John Drewett
Ecology

Barn at Cubble Head, Burtersett, Hawes, DL8 3PL

Bat and breeding bird scoping survey

Report date: 15 October 2013

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Contents

Record of report and revisions

Date	Details	Compiled by
15 October 2013	Original report	John Drewett BSc (Hons), MCIEEM

If we collected information about species of plants and animals at, over or near your property during this survey, basic details of these records will be forwarded to the most appropriate local biological recording centre after completion of the survey. As ecologists, we rely on these centres to supply information about the wildlife previously recorded in the vicinity of survey sites in order to assess the significance of survey results in the local context. We feel that it is important to ensure that the data held by these centres is as complete and up to date as possible, in order that we can continue to give the best advice to all of our clients. If you are not prepared to allow the data collected during our survey to be used in this way you must let us know.

1 Executive Summary

A bat and nesting bird scoping survey was commissioned in October 2013 in connection with the proposed restoration of the building.

The survey site is a disused and roofless stone barn on a north facing hillside to the west of Burtersett village.

The survey comprised a single daytime visit carried out on 8 October 2013.

No evidence of roosting bats or nesting birds was found during the survey.

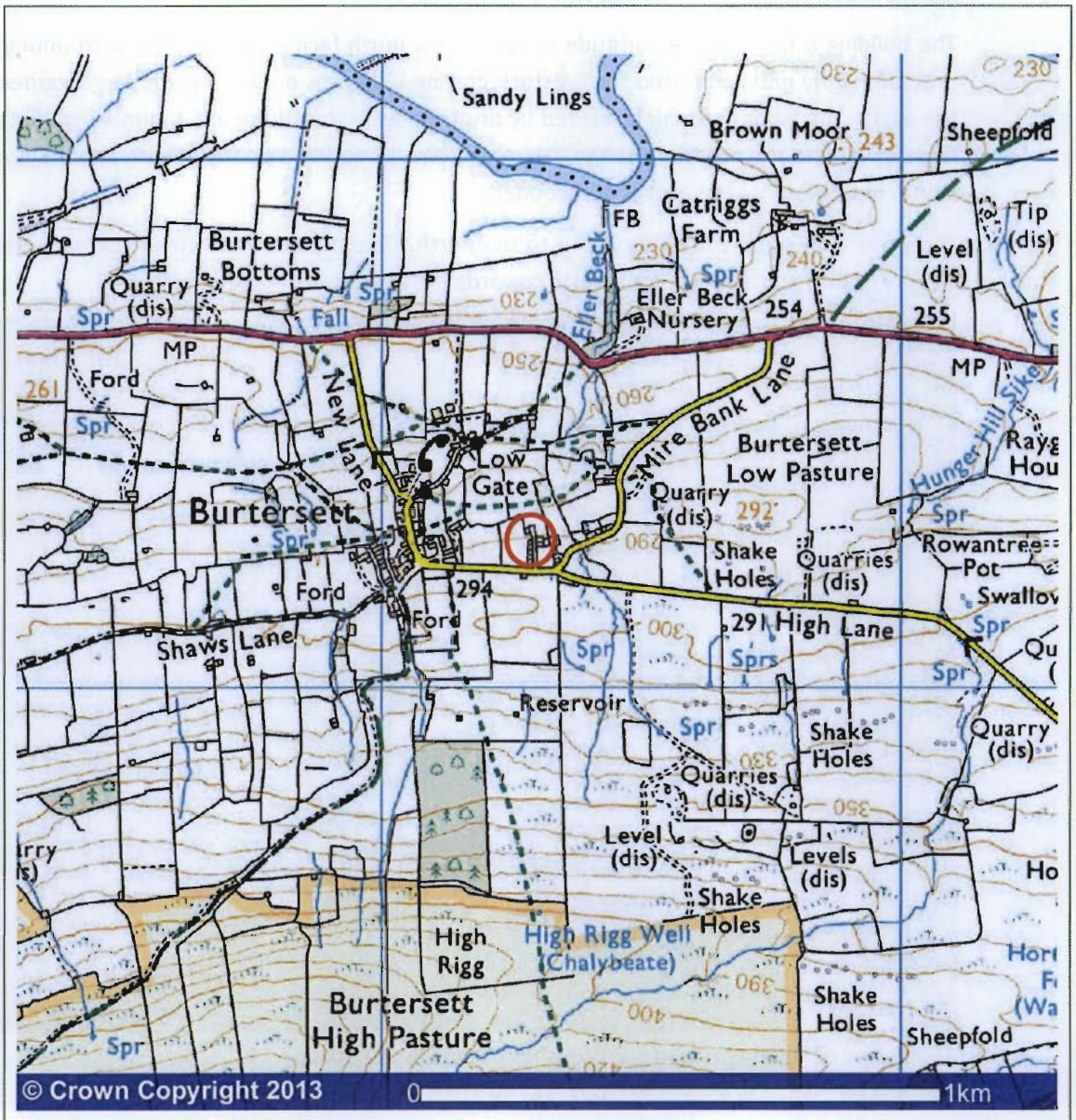
The building is considered to have low bat roost potential and low nesting bird potential. Barn Owls are considered unlikely to use the barn.

The proposed works are considered unlikely to have an adverse impact on bats or nesting birds.

Precautions have been advised to minimize the risk of accidentally entombing bats if pointing is carried out during winter.

2 The survey site

2.1 Location



John Drewett Ecology	Project	Date
No Man's Common, Arrathorne, Bedale, DL8 1NA 01677 451886 jdecology@btinternet.com	Cubble Head, Burtersett, DL8 3PL	Oct 2013
	Title Location plan	Grid Ref. SD893892

2.2 Surroundings

The surveyed building is located in a rural location adjacent to an existing house, but away from the main part of Burtersett village which is 150m to the west.

The building is located at an altitude of 286m on a north facing hillside. The surrounding land is predominantly grassland used for livestock grazing. There is a dwelling and large garden just to the east. The fields are mainly divided by drystone walls, but there are a number of mature field trees on land to the north of the site. There is a small woodland on the hillside about 500m to the south, but otherwise the area is not wooded.

The River Ure is approximately 700m to the north. There are several small watercourses in the vicinity of Burtersett which drain north towards the river.

Aerial view of survey site and surroundings (image dated 2002)

4 Survey methods

4.1 Desk study

- Consulted the Multi-Agency Geographic Information for the Countryside (MAGIC) website at http://magic.defra.gov.uk to check if there are any statutory nature conservation designations relating to the site or nearby.
- Asked North Yorkshire Bat Group for records of bats previously recorded within 2km of the survey site to gather any previous information about bats at the site and to put our findings in the context of existing information.
- Researched the features and habitats of the area through the use of maps and aerial photographs.

4.2 Field work

- Undertook a survey of habitats and landscape features on the site and within 300m
- Examined the building to record its main features especially those that may be suitable for roosting bats or other protected species.
- Took photographs of the site, its features and any evidence of bats to illustrate the findings in this report.
- Carried out a detailed check of the interior and exterior of buildings to look for bat droppings; feeding remains such as moth & butterfly wings; live bats; dead bats; stains and marks on surfaces indicating regular use by bats; urine marks; and areas devoid of cobwebs.
- Carried out a search for any evidence of nesting birds.

4.3 Surveyors working on the project

Name	Natural England licences*	Survey date(s)
John Drewett BSc (Hons), MCIEEM	WML-CL20 (Bats) WML-CL08 (GC Newts)	8 October 2013
**To confirm that the licensee is registered to use this licence contact Natural England licensing 0845 601 4523*		

The background research, analysis and report writing was carried out by John Drewett.

4.4 Equipment used

All surveys utilize a digital camera, binoculars, torches and ladders as necessary. No additional equipment was used in conducting this survey.

5 Existing information

5.1 Designated statutory protected sites

The survey site is located within the Yorkshire Dales National Park.

There are no statutory nature conservation designations applicable to the survey site or its immediate surroundings.

5.2 Existing records of protected species

The following records of bats previously recorded within 2km of the site were supplied by North Yorkshire Bat Group. This information has largely been assembled as a result of responding to enquiries from the public about bats. Some recent records have also been supplied by consultants carrying out survey work in connection with proposed developments. It does not, therefore, represent a comprehensive assessment of the local bat fauna.

Species	Site	Grid ref.	Date	Comment
Common Pipistrelle	Dales Countryside Museum	SD875899	03 Jun 2009	In flight
Noctule Bat	6 Brandymires, Hawes	SD877901	25 Jun 2013	In flight
Common Pipistrelle	6 Brandymires, Hawes	SD877901	25 Jun 2013	Roost of 1 bat in outbuilding roof
Daubenton's Bat	Haylands Hawes	SD877904	09 May 2003	Feeding
Pipistrelle species	Haylands Hawes	SD877904	09 May 2003	Feeding
Myotis bat sp.	Haylands Hawes	SD877904	09 May 2003	Feeding
Unknown	Cairngorme, Hawes	SD8789	03 Nov 1986	Old droppings only
Unknown	Re: Gayle Mill, Nr Hawes	SD8789	12 Sep 2003	
Common Pipistrelle	Eastbourne House, Burtersett Road, Hawes	SD879897	12 May 2008	Grounded bat
Common Pipistrelle	SD879897	SD879897	11 May 2008	Dead

6 Buildings

6.1 Barn

6.1.1 Description

The surveyed building is of stone construction. There are a few remaining roof timbers, but all of the roof covering is missing. The building is divided into two rooms by an internal wall.

The south wall has undergone some stabilization and an internal concrete block wall has been constructed behind it. The south wall is fairly well pointed. The lower sections of the other walls of the building are also pointed to varying degrees, but large areas of mortar are missing from the upper walls, internally and externally.

There are a number of openings through the walls, but also a good number of holes that provide potential access points to the wall fill. Generally holes are quite large and so offer little security against predatory animals.

View of building from the south

View of building from the west

View of building from the east

Remains of roof timbers, northern section

Interior wall, south end

Typical interior wall, southern room

Building viewed from the north

Typical interior wall, northern room

6.1.2 Evidence of bats

No bats, bat droppings, feeding remains or other evidence of bats was found in or around the building.

6.1.3 Bat roost potential

Bat roost potential is considered to be low. There is no roof to provide shelter and although there are a plethora of holes within the walls these are mostly too open to be attractive to bats. There is a slight risk that individual bats might choose to hibernate in some of the narrower crevices.

6.1.4 Other protected species

There is no evidence of nesting Barn Owls or any other nesting birds.

7 Assessment

7.1 Constraints on survey information

As the survey was carried out in October it was not possible to carry out bat emergence surveys. However, considering the low potential of the building this was not considered to pose a significant constraint on the survey results.

The survey was undertaken outside of the main season for nesting birds. At this time of year it would be expected that there would still be some evidence (old nests, droppings, etc.) if nesting birds had used the building, but none were found.

7.2 Evaluation of survey findings

The surveyed building is a disused stone barn. The roof is missing and there are numerous holes within the walls. The surrounding land is used predominantly for livestock grazing and although there is a good network of drystone walls, the building is not directly linked to rivers or woodlands by semi-natural features.

Although there are no features to restrict bats or birds accessing the building there is no evidence of use by either. Bat roost potential is considered to be low, but the occasional individual bat could find the walls suitable for hibernation. Barn owls are considered unlikely, but some birds such as Jackdaws may nest from time to time.

7.3 Potential impacts in absence of mitigation

The main risk is of accidentally entombing any bats that might choose to hibernate in the walls during pointing works.

7.4 Recommendations and mitigation

7.4.1 Minimizing risk to bats during works

To minimize any risks posed to bats that may be roosting or hibernating in the buildings on a casual basis, care must be taken during building works. In particular:

- When carrying out pointing works check for the presence of bats before pointing up holes. In stone walls bats may well be out of sight within the wall itself, so take extra care in such areas.
- Do not point up holes between November and February. Bats may be concealed deep in the wall at this time and be in hibernation, so will not arouse when disturbed.

7.4.2 Procedure if bats are found

If bats are found during works then all works in the immediate area MUST STOP. Contact John Drewett Ecology for further advice on 01677 451886.

8 Background information and references

8.1 Bats: Legislation and policy guidance

Bats and their roost sites are protected by the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act, 1981 (as amended). This protection applies at all times, even if the bats are absent at the time that an activity is carried out.

Although many surveys are undertaken because Local Planning Authorities must consider the impact of a development on protected species during their decision making, it should be noted that bats and their roosts are protected, whether or not a survey has been requested, and that ignorance of the presence of bats is no defence against prosecution. Fines of up to £5000 and a six month prison sentence can be imposed for each offence.

Among other things it is an offence to:-

- Deliberately capture (or take), injure or kill a bat
- Deliberately disturb bats where the disturbance is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young or
- Deliberately disturb bats which is likely to impair their ability in the case of hibernating or migratory species, to hibernate or migrate
- Deliberately disturb bats, in particular any disturbance which is likely to affect significantly the local distribution or abundance of the species to which they belong
- Intentionally or recklessly disturb any bat while it is occupying a structure or place which it uses for shelter or protection
- Intentionally or recklessly obstruct access to any structure or place which any bat uses for shelter or protection
- Damage or destroy a breeding site or resting place of any bat

The National Planning Policy Framework 2012 recognises that the planning system should perform an environmental role – contributing to protecting and enhancing our natural, built and historic environment. This should include "moving from a net loss of bio-diversity to achieving net gains for nature". Planning should "promote...recovery of priority species populations". Paragraph 119 states that "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". This section also states that "opportunities to incorporate biodiversity in or around developments should be encouraged". Significantly, paragraph 119 states that "The presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined".

Where it is proposed to carry out works which will have an adverse impact on bats or on a bat roost, a European Protected Species (EPS) licence must first be obtained from Natural England,

even if no bats are expected to be present when the work is carried out. Granting of planning permission does not override this requirement.

Bat conservation is also part of the biodiversity action plan process. The Convention on Biological Diversity, signed in Rio de Janeiro in 1992, requires states to develop national strategies and to undertake actions aimed at maintaining or restoring a wide range of biodiversity.

In England & Wales, the Natural Environment and Rural Communities (NERC) Act, 2006 imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, *"to have due regard, as far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity"*. It notes that *"conserving biodiversity includes restoring or enhancing a population or habitat"*. Local authorities frequently require protected species surveys to be submitted with planning applications so that they can fully take conservation into account in their decision making.

An EPS licence application requires details of the proposed works, the bats which may be affected and the mitigation proposed to maintain the favourable status of bats in the region. The application is usually drawn up on behalf of the client by a specialist ecological consultant. The consultant is required to check that work is proceeding in accordance with the method statement and to also carry out monitoring of the impact on bats for some time after completion of the works – the length of monitoring is dependent on the species, development and expected impact of the development on protected species. Natural England aims to make a decision on licence applications within 30 working days of receipt. There is no guarantee that a licence will be granted and there is no fast track process to obtaining one. Applications can only be made once planning permission has already been obtained (where appropriate).

EPS licences can only be issued if Natural England is 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.

8.2 Brief summary of bat biology

Bats are the only mammals to have developed powered flight. They are the second largest group of mammals in the world, with almost 1000 different species. In Britain 17 species occur, with the range of species declining towards the north. All British bats feed solely on invertebrates.

British bats live in crevices in trees, caves, buildings, bridges, tunnels and other structures. They are long-lived animals which use roost sites to which they return year after year. In summer females are usually colonial, each species gathering together in warm maternity roosts to give birth to their single young. Males often spend the summer alone or in small groups. Several different roosts may be used over a year, the bats moving between these places depending on time of year, prevailing weather and other conditions.

In winter bats hibernate, a process of long periods of deep torpor punctuated by regular arousals. Their body temperature falls close to the ambient temperature of their chosen hibernaculum and their heart rate and metabolism drop dramatically. In this state they use little energy, allowing them to survive until spring on their fat reserves. They are very sensitive to temperature changes

at this time. Changes may cause them to wake, a process which uses considerable energy reserves. Many species hibernate in cool, stable underground sites such as caves and tunnels, although individual bats may be found in almost any small crevice. Summer roosts and hibernation sites for the same bats are normally located in different places.

For more than 50 years bats suffered a major decline. The reasons are many and varied, but include destruction of roost sites, a reduction in insect prey and direct and indirect poisoning from toxic chemicals. As a result of greater protection, some are now doing better, but they are still vulnerable and threatened.

The survival of a colony of bats depends on there being a range of suitable summer roost sites, hibernation sites and feeding areas within a reasonable distance. Deep crevices in which they can roost, woodland, hedgerows and freshwater nearby all help to provide the conditions and food they need. A continuous linked network of good habitat provides ideal conditions. Some species will follow hedgerows and woodland edges and rivers where their food is concentrated whilst others fly higher and largely ignore features on the ground. Almost anywhere, even city centres, will be visited by bats at some time.

Each species of bat is different in the places it roosts, the food it eats, how it hunts and what it requires. That is just one reason why a bat survey must identify the species and numbers of bats present on a site, their roost locations, access points, feeding areas, etc., before determining any mitigation necessary.

8.3 References

- Anon (2012) *National Planning Policy Framework,* Department for Communities and Local Government
- Dietz C, Helversen O & Nill D (2009) *Bats of Britain, Europe & Northwest Africa*, A&C Black
- Hundt L (2012) *Bat Surveys: Good Practice Guidelines, 2nd edition,* Bat Conservation Trust
- Mitchell-Jones A J (2004) *Bat mitigation guidelines*, English Nature.
- Mitchell-Jones A J & McLeish A P (2004) *Bat Workers' Manual*, JNCC.
- Wray S, Wells D, Long E & Mitchell-Jones A J (2010) *Valuing Bats in Ecological Impact Assessment*, In Practice No. 70, pp. 23-25