is very damp. There are some minor crevices and gaps between timbers but these are generally exposed and cobwebby. *Low bat roosting potential.*

Building 5 (Photos 10-11)

Large cattle shed, similar construction to building 4 but with large roofing timbers, many crossing over and overlapping which may provide crevices and roosting opportunities. These areas are generally densely cobwebbed (see photo 11). The floor is covered in straw and animal dung. Old bird nesting material is present on roofing timbers. *Low bat roosting potential.*

Building 6 (Photos 12-14)

Narrow, mono-pitched lean-to between buildings 5 and 7. Corrugated metal roof on thin timbers. Some timbers overlap, creating small gaps between but these areas are cobwebby and undisturbed. Saw dust covers the floor. The rear (west) wall has some cracks in the block-work but these lead all the way through to the inside and are exposed/draughty. *No/negligible bat roosting potential.*

Building 7 (Photos 15-16)

Same construction as buildings 1 and 2 with concrete frame. Open ridge line, no ridge beam. *No bat roosting potential.*

Building 8 (Photos 17-18)

Bat Scoping Survey: Dry Hill Farm Feb 2016

Open-sided, corrugated asbestos roof on a thin timber frame, part of the roof has collapsed. Timbers overlapping and attached together (see photo 18) but there are no obvious crevices and no bat droppings visible on top of hay bales stored below. Old bird nesting material present. *No bat roosting potential.*

Building 9 (Photos 19-20)

Open-sided lean-to. Corrugated roof on timber frame. The structure has no bat roosting potential. An old wooden crate has been attached to one of the roofing timbers to provide a nest box but no signs of use could be seen. No barn owl pellets were found.

Building 10 (Photos 21-22)

Large metal nissen hut and lean-to on a steel frame. *The structure offers no potential bat roosting habitat.*

Building 11 (Photos 23-25)

Large shed, corrugated roof on concrete frame and breeze-block walls. Partially demolished. There is a large crack in the internal wall, where it connects with building 12: this area is however very damp (see photo 24). *No/negligible bat roosting potential.*

Building 12 (Photos 25-26)

As building 11. Full of timber and rubble. The south wall is in a poor condition with large gaps and cracks in the block-work. *Negligible bat roosting potential.*

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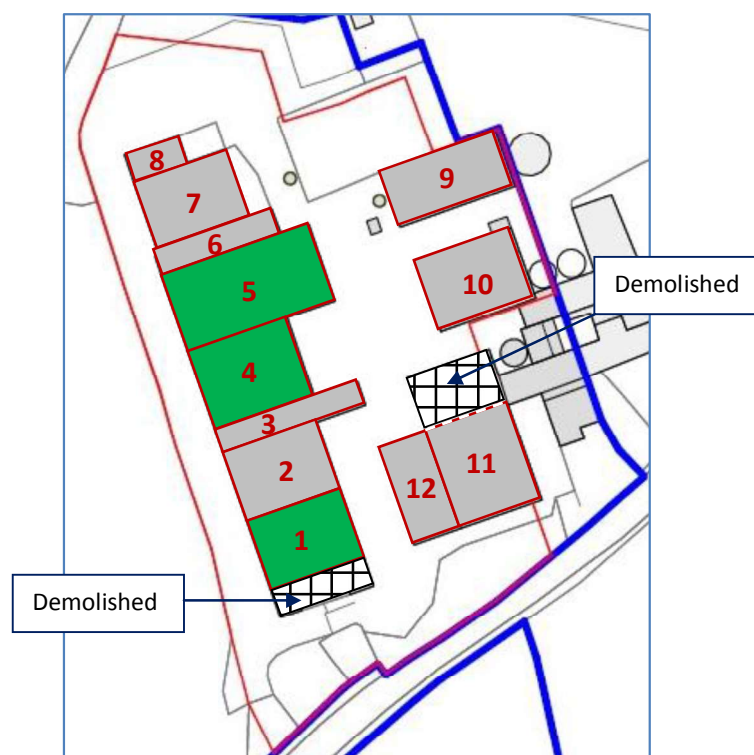


Figure 4 - Building layout plan showing structures surveyed and scoping survey results (see key below).

Colour code	Bat roost potential	Evidence
Red	Confirmed roost	Signs of roosting activity e.g. entry/exit points, <i>accumulated</i> bat droppings, live bats.
Amber	High potential bat roosting habitat	High suitability for breeding roosts, hibernation (e.g. lined roofs, roof voids with access points, cavities). May be some evidence of use, e.g. <i>scattered</i> bat droppings, feeding perch.
Yellow	Moderate potential bat roosting habitat	Some potential for use by breeding bats, hibernation, potential for day roosting (.e.g. fascia boards, crevices).
Green	Very low potential bat roosting habitat	No potential for significant numbers/breeding colonies but opportunities for day roosting or transient bats (e.g. unlined roofs, raised tiles, but exposed/draughty conditions, small cluttered roof voids).
Grey	No/negligible potential bat roosting habitat	No roosting opportunities or unfavourable conditions. Poor connectivity to surrounding landscape or highly urbanised, no available foraging habitat. High levels of artificial lighting/disturbance.

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Site photographs:



Photo 1 - Building 1.



Photo 2 - Interior to building 1.



Photo 3 - Western elevations of buildings 1-8.



Photo 4 - Crevices within masonry of building 1 south elevation (damp walls).



Photo 5 - Block work in poor condition on west elevation to building 1.



Photo 6 - Building 2.

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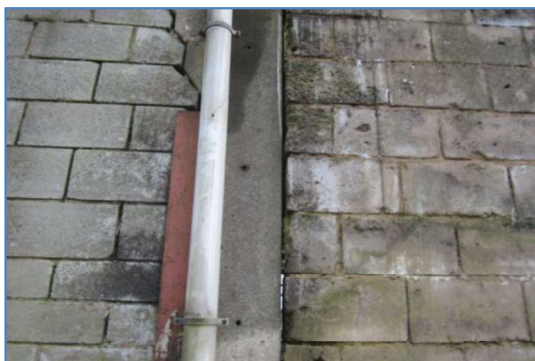


Photo 7 – Connection of building 1 and 2 with crevices in the breeze-block walls.



Photo 8 – Building 3.



Photo 9 – Building 4.



Photo 10 – Building 5.

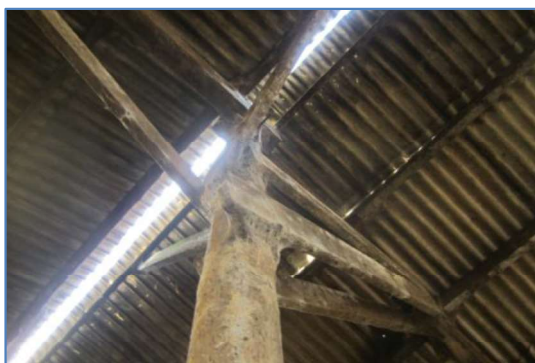


Photo 11 – Cobwebby timbers of building 5.



Photo 12 – Building 6.

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Photo 13 – West elevation of building 6, showing large cracks in rear wall.



Photo 14 – Overlapping timbers of building 6 with gaps in-between (cobwebby).



Photo 15 – Building 7.



Photo 16 – Interior of building 7.



Photo 17 – Building 8.



Photo 18 – Partly collapsed/missing roof of building 8, and thin roofing timbers.

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Photo 19 – Building 9.



Photo 20 – Box attached to timbers in building 9.



Photo 21 – Building 10.



Photo 22 – Inside building 10.



Photo 23 – Building 11.

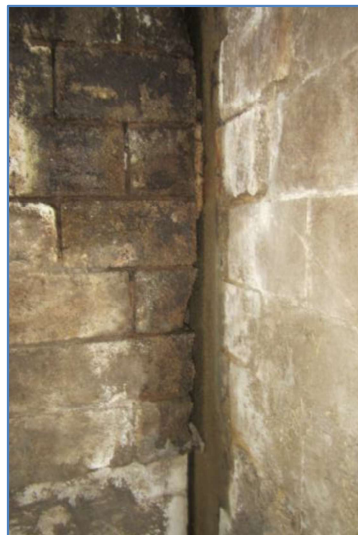


Photo 24 – Crack in internal wall of building 11.



Photo 25 - Rear (south) elevation of buildings 11 and 12.



Photo 26 - Interior to building 12.

7. Discussion and analysis

Following a visual assessment and scoping survey in February, no signs of bat roosting has been found within any of the buildings on site.

All buildings have very low or no bat roosting potential: their condition and the materials used in their construction do not tend to create favourable roosting conditions. There are no roof voids, and no ridge beams; therefore, there are no opportunities for void dwelling bat species.

A number of outbuildings (buildings 1, 4, 5, 11 and 12) offer some minor crevice roosting opportunities due to cracks and crevices in the breezeblock walls, and crevices around timbers. Many of the crevices in the walls (in the case of buildings 1, 11 and 12) were large where the walls had cracked, and lead all the way through to the inside. They do not lead into any enclosed cavities and some areas were visibly damp and exposed/draughty. These areas are unlikely therefore to offer suitable dry, warm and sheltered roosting opportunities, especially for use by high numbers of bat (e.g. by a breeding colony), but there is still a residual risk of use by low numbers or by solitary bats. Crevices between timbers joints and between the roofing sheets and roofing timbers/cladding are features sometimes utilised by small numbers of roosting bats.

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Crevices around timbers appeared cobwebby, indicating a lack of disturbance to these locations, and the fact that all outbuildings are open-sided means that internal conditions are draughty, exposed and well lit.

No bat droppings or feeding remains were found, however, the conditions during the scoping survey were not ideal for either the preservation of, or the identification/detection of evidence: straw, sawdust and debris on the floor may obscure signs of use, and the damp, disturbed conditions also means that evidence would not be well preserved, especially during the winter, outside of the active season.

To take account of this and the presence of low risk crevice roosting habitat, and as a precaution, it is recommended that an updated visual assessment is carried out during the bat active season and prior to work.

Old bird nesting material was found within many of the open-sided outbuildings. There were no signs of use by barn owl.

8. Impact assessment

Proposed conversion work will result in the loss of low risk bat roosting habitat identified during the scoping survey.

Conversion of buildings will result in the loss of bird nesting habitat, and there is also a risk of disturbance to nesting birds if work is carried out during the breeding season and if active nests are present.

9. Mitigation & Compensation

9.1 Mitigation summary

To take account of low risk bat roosting habitat and as the scoping survey was carried out outside of the optimum time of year, an updated visual assessment should be undertaken before works. This shall be carried out when bats are active to look for signs of use such as bat droppings and feeding remains etc. If any bats or any evidence of bats are found to be present, works will cease and the advice of the ecologist will be taken concerning any licensing requirements and additional surveys.

New crevice roosting habitat can easily be incorporated into the proposed scheme through the installation of long-lasting professional quality crevice bat boxes on site. This habitat provision is also in line with current local and national planning policy with regard to biodiversity.

A check should be made immediately prior to work for the presence of any nesting birds in buildings to be worked on. If any active nests are found then work to those immediate areas should be delayed until after the bird breeding season or once any chicks have fledged. New nesting habitat should also be provided as part of the scheme through the installation of bird nest boxes for replacement of lost habitat and for general biodiversity enhancement.

9.2 Method Statement

1. A further, updated visual assessment shall be carried out prior to work at the appropriate time of year (April - September) and in suitable weather conditions. Bat survey results will be forwarded to the LPA.
2. If any roosting bats or evidence of roosting is found to be present, further advice will be sought with regard to the need to apply for a European Protected Species Licence (EPSL). If an EPSL is needed, no work shall take place until this has been obtained.
3. Any lighting scheme should be designed to minimise any disturbance to bats and other wildlife using the site and surrounding area for foraging and commuting. No roost locations, foraging areas or commuting routes should be directly illuminated.
4. A check should be made for active bird nests immediately prior to conversion of the buildings. If any active nests are discovered, work to these immediate areas shall be carried out outside of the bird breeding season or once any chicks have fledged in order to avoid disturbance.

9.3 Recommendations for ecological enhancement

1. Replacement crevice roosting habitat will be provided on site through the installation of professional long-lasting crevice bat boxes on site, in suitable locations to be agreed by the ecologist. It is recommended that a total of 3 habitat features are provided. External bat boxes should be Schwegler Type 1FF wall bat roosts which can be affixed to external walls and/or Type 2F general purpose bat boxes affixed to retained trees on site.
2. To provide additional bird nesting habitat, a total of 5 bird nest boxes should be installed on site. It is recommended that Schwegler type 1B or Schwegler 1N deep

nest boxes are used or integral boxes such as Schwegeler sparrow terrace 1SP or brick sparrow box. See appendix 4 for suggested bird boxes.

10. Information concerning bat protection and the planning system

10.1 Relevant Legislation. All bat species are protected under the Wildlife and Countryside Act (WCA) 1981 (as amended), the Countryside and Rights of Way Act 2000 and the Habitat Regulations 2010.

Under the WCA it is an offence for any person to intentionally kill, injure or take any wild bat; to intentionally disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection; to intentionally damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; to be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat; or to sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild bat, or any part of, or anything derived from a wild bat.

Under the Habitat Regulations 2010, it is an offence to (a) deliberately capture, injure or kills any wild animal of a European protected species (EPS), (b) deliberately disturb wild animals of any such species, (c) deliberately take or destroy the eggs of such an animal, or (d) damages or destroys a breeding site or resting place of such an animal. Deliberate disturbance of animals of a European protected species (EPS) includes in particular any disturbance which is likely to impair their ability (i) to survive, to breed or reproduce, or to rear or nurture their young; or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used. In order to minimise the risk of breaking the law it is essential to work with care to avoid harming bats, to be aware of the procedures to be followed if bats are found during works, and to commission surveys and expert advice as required to minimise the risk of reckless harm to bats.

10.2 Licences. Where it is proposed to carry out works which will damage / destroy a bat roost or disturb bats to a significant degree, an EPS licence must first be obtained from the Natural England (even if no bats are expected to be present when the work is carried out). The application for a license normally requires a full knowledge of the use of a site by bats, including species, numbers, and timings. Gathering this information usually involves surveying throughout the bat active season. The licence may require ongoing monitoring of the site following completion of the works.

Licences can only be issued if Natural England are satisfied that there is no satisfactory alternative to the development and that 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.

10.3 Planning and Wildlife. The March 2012 National Planning Policy Framework (NPPF) has replaced PPS9 (Planning Policy Statement on Biodiversity and Geological Conservation) as the relevant national planning guidance in relation to ecological issues.

Para 109 of NPPF states that the planning system should “contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”.

Para 117 of NPPF states that the planning system should “promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species, populations, linked to national and local targets”.

Para 118 of NPPF states that “When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site’s notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss

of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Para 119 of the NPPF makes it clear that “The presumption in favour of sustainable development (paragraph 14) does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined”. Therefore EPS will still be a material consideration when considering sustainable developments.

The accompanying ODPM / Defra Circular 06/2005 remains pertinent; circular 06/2005 is prescriptive in how planning officers should deal with protected species, see paragraphs 98 and 99:

- The presence of a protected species is a material consideration when considering a proposal that, if carried out, would be likely to result in harm to the species or its habitat (see ODPM/Defra Circular, para 98)
- LPAs should consider attaching planning conditions/entering into planning obligations to enable protection of species. They should also advise developers that they must comply with any statutory species protection issues affecting the site (ODPM/Defra Circular, para 98)
- The presence and extent to which protected species will be affected must be established before planning permission is granted. If not, a decision will have been made without all the facts (ODPM/Defra Circular, para 99)
- Any measures necessary to protect the species should be conditioned/planning obligations used, before the permission is granted. Conditions can also be placed on a permission in order to prevent development proceeding without a Habitats Regulations Licence (ODPM/Defra Circular, para 99).
- *The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances.*

Further to NPPF and ODPM Circular 06/2005, Section 40 of the Natural Environment and Rural Communities Act (2006) states that ‘Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity’. Section 40(3) also states that ‘conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat’.

11. Legislation in relation to barn owls

11.1 Barn owls are afforded full protection under the Wildlife and Countryside Act, 1981. Their inclusion in Schedule One protects against wilful disturbance whilst an owl is at or near the nest, and makes it an offence to carry out any of the following actions:

- Killing or injuring a barn owl
- Catching a barn owl
- Taking or destroying any egg of a barn owl
- Damaging or destroying the active nest site with eggs or young or before eggs are laid
- Disturbing the dependent young of a barn owl
- Possessing, offering for sale or selling a barn owl (but see exceptions)
- Release or allow the escape of a barn owl into the wild (but see exceptions)

These actions are punishable by a maximum fine, upon conviction, of £5,000. Nesting has been recorded in every month of the year.

11.2 Protection is also given under the Countryside and Rights of Way Act, 2000 against reckless disturbance whilst nesting.

11.3 Because of recent declines in numbers, and concern over their current status, barn owls are also listed in the EC Birds Directive and Appendix II of the Bern Convention. They are an Amber Listed species in “Birds of Conservation Concern” (RSPB).

12. References

BS42020. Biodiversity - Code of Practice for planning and development. British Standards Institution 2013.

Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System.

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The Conservation of Habitats and Species Regulations 2010.

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UKBAP 1995. *UK Biodiversity Action Plan*. <http://www.ukbap.org.uk/>

RSPB (2009) Barn owls and the law:

http://www.rspb.org.uk/advice/law/barn_owls_law/index.aspx

The Barn Owl Trust (<http://www.barnowltrust.org.uk/>)

Barn Owl Trust (2012) *Barn Owl Conservation Handbook*, Pelagic Publishing, Exeter

Appendix 1: Glossary of bat roost terms

Bat Roost Definitions:

Day roost: a place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.

Night roost: a place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.

Feeding roost: a place where individual bats or a few individuals rest or feed during the night but are rarely present by day.

Transitional / occasional roost: used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.

Swarming site: where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.

Mating sites: where mating takes place from later summer and can continue through winter.

Maternity roost: where female bats give birth and raise their young to independence.

Hibernation roost: where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.

Satellite roost: an alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

Appendix 2: Standard good working practices in relation to bats

Bats are small, mobile animals. Individual bats can fit into gaps 14-20mm wide. They can roost in a number of places including crevices between stonework, under roof and ridge tiles, in cavity walls, behind barge boards, in soffits and fascias and around window frames. Builders should always be aware of the potential for bats to be present in almost any small gap accessible from the outside in a building. The following guidelines are provided in order to reduce the risk of harm to individual bats.

- Roofs to be replaced, or which are parts of a building to be demolished, should be dismantled carefully by hand. Ridge tiles, roof tiles and coping stones should always be lifted upwards and not slid off as this may squash/crush bats.
- Re-pointing of crevices should be done between April and October when bats are active. Crevices should be fully inspected for bats using a torch prior to re-pointing.
- Any existing mortar to be raked should be done so by hand (not with a mechanical device).
- Look out for bats during construction works. Bats are opportunistic and may use gaps overnight that have been created during works carried out in the daytime.
- If any bats are found works should stop and the Bat Conservation Trust (0845 1300 228) or a suitably qualified bat ecologist should be contacted.

If it is necessary to pick a bat up always use gloves. It should be carefully caught in a cardboard box and kept in a quiet, dark place. The Bat Conservation Trust or a suitably qualified bat ecologist should be contacted.

Appendix 3: WYBG bat roost records

Grid Ref	Location Name	Date	Common Name	Recommended Name	Abundance	Record Type
SE2242109489	25 Lane Hackings Green, Lower Cumberworth, Denby Dale, HD8 8PW	24/07/2001	Common Pipistrelle	Pipistrellus pipistrellus	100-200 Count of Adult	Roost
SE2257508132	166 Barnsley Rd, Denby Dale, HD8 8QW	01/01/1988	Vesper Bat species	Vespertilionidae	Not Recorded Range	Roost (possible)
SE22940850	37 Sunnybank, Denby Dale, Kirklees	17/09/2003	Vesper Bat species	Vespertilionidae	1 Count of Adult	in building
SE2302209049	27 Greenside, Denby Dale, Kirklees	14/09/2005	Vesper Bat species	Vespertilionidae		Roost (possible)
SE2309909012	27 Rockwood Rise, Denby Dale, HD8 8SN	24/08/1996	Vesper Bat species	Vespertilionidae		Roost (possible)
SE2309909012	27 Rockwood Rise, Denby Dale, Kirklees	18/07/2005	Vesper Bat species	Vespertilionidae		Roost
SE2310509056	18 Rockwood Rise	26/07/1990	Common Pipistrelle	Pipistrellus pipistrellus	unknown Count of Adult	Roost (possible)
SE2310509056	18 Rockwood Rise, Denby Dale, HD8 8SN	26/07/1990	Common Pipistrelle	Pipistrellus pipistrellus	unknown Count of Adult	Roost (possible)
SE2313708873	Kirklees, 6 Woodside, Denby Dale	08/05/2000	Vesper Bat species	Vespertilionidae	18 Count of Adult	Roost
SE2317208900	12 Woodside, Denby Dale	08/05/1987	Pipistrellus	Pipistrellus		Roost (possible)
SE2317208900	12 Woodside, Denby Dale, HD8 8QX	20/04/1988	Pipistrellus	Pipistrellus	21-50 Count of Adult	Roost (maternity)
SE2361710142	23 Meadow View, Skelmanthorpe, HD8 9ET	11/07/1994	Pipistrellus	Pipistrellus	Not Recorded Range	Roost (possible)
SE238087	Stubbin House	12/05/2001	Common Pipistrelle	Pipistrellus pipistrellus	1 Count of Adult	Roost (possible)
SE2388009354	244 Wakefield Road, Denby Dale, Huddersfield, HD8 8SU	19/07/2001	Common Pipistrelle	Pipistrellus pipistrellus	51-100 Count of Adult	Roost

Appendix 4: Integral bat and bird box examples



Figure 5 - ibstock bat roost entrance brick
(www.ibstock.com)

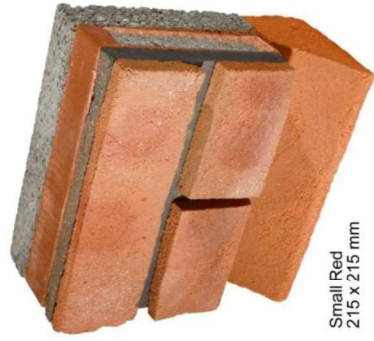


Figure 6 - ibstock enclosed bat box 'B'
(www.ibstock.com)



Figure 7 - Schwegler bat tube 1FR (www.nhbs.com)



Figure 8 - Schwegler swift and bat box IMF with bat access (www.nhbs.com)

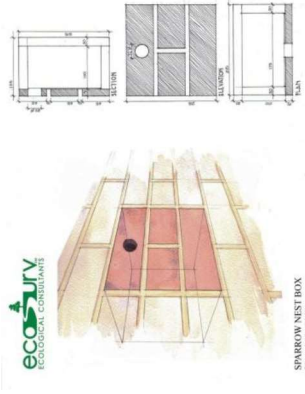


Figure 9 - Brick sparrow box (www.nhbs.com)



Figure 10 - Schwegler sparrow terrace 1SP
(www.nhbs.com)