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# Activity Survey Report – Bats.

# Buildings 1 & 2

# West Cumberland Infirmary







Prepared for North Cumbria University Hospitals NHS Trust



## **Quality Assurance**

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S.A.P Ecology & Environmental Ltd will submit any records of protected species to the appropriate biological records centre on an annual basis.



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## 1. Executive Summary

#### 1.1 Summary

S.A.P Ecology & Environmental Ltd were contacted by CCL Solutions, on behalf of North Cumbria University Hospitals NHS Trust. The Trust propose to carry out a number of planned phased demolitions at the West Cumberland Infirmary as part of an improvement project.

S.A.P Ecology and Environmental Ltd were commissioned to undertake a preliminary building assessment of buildings 1 and 2, to assess their suitability to support roosting bats. The assessment was carried out on Thursday 1<sup>st</sup> August 2019 (SAP report ref: CCL102/004/001). The assessment recorded multiple features on the external of both buildings 1 and 2 which could provide bats with roosting opportunities. Building 1 was assigned a low level of suitability to support roosting bats and building 2 was assigned a moderate level of suitability to support roosting bats.

Subsequent activity surveys were commissioned to confirm if bats are indeed using the features recorded in the preliminary assessment. All vantage points on both buildings were covered over three different dates and surveys took the form of one dawn return to roost survey on 8<sup>th</sup> August 2019, one dusk emergence survey on 8<sup>th</sup> August 2019 and one dawn return to roost survey on 10<sup>th</sup> September 2019. After the first survey was completed on building 2, the building was downgraded from 'moderate' suitability to 'low' suitability due to the low activity experienced during the surveys, and therefore a second survey was not considered necessary.

The results of the 2019 activity surveys concluded that no bat roosts are currently present within the buildings. A low level of bat activity was recorded during the surveys and comprised of bats feeding mainly in front of the western aspect of building 2 and in the field south of the buildings. Bats were recorded commuting past the buildings. Sound analysis of recordings taken confirm the bat species active in the area to be both common and soprano pipistrelles.

The proposed demolition works will not have an impact on bats, nor will the works have any effect on commuting and feeding opportunities for bats within the surrounding area. Works can proceed at any time in relation to bats.

#### 1.2 Recommendations

- No bat roosts were recorded within buildings 1 and 2 and therefore the demolition can go ahead at any time in relation to bats;
- If bats are found during demolition, all works must cease, until an appropriate protected species licence has been attained;
- If demolition works are to be carried out during the breeding bird season (March October inclusive), a breeding bird check should be undertaken (no more than two days prior to works). If breeding birds are found, works will need to be postponed until birds have fledged of their own accord.



## 2. Introduction

### 2.1 Project background

S.A.P Ecology & Environmental Ltd were contacted by CCL Solutions, on behalf of North Cumbria University Hospitals NHS Trust (hereafter referred to as 'the Trust'). The Trust are in the process of restructuring West Cumberland Hospital and current plans include the demolitions of two buildings (buildings 1 and 2).

As part of the development, S.A.P Ecology & Environmental Ltd were commissioned to undertake preliminary building assessments in relation to bats and breeding birds of the buildings highlighted for demolition. A preliminary building assessment was carried out on Thursday 1<sup>st</sup> August 2019 (SAP report ref: CCL102/004/001). The assessment recorded a number of features such as gaps in lead flashing, in door frames, in soffit boxes and in window frames of building 1, and gaps in soffit boxes, facia boards, missing mortar, gaps at wallheads and under windowsills of building 2. Internal survey of either building was not possible. Building 1 was assigned a low level of suitability for roosting bats and building 2 was assigned a moderate level of suitability for roosting bats.

Where suitable, buildings 1 and 2 will be referred to collectively as 'the buildings' in the remainder of this document.

Recommendations were made for one bat activity survey to be carried out on building 1 and two bat activity surveys on building 2, during the bat activity season (May – September, inclusive) to determine if bats are using any of the features highlighted during the survey to roost. This report relates to the results of those activity surveys.

Building 1 is located at grid reference NX 98951 15876 and building 2 is located at grid reference NX 98935 15863. Both buildings are located within the grounds of the West Cumberland Infirmary, Hensingham, Whitehaven, directly off Homewood Road and are situated in an urban environment, with several residential buildings in the immediate vicinity. The surrounding area is comprised of amenity grassland, with small areas of broadleaved woodlands. A tributary of the River Keekle is located approximately 1.1km east. The main River Keekle is located 1.6km east. Bellhouse Gill is located approximately 650 metres south. Four small ponds are located within 1.2km.

### 2.2 Project brief

S.A.P Ecology & Environmental Ltd were commissioned to carry out activity surveys of the buildings. The brief was to:

- Carry out one dusk emergence or one dawn re-entry survey of all access points recorded on building 1 at West Cumberland Infirmary;
- Carry out one dusk emergence and one dawn re-entry survey of all access points recorded on building 2 at West Cumberland Infirmary;
- Record all bat activity using recording devices and heterodyne and frequency division bat detectors;
- Analyse any bat activity recorded to determine species;
- Produce a detailed report of the activity survey, outlining relevant methodologies, results and discussion;
- The report to be supported by appropriate digitised mapping.



# 3. Methodology

## 3.1 Emergence/re-entry Surveys

Ecologists were situated around the buildings ensuring adequate visual coverage of all access/egress points which were identified during the daytime preliminary building assessment.

Each ecologist was equipped with a Bat Box Duet frequency division detector and recording device. Sound recordings made during the survey were retained for analysis and to aid identification of species.

The dusk survey started 15 minutes before sunset and continued for 1.5 hours after sunset. The dawn survey commenced 90 minutes before dawn and continued for at least 15 minutes after dawn, until all bat activity had ceased. Any visual emergence/re-entries were recorded, including the time and location.

All surveys were conducted in line with good practice guidelines (Collins, 2016).

#### 3.2 Limitations

There were no limitations to survey. All access and egress points could be clearly seen during the surveys and the weather at the time of survey was suitable for foraging and commuting bats.

#### 3.3 Surveyors

Table 1: The emergence/re-entry surveys were undertaken by the following surveyors:

Date	Dusk/Dawn	Surveyor	Survey Location	NE Licence Number
08/08/2019	Dawn	Stephen Parkin	B2 - 2	2016-23679-CLS-CLS
	Dusk	Johnny Walls	B1 - 1	-
08/08/2019		Stephen Parkin	B1 - 3	2016-23679-CLS-CLS
06/06/2019		Shannon Clifford	B2 - 1	-
		Jack Bell	B2 - 3	-
<b>10/09/2019</b> Dawn Si		Stephen Parkin	B1 - 2	2016-23679-CLS-CLS



## 4. Results

### 4.1 Emergence/Re-entry survey

#### Dawn return to roost survey 8<sup>th</sup> August 2019

No bats were recorded returning to building 2 to roost. Bat activity during the survey was very low, with bats occasionally foraging and feeding over the field south of building 2. Bats were also recorded commuting past the building. Sound analysis confirms that the bat species active in the area during the survey was common pipistrelles (*Pipistrellus pipistrellus*).

#### Dusk return to roost survey 8<sup>th</sup> August 2019

No bats were recorded emerging from either building 1 or 2 during the dusk survey. Bat activity during the survey was low, with occasional commuting past buildings 1 and 2. Bats were mostly foraging over an area of grassland in front of the western aspect of building 2 and over the vegetation along the fence line towards the field. Sound analysis confirms that the species active in the area were common pipistrelles and soprano pipistrelles (*Pipistrellus pygmaeus*).

#### Dawn return to roost survey 10<sup>th</sup> September 2019

No bat activity was recorded during the survey.

#### Table 2 provides a summary of the surveys carried out.

Table 2: Summary of survey results.

Type of Survey	Date	Sunset/sunrise time	Temp start (°C)	Temp finish (°C)	Notes
Dawn	08/08/19	05:37	15	14	No recorded return to roost. Very low activity. Foraging and commuting activity recorded.
Dusk	08/08/19	21:02	19	17	No recorded emergence. Low activity. Foraging and commuting activity recorded.
Dawn	10/09/19	06:37	13	12	No bat activity recorded.



## 5. Discussion & relevant legislation

## 5.1 Emergence/re-entry Survey Summary

Recordings taken at the time of survey indicate that bats are foraging and commuting past the buildings, particularly towards the field to the south of the buildings which bats are likely using as a feeding ground. Bat activity throughout the surveys was low suggesting a low population of bats in the local area.

No bats were recorded emerging from or returning to roost within either building 1 or 2 during the surveys. However, bats are dynamic creatures and do roost opportunistically through the year. If during works bats are found, all works must stop immediately until a legal licence can be obtained from Natural England.

Due to the low level of bat activity throughout the first set of surveys, the level of suitability for building 2 to support roosting bats was downgraded from 'moderate' to 'low' therefore a second survey of building 2 was not considered necessary.

#### 5.2 Protected Species

#### Bats

All bat species in the UK are protected from killing, injury and roost disturbance by both national and international law, in the form of the Wildlife and Countryside act (1981) as amended. In England, bats are also protected under The Conservation (Natural Habitats &) (Amendment) Regulations 2007. The legislation that is in place makes it an offence to:

- Intentionally capture, injure or kill a bat;
- ✓ Intentionally disturb a bat which will likely:
  - o Impair its ability to survive, breed, reproduce or rear its young;
  - o Impair its ability to hibernate or migrate, or;
  - Affect the local distribution or abundance of the species.
- Intentionally or recklessly disturb a bat roost;
- Intentionally or recklessly obstruct access to a roost;
- → Damage or destroy a resting place or breeding site;
- Keep, transport, sell or exchange any life or dead bat or part of.

Bats tend to re-use the same roosts year after year and therefore a roost is protected whether bats are present or not.



# 6. Potential Ecological Issues, Impact Assessment & Recommendations

#### 6.1 Bats

No bats were recorded roosting within the buildings surveyed, there are no issues relating to bats.

#### 6.2 Birds

No bird nests were recorded at the time of survey. However, both buildings have suitable areas for nesting.

#### 6.3 Impact Assessment & Recommendations

The proposed works are not expected to have any negative effect on the local bat population. No further surveys are required.

If demolition works are to be carried out during the breeding bird season (March – October inclusive), a breeding bird check should be undertaken (no more than two days prior to works). If breeding birds are found, works will need to be postponed until birds have fledged of their own accord.

#### 6.4 Further Surveys

At present no further surveys are required. It should be noted however that bat surveys are only valid for a limited amount of time, if works are delayed for more than 18 months from the date of survey they should be repeated.



## 7. Conclusion

The activity surveys recorded no bat roosts within buildings 1 and 2 and therefore the demolition of these buildings can go ahead at any time.

If demolition works are to be carried out during the breeding bird season (March – October inclusive), a breeding bird check should be undertaken (no more than two days prior to works). If breeding birds are found, works will need to be postponed until birds have fledged of their own accord.

Subject to the recommendations within this report being followed, the proposed demolition works should be compliant with relevant legislation and planning policy regarding protected species.



## 8. References

Collins, J (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edition). The Bat Conservation Trust, London.

Mitchell-Jones, A.J. (2004) Bat Mitigation Guidelines. English Nature, Peterborough.

Mitchell-Jones, A.J. & McLeish, A.P. (2004) Bat Workers Manual (3<sup>rd</sup> Edition). Joint Nature Conservancy Committee, Peterborough.

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