

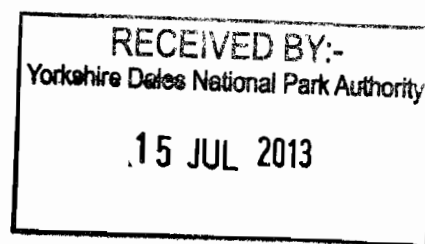
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BAT SURVEY

15 Back Lane, Sedbergh



1692

BAT & NESTING BIRD SURVEY

Instructions

Investigate for the presence or absence of bat species as part of a planning application for the modification of 15 Back Lane, Sedbergh.

Professional responsibility

This report has been commissioned and the actions of the surveyor have been made in accordance with the Code of Professional Conduct for the Institute of Ecology and Environmental Management. (www.ieem.org.uk) and the Royal Institution of Chartered Surveyors (www.rics.org.uk)

Accuracy of report

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, bats and nesting birds are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and or in their interaction with bat species and nesting birds. If bats or nesting birds are found during a work programme and continuing the work programme could result in their disturbance, injury or death either directly or indirectly an offence may be committed.

These species may only be disturbed, injured or killed under license.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

This report has been printed on recycled paper as part of our commitment to achieving both the ISO 9001 Quality Assurance and ISO 14001 Environmental Assurance standards. Envirotech has been awarded the gold standard by the Cumbria Business Environmental Network for its Environmental management systems.

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1. Introduction

1.1 Site Description

The site consists of a large end terraced, pointed stone residential building with a substantial slate roof. It is located to the South East of Sedbergh Town Centre in the Yorkshire Dales National Park.

1.2 Proposed Works

A listed building application is to be submitted for the building to be modified with the middle portion of the building being re-roofed.

1.3 Aims of Study

To ensure that the proposed development does not affect any bat species which is listed under the Conservation (Natural Habitats, &c) Regulations 2010 which implements the EC Directive 92/43/EEC in the United Kingdom the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000.

The survey will:-

- ⇒ Identify the past and/or current use of the site by bat species
- ⇒ Assess the likely impact of the proposed development on these species
- ⇒ Provide a basis upon which to propose mitigation (if required) for bat species affected by the development

2 Methodology

The methods used comply with those described in BCT (2012). This is a progressive assessment starting with a broad habitat assessment then increasingly more thorough survey methods, until a level is reached at which additional survey effort is unlikely to provide additional useful information about the site.

2.1 Desk Study

- ⇒ Likely bat roosting and feeding sites adjacent to the site were identified from aerial photography. This allows us to determine likely commuting routes into and off the site.
- ⇒ A records search was undertaken of the Envirotech dataset. The purpose of a records search is to establish the species of bat found in the local area and any past history of bats at the site. No additional data searches were considered necessary at this site as the bat species likely to be found in the local area could be adequately determined from the records searched.

2.2 Field Survey

2.2.1 Methodology

- ⇒ Field assessment of adjacent bat feeding and roosting sites made following a review of aerial photography: Thus allowing us to cross check our interpretation of aerial photography with actual habitat on the ground.

- ⇒ Thorough inspection of the walls and eaves using a torch and 10x42 binoculars to locate potential bat roosts: Gaps and cracks in the walls or under the eaves and soffits may provide access to the building by bats. Where possible all gaps and cracks judged to be of a suitable size for bats to take entry to the building were inspected either from the ground or the top of a ladder. Where appropriate an endoscope was used to fully inspect these gaps internally.
- ⇒ Thorough inspection of the roof using a torch and 10x42 binoculars to locate potential bat roosts: Gaps under the tiles, ridge lines and flashing may provide suitable roosts for bats. All gaps and cracks judged to be of a suitable size for bats to take entry to the building were inspected either from the ground or the top of a ladder. Using binoculars and a torch to illuminate the gaps underneath the tiles and ridge lines it is often possible to see residual evidence of bats such as droppings, scratch marks or bats themselves.
- ⇒ Thorough inspection of interior and exterior of building to look for signs of bats such as grease or scratch marks, bat droppings and feeding detritus.
- ⇒ Thorough search for detritus associated with bat feeding perches and roosts:- These roosts are usually associated with Brown Long-eared (*Plecotus auritus*) bats in roof voids and under eaves.

2.2.2 Timing

Date of Visit	Site/ Local area Inspection	Emergence Survey
26 th June 2013	13:30 - 14:30	Not required

2.2.3 Weather conditions

Site conditions can have a large impact upon the results of an emergence survey but have little impact on a daytime inspection/ scoping survey

- Cloud cover 20%
- Temperature: 17° C
- Sunny

2.2.4 Personnel

The survey was carried out by

Matthew Thomas BSc (Hons) and Eve Grayson

3 Results

3.1 Desk Study

There are records of four bat species on the datasets within 1km. Daubenton's (*Myotis daubentoni*), Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Brandt's (*Myotis brandtii*) are all present within 300m of the site.

Having visited the area we are of the opinion that the records on the Envirotech dataset are likely to be under-representative of the species of bats in the local area.

From the pre-existing records, a review of aerial photography, a field assessment of the area adjacent to the site and the experience of the surveyor, bat species which may occur adjacent to the site are:-

- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Whiskered (*Myotis mystacinus*)
- Brandt's (*Myotis brandtii*)
- Alcatheo (*Myotis alcatheo*)
- Noctule (*Nyctalus noctula*)
- Brown Long-Eared (*Plecotus auritus*)
- Natterer's (*Myotis nattereri*)
- Daubenton's (*Myotis daubentonii*)

This assessment has been made on the following basis:

Landscapes can be divided into four categories for use by bats; open, closed, edge and water. Each type of landscape category is suitable for use by a different combination of bat species. We would classify the landscape immediately adjacent to the site as "edge", within 1km of the site the landscape could also be described as "edge", "water", "closed" and "open".

The gardens and treelines adjacent to the site were judged to be the primary commuting routes for bats next to the site. The River Rawthey corridor and its associated treelines may also be an important commuting route close to the site. These were judged to be **high quality** foraging areas for bats.

The River Rawthey to the South East and South of the site provides a resource which would be favourable for bats which feed in "water" landscapes such as Soprano Pipistrelle and Daubenton's. Soprano Pipistrelle are not always confined to landscapes including water bodies, although they have a strong preference for them. In addition, Alcatheo bats are also known to have a preference for foraging in high tree canopies over water bodies.

Both Natterer's (*Myotis nattereri*) and Brown Long-eared (*Plecotus auritus*) bats prefer to roost or fly inside enclosed spaces before emerging. There are roof voids within the building which are of a suitable size for these species. These bats are likely to be found feeding in woodland to the North East or the South West of the site.

Noctule (*Nyctalus noctula*) are rarely found roosting in buildings but have been known to do so. These species of bat disperse widely from their roosts, which tend to be in trees, to feed. We would judge it unlikely they would roost in a building such as those surveyed but are likely to be found in the wider area.

Whiskered (*Myotis mystacinus*), Brandt's (*Myotis brandtii*) and Common Pipistrelle (*Pipistrellus pipistrellus*) are likely to make use of the open fields and gardens in the local area to forage, as well as tree lines along the river corridor and woodland edge.

3.2 Field Survey

3.2.1 Habitat Description

The site is a bed and breakfast property which lies within the town of Sedbergh, Yorkshire Dales National Park (SD 660 921) see Figure 1.

The site is set in a semi-rural location, surrounded primarily by open grassland/pasture and mature gardens. The River Rawthey runs approximately 600m to the South East and South of the site with associated mature treelines.

Several patches of broadleaved woodland are present within the local area, most notably, a patch ~800m to the South West of the site and second ~200m to the North-East of the site.



Figure 1. OS Map of local area

The site includes a large residential building with pointed natural stone exterior walls and a substantial slate roof.

An annotated satellite image of the surrounding habitat is shown on Figure 2.

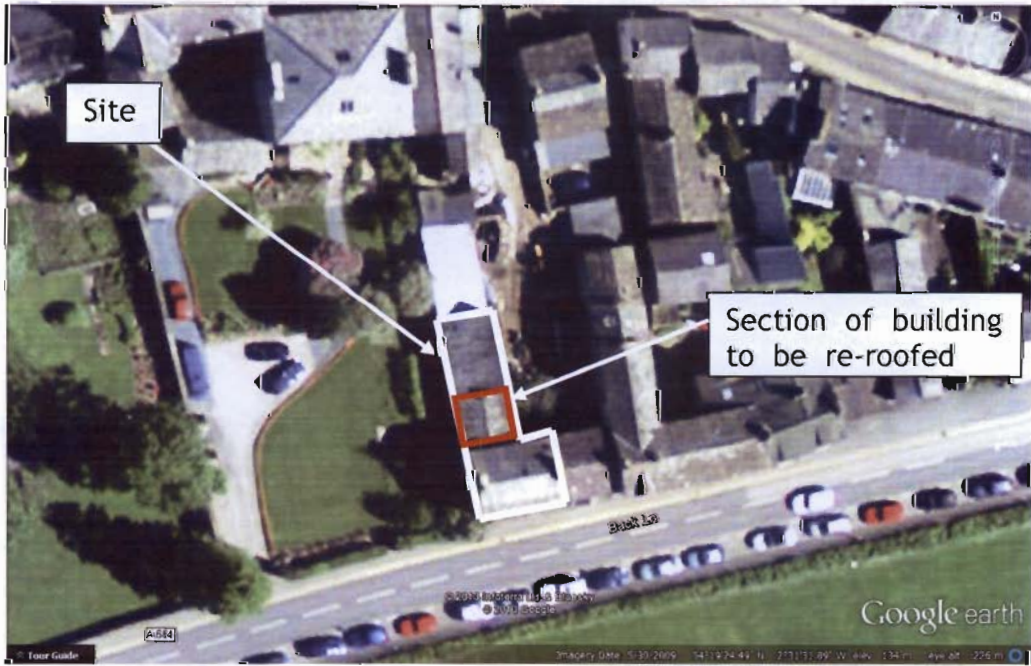
The site lies in a semi-rural location

Broadleaved woodland



Open pasture and grassland

River Rawthey



Site

Section of building to be re-roofed

Figure 2- Satellite Image of surrounding area

3.2.2 *Bat Roost Survey*

The exterior walls of the building were inspected for gaps, cracks, areas of rotten wood and or signs of bats such as grease marks, bat droppings and feeding detritus. Where appropriate, ladders, binoculars and an endoscope were used to inspect areas above head height. All areas of the wall affected by work could be fully inspected.

The walls are of pointed natural stone. Walls on all elevations of the affected section of the building are well-sealed with no apparent gaps or cracks. No suitable roost sites were located in them. No Evidence of use by bats could be found (droppings and staining associated with roosting bats would have been easily detected on the white walls).

The roof is of slate construction. The roof could be easily inspected from the ground with close focus binoculars and a 1,000,000 candle power torch. Occasional raised slates were found to provide a sufficient space for roosting bats on both the Eastern and Western aspect of the roof, though the ridge tiles were relatively well-sealed. Upon inspection, no indications of use by bats was apparent.

Internally, access to the roof void of the affected section of the building is via the first floor of an adjacent section of the building. The roof void is felt-lined and lath and plastered. There are some cracks in the beams but the void is heavily cobwebbed along the ridgeline throughout.

The roof void of the affected section of the building has a window about a metre square in size, which ensures the void is relatively well lit. This would make the void less suitable for bats. No gaps were visible on the Northern gable wall. No droppings were located in this void, with no other signs of bat activity, such as staining and feeding detritus.

3.2.4 *Emergence survey*

The daytime inspection revealed that the risk to bats at the site was negligible. In accordance with BCT (2012) no emergence survey was required to confirm the absence of bats at the site.

4 Assessment

4.1 *Constraints*

We judge that the site survey is sufficient to address the minimum risk to bats at the site. Parts of the slate roof were difficult to view as only a small courtyard was located to the East of the affected building and trees and shrubs obscure the roof to the West. An emergence survey would not provide additional useful information about the site. A thorough inspection of the roof void and surrounding areas indicates the presence of bat roosts is unlikely.

4.2 *Interpretation*

4.2.1 *Presence/ absence*

We consider that the building has a number of potential roost sites, though there is no evidence to suggest current or past use by bats.

4.2.2 Population size class assessment

From a review of adjacent habitat the maximum number of bats that are likely to use the area around the site is of the magnitude 10-100 (medium).

4.2.3 Site status assessment

The site is likely to be of little significance to bats. It offers some potential for roosting bats, but no signs of current or past use were identified.

4.3 Potential Impacts

4.3.1 Bat Roosts

4.3.1.1 Pre and mid-activity impacts

A worst case scenario will be considered in addressing potential impacts at the site without mitigation.

No signs of past maternity or gathering roosts were found at the site during the survey. The potential for a maternity or gathering roost in the building is judged to be low due to the absence of highly suitable roost sites. Evidence of past use of the site by large numbers of bats such as would occur in a maternity or gathering roost, such as staining on the roof or walls, was absent. We judge there is no risk to a maternity colony or gathering roost at this site from the proposed work.

We judge there is a very low risk of disturbing bats in or loss of transitional, bachelor or non breeding female roost sites. On balance there are likely to be numerous other more suitable sites in other parts of the surveyed building, other buildings, and trees in the wider area. Likely impacts are considered to be low. There may be a risk of disturbance to bats which opportunistically use parts of the roof or walls as they are opened during work and new roosting opportunities are made available.

In our experience lek sites are commonly found in proximity to the main feeding and commuting routes. The primary commuting and feeding area at the site were judged to be the gardens and tree lines around the site as well as the river corridor, which were judged to be high quality. There were no potential lek sites identified in the building which are also close enough to them to be used by male bats for leks. It is therefore unlikely there will be a loss of or disturbance to lek sites.

There are no areas of rotten wood in the building which offer crevices which could be suitable for hibernating Pipistrelle species bats. There are no areas of the building which are sufficiently damp and cool which would be ideal for hibernating Myotis species bats. There is very little evidence and limited potential for hibernation at the site; it is therefore unlikely there will be loss of hibernation sites.

There is unlikely to be any loss of a swarming site. Swarming sites are generally found at or near hibernation sites. We judge that the site is unlikely to be used by Myotis species bats and Brown Long-eared (*Plecotus auritus*) which have been known to swarm as there are no hibernation sites for these species in the building.

Without mitigation, there is considered to be a very low risk of the alteration or loss of

occasional, roost sites for bats at the site. It is unlikely that this site would be used by a large number of bats the proposed work is unlikely to have a significant impact on their local distribution.

4.3.1.2 Long term impacts

There is on balance a low risk of the disturbance of roost sites for bats.

It is the opinion of the surveyor that the loss or creation of roosts for crevice dwelling bats during work will not have a significant long term impact on the local population of the species.

4.3.1.3 Post activity interference impacts

There is unlikely to be disturbance to feeding bats during the post construction phase of the project. There is already some artificial illumination and noise at the site from both the site and surrounding houses. Bats utilising the local area to forage are likely to be accustomed to such disturbance.

4.3.1.4 Other impacts

It is our opinion that there will be no significant other negative impacts relating to the proposed work which may affect bat species.

4.3.2 Bat Foraging and Commuting Habitat

There is unlikely to be a disruption to any commuting routes at the site.

There is unlikely to be a disturbance to feeding bats during and after the construction phase of the project. It is judged that the foraging areas near the site will be unaffected by the proposed work.

4.4 Legislation and Policy Guidance

4.4.1 Legislative context - Bats

All bat species are protected under Section 39 of the 2010 Conservation (Natural Habitats, &c.) Regulations the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act.

Annex IV of the *Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (EC Habitats Directive) lists animal and plant species of Community interest in need of strict protection; this includes all bat species.

In the UK, the EC Habitats Directive has been transposed into national laws by means of the Conservation (Natural Habitats, &c.) Regulations 2010 (as amended). These are commonly and collectively known as the 'Habitats Regulations' and they give bats, their breeding sites and resting places a high level of strict protection.

In summary, it is a criminal offence to:

- ⇒ capture or kill a bat;
- ⇒ disturb a bat whilst in a place of shelter or rest; or

⇒ damage or destroy a bat's breeding site or resting place.

The breeding sites and resting places of bats are usually known as 'roosts' and resting places also include, for example, feeding perches where a bat consumes its prey. Bat roosts are protected even when bats are not present.

Prosecution could result in imprisonment, fines of £5,000 per animal affected and confiscation of vehicles and equipment used.

It is essential that all contractors are instructed to work with particular care in order to avoid disturbing or harming bats. All those working at the site must be aware of the procedures to be followed if bats are found during works. Project Managers must commission surveys and expert advice as required to minimise the risk of reckless harm to bats.

Natural England advises that, if possible, any works at bat roosts should be undertaken so as not to affect the bats and/or their roosts.

With careful working, it is judged that no significant disturbance to bats will occur at the site.

5 Recommendations and Mitigation

5.1 Further Survey

We consider that the risk to bats in the building will remain low and additional survey work is unlikely to provide additional information about the site prior to the listed building consent determination.

5.2 Mitigation Measures

5.2.1 Mitigation for Roost Sites

Natural England requires that mitigation addresses the impacts picked up by the site assessment, as follows:-

- Quantitative characteristics: There should be no net loss of roost sites, and in fact where significant impacts are predicted there will be an expectation that compensation will provide an enhanced resource compared with that to be lost. The reasoning behind this concept is that the acceptability of newly created roosts by bats is not predictable
- Qualitative characteristics: the plans should aim to replace like with like. As an extreme example, it would be unacceptable to replace maternity roosts with hibernation sites.
- Functional characteristics: compensation should aim to ensure that the affected bat population can function as before. This may require attention to the environment around the roost.

Natural England also recommends that precautions are taken to avoid the deliberate killing or injury of bats during development work at the site.

As a precautionary approach the following guidelines will be adhered to.

1. All contractors on the site will be made aware of the possible presence of bats prior to the commencement of work.
2. Contractors will be provided with the contact details of an appropriately qualified individual who can provide advice in relation to bats at any time during work. In the event that bats are found during work, unless the action has already been cleared by a suitably qualified individual, **all work will cease** and an appropriately qualified individual will be contacted for further advice.
3. **Contractors will be observant during work for bats which may use the building if new areas of the roof are exposed and left open over night. Bats are opportunistic and may make use of gaps opened up during work overnight. Complete re-roofing as quickly as possible once it commences.**
4. If it is necessary to remove a bat to avoid it being harmed, gloves should be worn. It should be carefully caught in a cardboard box and kept in the dark in a quiet place until it can be released at dusk near to where it was found, or moved to an undisturbed part of the building, with outside access, and placed in a location safe from predators.
5. **If bats or bat roosts are found during work, all work should cease** as per point 2. The site will need to be re-assessed in regard to its use by bats. A Natural England license may be required if continuing work is, on balance, likely to result in the disturbance, killing or injury of bats or the alteration, destruction or obstruction of roost site.
6. **Remove slates by hand only.**
7. Two roof verge roosts should be created post-construction to improve the suitability of the building for bats (see Appendix 3).

Following English Nature (Natural England) guidance Mitchell-Jones (2004), if these guidelines are followed we would consider that on balance, a disturbance to bat species which could be contrary to the 2010 Habitat Regulations and Wildlife and Countryside Act 1981 (as amended) is unlikely. **If bats are found prior to or during work a license Mitigation for Foraging and Commuting Habitat**

No specific mitigation for foraging and commuting habitat is necessary. The habitat surrounding the site does not change.

5.3 Requirement for Habitats Regulations (EPS) Licence

At this stage, we judge that a Natural England license will not be required to cover work on the building. No bats were confirmed as roosting at the site, the loss of potential roost sites will be avoided and no significant disturbance to bats will occur, so long as the recommendations at paragraphs 5.1 and 5.2 of this report are followed.

If bats are disturbed or bats are found as a result of work, **all work must cease** as per point 5 above and the site will need to be re-assessed by a suitably qualified person with regard to its use by bats. A **Natural England license** may be required if continuing work is, on balance, likely to result in the disturbance, killing or injury of bats or the alteration,

destruction or obstruction of a roost site.

6 Summary

A listed building application is to be submitted for the middle section of the building at 15 Back Lane, Sedbergh to be re-roofed.

A bat survey was requested following guidance under Regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 2010, the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000.

The survey was undertaken following a methodology which would be likely to identify past or current use of the site by bat species. The level of survey was in accordance with published guidelines (BCT, 2012).

The site survey found no evidence of use by bats of the building for roosting but identified some potential roost sites as well as possible take up and use of new roost sites created during the re-roofing works.

It is judged that the work can take place without affecting bats, **so long as the recommendations in paragraphs 5.1 and 5.2 of this report are followed.**

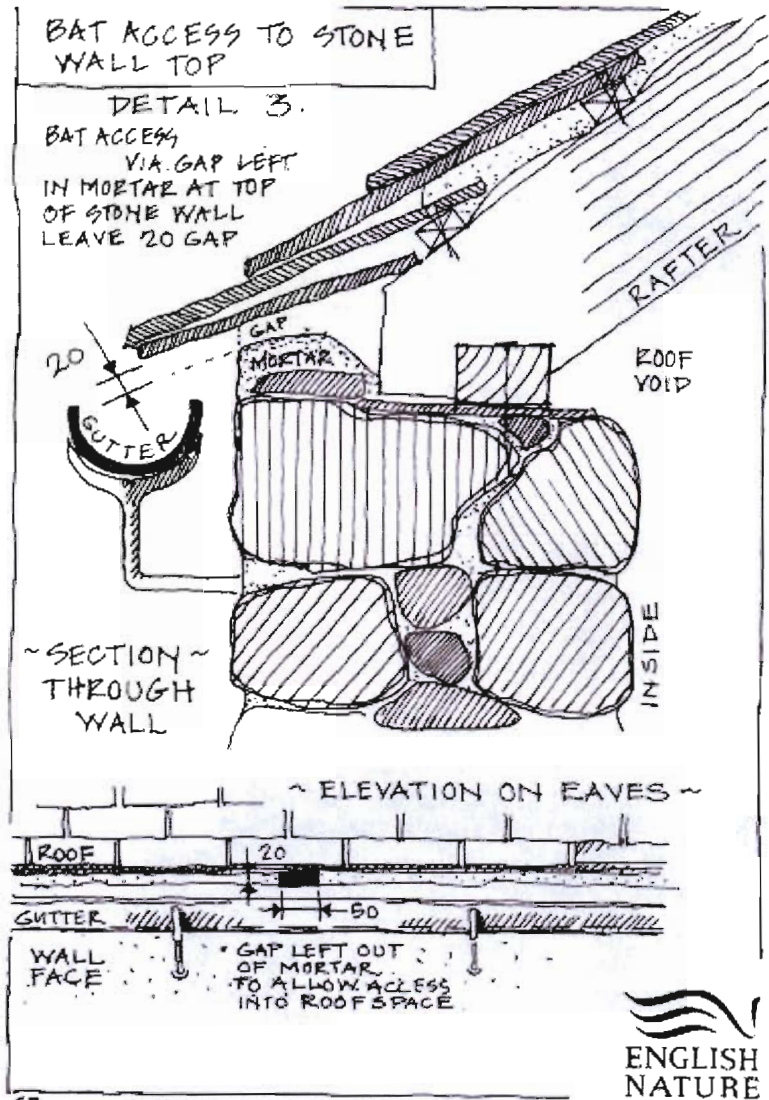
On the basis of survey information, specialist knowledge of bat species and the mitigation that has been proposed, it is considered that on balance the proposed activity is reasonably unlikely to result in an offence under regulation 39 of the Conservation (Natural Habitats, &c.) Regulations 2010. We do not consider there to be a need for a Natural England licence at this time.

I certify that this report reflects my objective opinion of the facts found in relation to the instruction received and information available based upon the methodology, assumptions and constraints detailed within this report.

Signed

Andrew Gardner BSc (Hons), MSc, MIEEM, MRICS, CEnv, Dip NDEA
Director
Wednesday, 03 July 2013

Appendix 3. Roof top access



SP The above information is for guidance only and may not be appropriate in all circumstances. It is advised to seek professional advice.
 English Nature, Cumbria, Carr, Jirice House, Hurley Hill, Cheadle Road, Skelton LA8 7SL, Tel: 01539 752244, Fax: 01539 752444, Email: jirice@eng.nature.gov.uk

7 References

Information from the following sources has been used in preparing the survey report.

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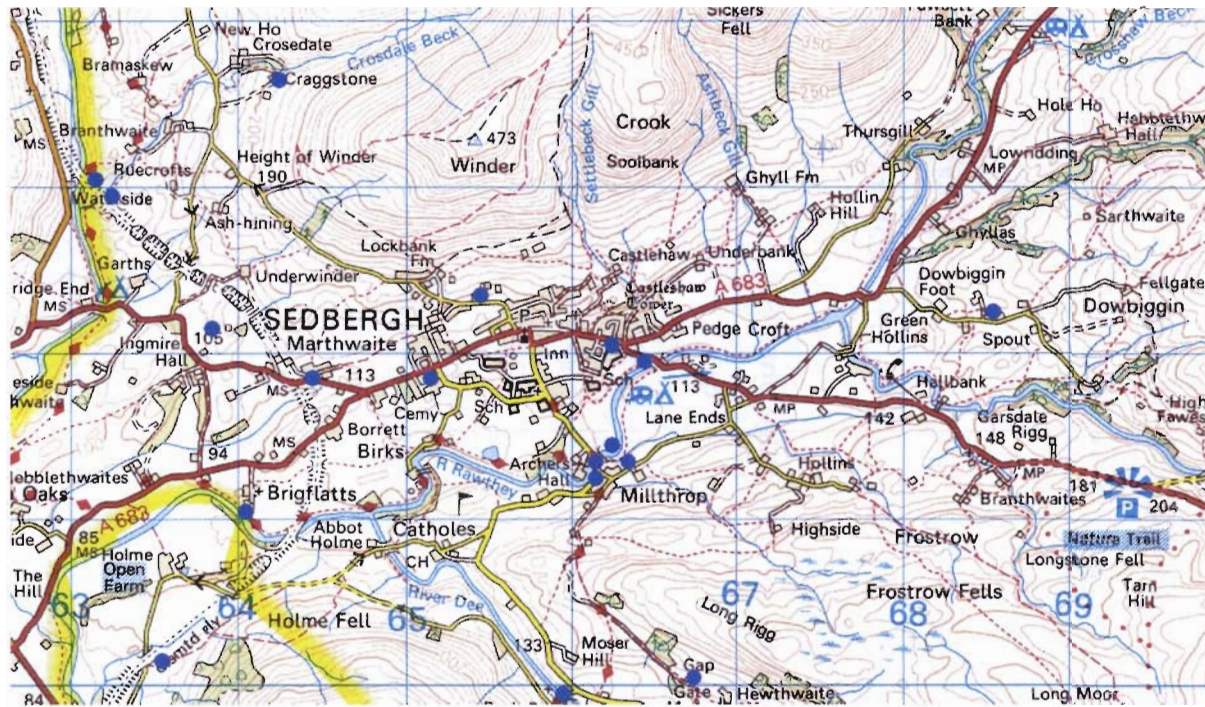
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Appendix 1 Previous Survey Information

Map of records from Envirotech Database for Sedbergh area. Blue dots represent bats records.



Appendix 2 Photographs

