



BJ Collins
PROTECTED SPECIES SURVEYORS

BAT SURVEY REPORT (UPDATE)

BUCKINGHAM HOTEL

BURLINGTON ROAD

BUXTON

DERBYSHIRE

A report to:

Mr Barar

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June 2021

Report to:	A. Barar
Report Title:	Bat Emergence and Activity Survey (update)

Survey Site/Job:	Buckingham Hotel, Buxton, Derbyshire,
OS Grid Reference:	SK 053 733

Survey Date(s):	May 2021
Surveyed by:	M. Mackinnon Natural England class licence no. 2015-16652-CLS-CLS

Architect/Agent:	
Planning Reference:	HPK2020/0352

Versioning and Quality Assurance

Report Status	Date	Author(s)	Reviewed by
Final version	05/07/2021	M. Mackinnon	B J Collins MSc MCIEEM

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RELIANCE - The report describes the conditions and ecological features on the site (and possibly its environs) at the time of survey and that this may (is likely to) change over time. Reliance upon the findings of this report should be determined in accordance with the Chartered Institute of Ecology and Environmental Management guidance on the longevity of ecological surveys, see Advice Note (April 2019) *On the Lifespan of Ecological Reports and Surveys* CIEEM.

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SUMMARY

This report has been prepared by B J Collins – Protected Species Surveyors Limited for Mr A. Barar of the Buckingham Hotel, Buxton. This report has been updated since the previous bat survey report issued in 2017 by BJ Collins PSS in relation to planning application reference HPK2020/0352. The proposal is to demolish the existing building and construct a replacement hotel. The existing building is centered upon the six figure Ordnance Survey grid reference of SK 053 733.

The report provides the results of follow-up bat preliminary bat roost assessment and subsequent emergence and activity surveys undertaken within the active season for bats during 2021.

Previous bat surveys were carried out from 2013, 2014, and 2015 by different ecological consultancies. These studies concluded the building to be of low to moderate potential of supporting roosting bats.

The building was surveyed in 2017 by BJ Collins PSS which identified a day roost utilised by a single Common Pipistrelle located behind lead flashing associated with a chimney stack situated at the southwest corner of the building. Activity by Common Pipistrelle and low activity by Soprano Pipistrelle and Myotis species were detected throughout the surveys.

The results of the 2021 preliminary roost assessment identified features with potential to support roosting bats in the roof coverings. Two follow up emergence and activity surveys were undertaken in May 2021. During the emergence and activity surveys three bats, all Common Pipistrelles, were observed emerging from the roof covering at the south pitch and at the eaves of the east elevation. Bat activity, majority of which was of Common Pipistrelles, was detected at the south, east and west boundaries of the site. No evidence of a maternity colony was identified.

For operations to remain lawful a submission should be made for a Low Impact Class licence. Depending on the timing of the demolition of the building further bat emergence and activity surveys maybe necessary to support licence application.

A mitigation strategy designed to safeguard roosting bats during the demolition and the installation of alternative roosting habitat in the proposed building has been included in this report.

A lighting plan has been designed to fall in line with current best practice outlined in guidance note 08/18 Bats and Artificial Lighting in the UK published by Institution of Lighting Professionals, to provide a more sympathetic scheme to meet the needs of bats. This includes various mitigation specifications.

1 INTRODUCTION

This report has been prepared by B J Collins – Protected Species Surveyors Limited for Mr A. Barar of the Buckingham Hotel, Buxton. This report has been updated since the previous bat survey report issued in 2017 by BJ Collins PSS in relation to planning application reference HPK2020/0352. The proposal is to demolish the existing building and construct a replacement hotel.

The report provides the results of follow-up bat (*Chiroptera*) preliminary bat roost assessment and subsequent emergence and activity surveys undertaken within the active season for bats during 2021.

The survey building is the Buckingham Hotel which is located at the northern end of Burlington Road in the town of Buxton, Derbyshire. The hotel building is centered upon the six figure Ordnance Survey grid reference of SK 053 733.

Previous bat surveys were carried out from 2013, 2014, and 2015 by different ecological consultancies. The previous studies concluded the building to be of low to moderate potential of supporting roosting bats.

The building was surveyed in 2017 by BJ Collins PSS which identified a day roost utilised by a single Common Pipistrelle (*Pipistrellus pipistrellus*) located behind lead flashing associated with a chimney stack situated at the southwest corner of the building. Activity by Common Pipistrelle and low activity by Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Myotis species were detected throughout the surveys.

1.1 Legislation applicable to bats

All species of British bat and their roosts are protected under British law by the Wildlife and Countryside Act 1981 (as amended), and bats are classified as European Protected Species under the Conservation of Habitats and Species Regulations 2017 ('the 2017 Regulations'). This has recently been amended by the Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations (2019) which continue the same provision for European protected species, licensing requirements, and protected areas after Brexit.

The legislation makes it an offence to kill, injure or disturb a bat and/or to damage or destroy a breeding site or resting place for a bat. It is also an offence to disturb the animals such that it impairs their ability to survive, to reproduce, to nurture their young, or such that it impairs their ability to hibernate or migrate. Under this legislation development work that could affect a bat or bat roost can only be permitted under a licence from Natural England.

Licences in respect of European Protected Species affected by development can be granted under Section 55(2) (e) of The Conservation of Habitats and Species Regulations (Amendment) (EU Exit) Regulations (2019), for the purpose of preserving public health or public safety or other imperative reasons of overriding public interest including those of social or economic nature and beneficial consequences of primary importance for the environment.

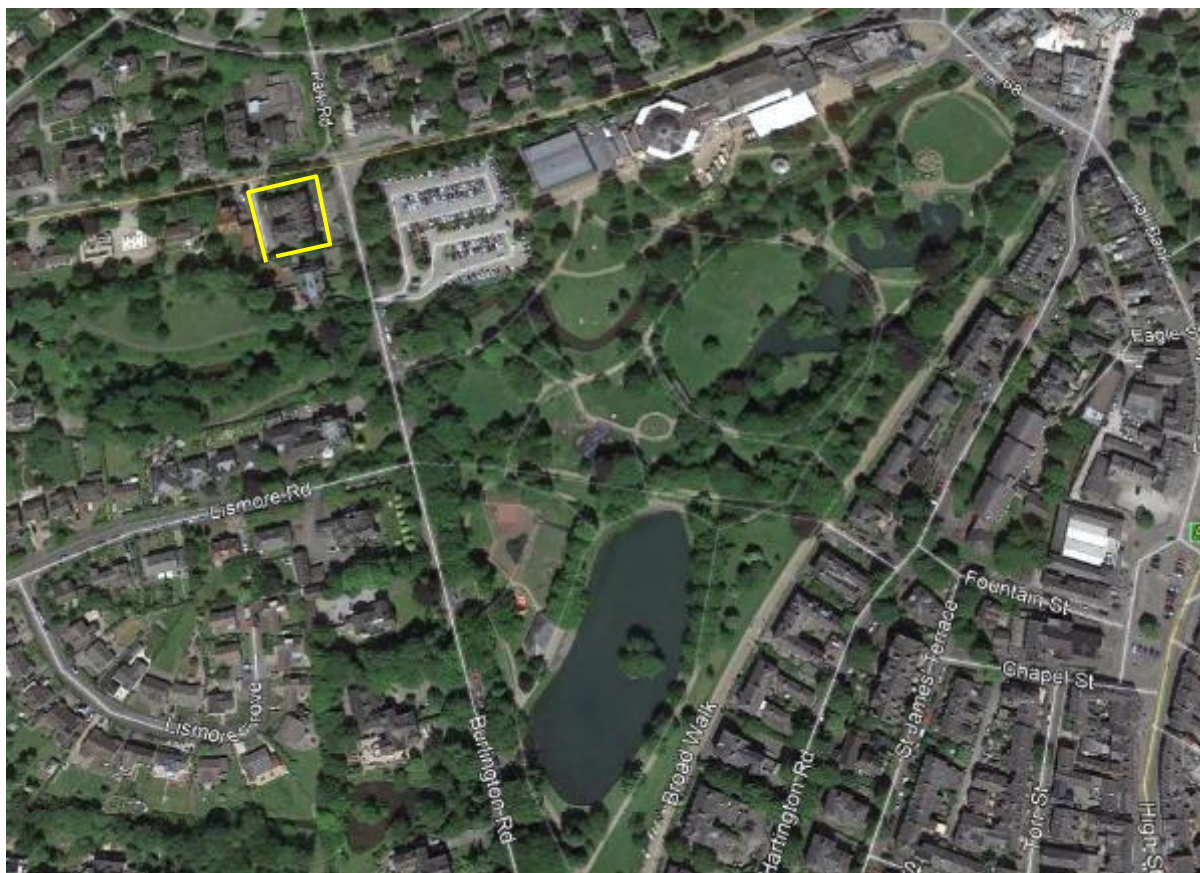
Under Section see Regulation 55(9) of the Regulations licences can only be issued if Natural England is satisfied that:

- There is no satisfactory alternative to the work specification and
- 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.

Natural England aim to process EPS licence applications within 35 working days of receipt and Low Impact Class licenses are typically registered within 14 working days of receipt.

2 SITE DESCRIPTION

2.1 Situation of the Buckingham Hotel



Photograph 1: Situation of the Buckingham Hotel in relation to the wider landscape area. The survey area is outlined in yellow.

The Buckingham Hotel is located on the west side of the northern end of Burlington Road with its junction onto the A53 St John's Road. It is situated to the north-west corner of the established Victorian park of Buxton Pavilion.

The building is surrounded by hardstanding with a line of mature Lime trees (*Tilia x europaea*) on the northern boundary. There is a line of mature deciduous trees which extend from the western boundary of Buxton Pavilion to the north-west corner and then to the southwest of the hotel's position. The tree line then extends partially around the northern boundary of the car park associated with Buxton Pavilion and Buxton Opera house.

The surrounding tree lines provide connectivity for bats and other mobile taxa across the landscape to a range of wetland features within the Pavilion Gardens which have good potential for foraging. The tree lines then lead into the wider landscape to the north and north-west which also comprises of areas of broadleaved woodland, a golf course and pasture. This landscape offers connectivity to bat foraging and roosting habitat in the wider area.

A review of the records of granted EPS licences held on the government's Magic database identified one licence issued for the disturbance or destruction to roosts supporting Brown Long-eared (*Plecotus auritus*) and Common Pipistrelle bats approximately 0.5km to the north of the survey area.

2.2 Description of the Buckingham Hotel

The building is constructed of local stone with a slate roof and dressed stone detailing. The roofs are of a hipped detail and with accommodation in the eaves which support a range of dormer windows. There are four chimney stacks penetrating through the roof all of which are sealed with lead flashing.

There are various attic spaces above the hotel. The roofs are underlined with a bitumen felt. There is no insulation present. Remnants of lime torching were found throughout the roof voids indicating building has been re-roofed at some point.

The windows are set in stone surrounds, the bay windows have slate hipped roofs with lead flashings. The eaves are finished with timber soffits.



Photograph 1: West aspect and frontage of Buckingham Hotel, Buxton



Photograph 2: North and west aspects of Buckingham Hotel, Buxton



Photograph 3: Typical view of the interior of the attic space over the building

3 SURVEY METHODOLOGY

3.1 Preliminary bat roost assessment

A visual inspection of the exterior of the building and roofs was undertaken on 12th May 2021. The building was examined by an experienced, licensed bat ecologist. Equipment used included powerful torch, camera and binoculars.

The objective of the survey was to follow up on the previous preliminary bat roost assessment undertaken in 2017 and to ensure that the emergence and activity surveys were fully informed. In accordance with best practice the building was searched for evidence of bat-use and to identify features that could potentially support roosting bats and to assess the likelihood of these features being used. This included looking for droppings, urine staining, worn surfaces and the bats themselves (alive or dead).

3.2 Survey intensity

Based upon the findings of the preliminary bat roost assessment undertaken on 12th May 2021 and previous survey results the building was assessed as being of moderate potential of supporting roosting bats.

In accordance with national survey guidelines published by the Bat Conservation Trust (2016) two emergence and activity surveys were undertaken in the active season of 2021.

3.3 Emergence and activity survey 12th May 2021

This survey was undertaken by four bat surveyors positioned at different aspects of the building. Ambient temperature was measured with an ETI Hygro-Therm hygrometer. The survey commenced prior to sunset at 20:55 and lasted 95 minutes. All bat activity detected or observed was documented by the surveyors.

The handheld equipment and positions of the surveyors is provided in Table 1 below.

Table 1: Surveyor positions and hand-held equipment used during bat emergence and activity survey 12th May 2021

Surveyor	Position	Hand held equipment
M. Mackinnon	South east corner	Pettersson D240X + digital recorder
A. Orrell	South west corner	Bat Scanner Stereo
N. Clayton	North-west corner	Echometer Touch Pro
A. Roe	South-east corner	Echometer Touch 2

3.4 Emergence and activity survey 26th May 2021

This survey was undertaken by four bat surveyors positioned at different aspects of the building. Ambient temperature was measured with an ETI Hygro-Therm hygrometer. The survey commenced at sunset at 21:17 and lasted 90 minutes. All bat activity detected or observed was documented by the surveyors.

The handheld equipment and positions of the surveyors is provided in Table 2 below.

Table 2: Surveyor positions and hand-held equipment used during bat emergence and activity survey 26th May 2021

Surveyor	Position	Hand held equipment
M. Mackinnon	South east corner	Pettersson D240X + digital recorder
A. Orrell	West elevation	Bat Scanner Stereo
N. Clayton	North-west corner	Echometer Touch Pro
A. Roe	South-east corner	Echometer Touch 2

3.5 Weather conditions

The weather conditions for the visual inspection were dry and bright allowing the surveyor to obtain clear views of the exterior fabric of the building. The conditions for the emergence and activity surveys are provided in the table below.

Table 3: Abiotic conditions of bat emergence and activity surveys of Buckingham Hotel, Buxton, May 2021

Date	Temp. at sunset	Temp. at finish	Conditions
12 th May 2021	10.2°C	82°C	Dry. Clear sky. Wind =1.
26 th May 2021	10.5°C	83°C	Dry. 40% Cloud cover. Wind =1.

3.6 Survey constraints

The surveyor had access to inspect all external areas of the building.

3.7 Personnel

The visual inspection survey on 12th May 2021 was carried out M. Mackinnon (Natural England class licence no. 2015-16652-CLS-CLS).

The emergence and activity surveys were undertaken by four bat ecologists: M. Mackinnon, A. Roe (Natural England Class Licence: 2015-12980-CLS-CLS), A. Orrell (2018-36941-CLS-CLS) and N. Clayton.

4 SURVEY RESULTS

4.1 Preliminary bat roost assessment results

The building has retained the same potential roost features identified during the previous visual inspection undertaken in 2017. These are mainly associated with the roof coverings including those over the bay windows.

The ridges and hips are covered with stone ridge tiles and gaps could be seen underneath these tiles particularly among the complex of roofs at the west aspect. There is potential for bats to access these gaps and roost along the ridge beam or the underside of the tiles.

The bases of the chimneys and the junction of the roofs with the dormer windows are lined with lead flashings. These have lifted in some places thereby providing opportunities for bats to roost underneath the lead in a draught-free and warm environment.

The slate roof covering and the slates cladding the sides of dormer windows have numerous crevices with potential to support crevice dwelling bat species such as the Pipistrelles.

The stonework in the main is in good condition however some areas of missing mortar were noted at the east elevation.

The tree lines along Burlington Road and at the north and south aspects have potential to offer cover bats commuting from a potential roost site in the roof covering as well as offer foraging habitat. Street lighting is present however this does not illuminate the roof coverings of the hotel.



Photograph 4: Roofs at west aspect and rear of Buckingham Hotel where numerous gaps were identified beneath the ridge tiles



Photograph 5: West aspect of Buckingham Hotel with gaps noted underneath raised slates



Photograph 6: East elevation of Buckingham Hotel with gap indicated in stonework adjacent to bay window

4.2 Emergence and activity survey results 12th May 2021

Three bats, all Common Pipistrelles were observed emerging from the south pitch roof at 21:11, 21:31 and 21:33 by the surveyor positioned at the south east corner. Two of the bats emerged from between the two dormers situated on the south side of the building and the third bat emerged from east side of the east dormer.

A total of 67 observations of bat activity were documented by the four surveyors. All the observations were of Common Pipistrelles. The first bat detected was at 20:55 by the surveyor positioned at the south west aspect of the building. Bats were observed foraging around the roofs and chimneys at the rear of the building. Bat activity was highest at the west aspect. A complete set of observations are provided in Appendix 1.



Photograph 7: Annotated photograph of east and south aspects of Buckingham Hotel with emergence points indicated

4.3 Emergence and activity survey results 26th May 2021

At 21:24 a Common Pipistrelle was observed emerging from the eaves or lower course of tiles above the 'Buckingham' sign at the east elevation. The bat headed to the tree line situated at the south of the site.

A total of 86 observations of bat activity were documented by the four surveyors. As with the previous survey most of the activity was of Common Pipistrelles foraging at the west and north west aspects of the site as well as along Burlington Road. Less activity was observed associated with the roof coverings and chimneys when compared with the previous survey on 12th May 2021.

Singular passes of Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Noctule (*Nyctalus noctula*) were noted at 22:22 and 22:18 respectively.

5 CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of the 2020 and 2017 bat emergence and activity surveys it is the conclusion of this report that the roof coverings and eaves of the Buckingham Hotel support day roosting by low numbers of Common Pipistrelle bats. There is no evidence to indicate the presence of a maternity colony. The observations from the surveys showed that bats foraged around the roof coverings particularly at the west and south aspects and in the immediate surrounding area.

For operations to remain lawful the demolition of the building will require a bat EPS derogation licence in advance of the commencement of works. As the building does not support a maternity roost and is used for roosting purposes by a common species as specified by the Bat Mitigation Guidelines (2004) it is recommended a submission is made to Natural England for a low impact class licence.

A mitigation strategy forms the basis of an EPS licence – this is provided in section 6.

6 MITIGATION STRATEGY – BATS

6.1 Application for a Low Impact Class Licence

For operations to remain lawful the demolition of the hotel will require a Low Impact Class licence before works proceed.

An application for a Low Impact Class licence can only be submitted once planning permission has been granted and any planning conditions relating to wildlife species have been formally discharged.

A Low Impact Class licence is valid for a period of three months from the time it is issued. If the demolition were delayed until May 2022 then further emergence and activity surveys would be required to satisfy Natural England that no maternity roost is present.

The licence application needs to contain an adequate mitigation strategy for bats. A key element of a mitigation strategy is to safeguard individual roosting bats from harm and provide alternative permanent roosting provision.

6.2 Timing of commencement of works

The results from the 2021 surveys identified day roost sites in the roof covering and eaves used four Common Pipistrelle bats with no evidence of any maternity colony being present. It is recommended that works to the roof coverings and eaves are undertaken when bats are active (approximately March to mid-November) and physiologically able to tolerate disturbance. It is recommended that the demolition of the eaves and roof coverings are timed to and avoid the sensitive hibernation period.

It is important to note that if a change in roost status is identified and a maternity colony is present then works would be restricted to either spring or autumn to avoid the sensitive maternity period. In this instance the low impact class licence would have to be upgraded to a full EPS licence.

6.3 Safeguarding of individual bats from harm during works

If the works are to commence during the active survey season, which runs from May to September (inclusive), it is recommended that pre-commencement emergence survey is undertaken to inform best practice to the locations of any roosts. This is a pertinent measure given the extent of the potential roost features that exist throughout the roof coverings and roost switching behaviour often exhibited by Common Pipistrelles.

The conditions of registration under the bat low-impact class licence scheme require that the building contractors are met on site and provided with a toolbox talk describing the roost locations and access features.

To safeguard individual roosting bats potential roost features such as the lead flashings around the bases of the chimneys, the eaves detail at the east elevation and the roof covering at the south aspect are to be removed carefully by hand under supervision of a licenced bat worker. The soft demolition of other potential roost features is to be further informed by any pre-start bat emergence and activity surveys.

If a bat is found during the soft strip activities it is to be transferred by hand to a temporary receptor site by the licenced bat worker. A procedure has been supplied in Appendix 2 for if a bat is found when a licensed bat worker is not present.

6.4 Temporary roost provision

Three timber bat boxes are to be installed on site prior to the commencement of works. These will be placed upon trees nominated by the ecologist. Any bats found during the works will be transferred to

one of these boxes by the licensed bat worker.

6.5 Permanent roost provision

The principal behind the mitigation strategy is to incorporate new bat roost features for the species proportionate to the roosts identified into the new hotel building.

The mitigation specified is for four integrated bat tubes to be installed in the east, west and south exterior walls of the new building. Bat tubes offer permanent and enclosed roosting habitat. The locations at of the bat tubes at different aspects of the hotel will provide a range of roosting microclimates often sought by the Pipistrelle species. The locations of the enclosed bat boxes are provided in the figures below.

To encourage uptake by a maternity colony it is recommended that single chambered enclosed bat tubes are installed such as the Habitat enclosed bat tube (shown below) or the Schwegler 1FR and Schwegler 2FR (to include back panel).

The frontage of these boxes can be rendered, covered with stone or painted. The access slot is to be positioned flush with the exterior wall as such a bat can land on the wall below and crawl up to the access slot.



Figure 1: An example of an Habitat enclosed bat box (other makes and finishes are available)

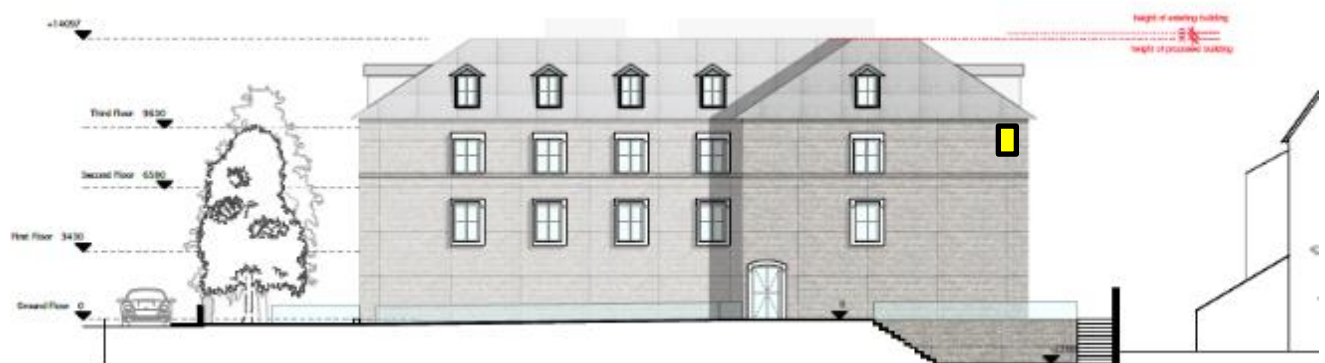


Figure 2: Proposed west elevation of hotel with location of enclosed bat tube indicated



Figure 3: Proposed south elevation of hotel with locations of enclosed bat tubes indicated



Figure 4: Proposed east elevation and frontage of hotel with location of enclosed bat tube indicated

6.6 Reduction of light pollution

Exterior lighting has been shown to negatively impact upon emergence times and foraging opportunities for bats thereby reducing their fitness and ability to survive. The observations from the 2021 bat emergence and activity surveys identified activity along Burlington Road to the east and at the west and south aspects of the building.

Almost nearly all the activity detected was of Common Pipistrelle which are known to be one of the more light tolerant species associated with urban environments.

A review of the lighting plan for the proposal produced by Thorlux Lighting (2018) has been amended to mitigate the situation for bats.

The report recommends the installation of 11 luminaires attached to all exterior walls of the hotel at heights of between 4-6 metres. These lights will be fitted with shrouds to maintain down lighters only.

Furthermore, the INDO SiCURA luminaire proposed for use will be specified to provide a warm light colour temperature of 2700K and a peak wavelength of >550 nm to avoid the component of light most disturbing to bats (plus 0% ULR).

Finally, the lighting units identified in figure 5 overleaf will be placed onto motion detection sensors to ensure that they are not permanently illuminated during the bat emergence and dawn re-entry periods. This maintains the dark corridor along the southern side and western side of the existing

hotel which has been shown to be favoured by commuting and foraging bats.

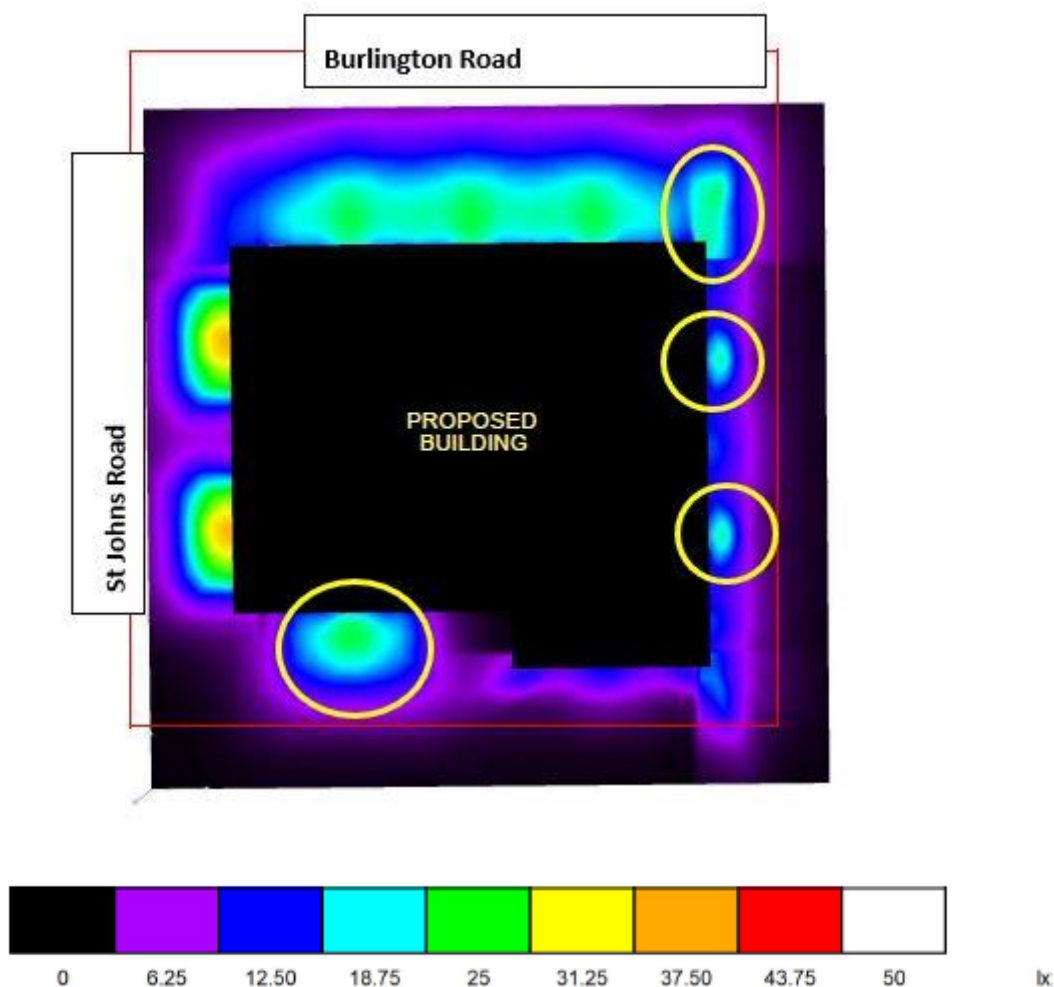


Figure 5: Excerpt from Thorlux Lighting report 2018 -labelled exterior scene p11

2 REFERENCES

Collins, B. J., (2017) **Bat Surveys to the Buckingham Hotel**. BJ Collins PSS Ltd, Nottinghamshire.

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Appendices

Appendix 1: Observations from bat emergence and activity surveys 2021

Table 4: Observations from bat emergence and activity survey 12th May 2021 Buckingham Hotel, Buxton

No.	Time	Surveyor	Species	Observation
1	20:58	MM	Common Pipistrelle	Flew south to north high over building.
2	21:05	MM	Common Pipistrelle	1 pass, not seen.
3	21:11	MM	Common Pipistrelle	Emerged from roof between the two dormers situated in the south pitch.
4	21:16	MM	Common Pipistrelle	Flew north to south down Burlington Road.
5	21:29	MM	Common Pipistrelle	Came from the north, 1 pass. Foraging.
6	21:31	MM	Common Pipistrelle	Emerged from roof between the two dormers situated in the south pitch. Headed south.
7	21:33	MM	Common Pipistrelle	Emerged from east side of east dormer situated in south pitch. Headed south.
8	21:46	MM	Common Pipistrelle	1 pass, not seen.
9	21:46	MM	Unknown	Flew around chimney situated on the east side of the south pitch. No echolocation call detected.
10	21:50	MM	Common Pipistrelle	3 passes, not seen.
11	21:54	MM	Common Pipistrelle	1 pass, not seen.
12	21:56	MM	Common Pipistrelle	1 pass, not seen.
13	21:58	MM	Common Pipistrelle	1 pass, not seen.
14	22:05	MM	Common Pipistrelle	2 passes, not seen.
No.	Time	Surveyor	Species	Observation
1	20:55	AO	Common Pipistrelle	1 brief pass, not seen.
2	20:59	AO	Common Pipistrelle	1 brief pass, not seen.
3	21:04	AO	Common Pipistrelle	Commuting, flew west from central roof area.
4	21:05	AO	Common Pipistrelle	Foraging, not seen.
5	21:08	AO	Common Pipistrelle	Commuting, not seen.
6	21:10	AO	Common Pipistrelle	Commuting north at west aspect of building.
7	21:12	AO	Common Pipistrelle	Multiple passes, not seen.
8	21:13	AO	Common Pipistrelle	Commuting south west.
9	21:15	AO	Common Pipistrelle	Commuting north.
10	21:16	AO	Common Pipistrelle	Foraging north/south at west aspect of building.
11	21:18	AO	Common Pipistrelle	Foraging, not seen.
12	21:20	AO	Common Pipistrelle	Multiple passes, behind AO.
13	21:22	AO	Common Pipistrelle	Multiple passes, behind AO.
14	21:27	AO	Common Pipistrelle	Foraging, not seen.
15	21:27	AO	Common Pipistrelle	Commuting north at west aspect of building.
16	21:27	AO	Common Pipistrelle	Foraging north/south at west aspect of building.
17	21:30	AO	Common Pipistrelle	2 bats heading west.
18	21:30 to 21:35	AO	Common Pipistrelle	Foraging around chimney.
19	21:36	AO	Common Pipistrelle	Foraging, not seen.
20	21:38	AO	Common Pipistrelle	Foraging, not seen.
21	21:39	AO	Common Pipistrelle	Foraging, not seen.
22	21:41	AO	Common Pipistrelle	Foraging around chimney.
23	21:43	AO	Common Pipistrelle	Foraging north/south at west aspect of building.
24	21:45 to 21:51	AO	Common Pipistrelle	Foraging, not seen. Multiple passes.
No.	Time	Surveyor	Species	Observation
1	21:15 to 21:27	NC	Common Pipistrelle	Foraging to the west of NC.
2	21:30	NC	Common Pipistrelle	Flew south to north over building and headed east.

3	21:31	NC	Common Pipistrelle	Flew south to north over building and headed east.
4	21:31	NC	Common Pipistrelle	Came from the NW, flew along north aspect of building.
5	21:32	NC	Common Pipistrelle	1 pass, not seen.
6	21:39	NC	Common Pipistrelle	1 pass, not seen.
7	21:34	NC	Common Pipistrelle	1 pass, not seen.
8	21:39	NC	Common Pipistrelle	1 pass, not seen.
9	21:40	NC	Common Pipistrelle	1 pass, not seen. Social call detected.
10	21:41	NC	Common Pipistrelle	Flew south to north over building and headed east.
11	21:42	NC	Common Pipistrelle	Flew south to north over middle of building and headed east.
12	21:44	NC	Common Pipistrelle	Flew south to north over middle of building and headed east.
13	21:49	NC	Common Pipistrelle	1 pass, not seen.
14	21:53	NC	Common Pipistrelle	1 pass, not seen.
15	21:55	NC	Common Pipistrelle	2 passes, not seen.
16	21:56	NC	Common Pipistrelle	2 passes, not seen.
17	22:02	NC	Common Pipistrelle	1 pass, not seen.
18	22:17	NC	Common Pipistrelle	1 pass, not seen.
No.	Time	Surveyor	Species	Observation
1	21:26	AR	Common Pipistrelle	1 brief faint pass, not seen.
2	21:29	AR	Common Pipistrelle	1 brief pass, not seen.
3	21:31	AR	Common Pipistrelle	1 brief faint pass, not seen.
4	21:33	AR	Common Pipistrelle	1 brief pass, not seen.
5	21:34	AR	Common Pipistrelle	1 faint pass, not seen.
6	21:41 to 21:44	AR	Common Pipistrelle	1 foraging alongside treeline on N boundary of hotel grounds. 5 passes.
7	21:48	AR	Common Pipistrelle	1 pass, not seen.
8	21:55	AR	Common Pipistrelle	1 foraging alongside treeline. 1 pass.
9	22:01	AR	Common Pipistrelle	1 pass, not seen.
10	22:06	AR	Common Pipistrelle	1 pass, foraging, not seen.
11	22:15	AR	Common Pipistrelle	1 pass, foraging, not seen.

Table 5: Observations from bat emergence and activity survey 26th May 2021 Buckingham Hotel, Buxton

No.	Time	Surveyor	Species	Observation
1	21:24	MM	Common Pipistrelle	Emergence from eaves at east aspect of hotel (level with Buckingham sign). Headed south.
2	21:35	MM	Common Pipistrelle	Foraging north/south along Burlington Road.
3	21:37	MM	Common Pipistrelle	Foraging north/south along Burlington Road.
4	21:40	MM	Common Pipistrelle	Foraging north/south along Burlington Road.
		MM	Tawny Owl	Perched in tree on Burlington Road.
5	21:45	MM	Common Pipistrelle	Foraging north/south along Burlington Road.
6	21:58	MM	Common Pipistrelle	1 brief pass, not seen.
7	22:06	MM	Common Pipistrelle	2 passes, not seen.
8	22:18	MM	Common Pipistrelle	1 pass, not seen. Foraging.
9	22:19	MM	Common Pipistrelle	2 passes, not seen.
10	22:21	MM	Common Pipistrelle	Foraging north/south along Burlington Road.
11	22:22	MM	Soprano Pipistrelle	1 pass, not seen.
12	22:22	MM	Common Pipistrelle	1 pass, not seen.
13	22:26	MM	Common Pipistrelle	1 pass, not seen.
14	22:29	MM	Common Pipistrelle	1 pass, not seen.
15	22:34	MM	Common Pipistrelle	1 distant pass, not seen.
16	22:43	MM	Common Pipistrelle	2 passes, not seen.
17	22:44	MM	Common Pipistrelle	2 faint passes, not seen.
No.	Time	Surveyor	Species	Observation
1	21:40	AO	Common Pipistrelle	Commuting west alongside building.
2	21:40	AO	Common Pipistrelle	Foraging at west aspect of building.

3	21:46	AO	Common Pipistrelle	2 bats foraging between north and south projections of building.
4	21:48	AO	Common Pipistrelle	3 bats foraging at west aspect of building.
5	21:51	AO	Common Pipistrelle	2 bats foraging at west aspect of building.
6	21:54	AO	Common Pipistrelle	Foraging at west aspect of building.
7	21:55	AO	Common Pipistrelle	2 bats foraging at west aspect of building.
8	22:01	AO	Common Pipistrelle	2 bats foraging at west aspect of building.
9	22:03	AO	Common Pipistrelle	Foraging at west aspect of building.
10	22:06 to 22:07	AO	Common Pipistrelle	Foraging at west aspect of building.
11	22:14	AO	Common Pipistrelle	Foraging, not seen.
12	22:14	AO	Common Pipistrelle	1 brief pass, not seen.
13	22:19	AO	Common Pipistrelle	Foraging, not seen.
14	22:20	AO	Common Pipistrelle	Foraging, not seen.
15	22:24	AO	Common Pipistrelle	1 brief pass, not seen.
16	22:30	AO	Common Pipistrelle	1 brief pass, not seen.
17	22:34	AO	Common Pipistrelle	Foraging, not seen.
18	22:39	AO	Common Pipistrelle	Foraging, not seen.
19	22:42	AO	Common Pipistrelle	Foraging, not seen.
20	22:45	AO	Common Pipistrelle	Foraging, not seen.
No.	Time	Surveyor	Species	Observation
1	21:37	NC	Common Pipistrelle	1 pass, not seen.
2	21:40	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
3	21:42	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
4	21:44	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
5	21:45	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
6	21:46	NC	Common Pipistrelle	Flying north/south at west aspect.
7	21:50	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
8	21:51	NC	Common Pipistrelle	Flying over flat roof and around dormer and chimneys in west pitch.
9	21:52	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
10	21:53	NC	Common Pipistrelle	Foraging over flat roof between north and south projections. 2 passes.
11	21:53	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
12	21:54	NC	Common Pipistrelle	1 pass, not seen.
13	21:56	NC	Common Pipistrelle	Foraging over flat roof between north and south projections.
14	21:57	NC	Common Pipistrelle	Foraging over flat roof between north and south projections. 3 passes.
15	21:59	NC	Common Pipistrelle	Flew west to east past north aspect of building.
16	21:59	NC	Common Pipistrelle	Flew south to AO.
17	22:00	NC	Common Pipistrelle	Came from the west, flew south along west aspect of building.
18	22:03	NC	Common Pipistrelle	Came from the west, flew south along west aspect of building.
19	22:06	NC	Common Pipistrelle	Came from the west, flew south along west aspect of building.
20	22:07	NC	Common Pipistrelle	1 pass, not seen.
21	22:10	NC	Common Pipistrelle	1 pass, not seen.
22	22:14	NC	Common Pipistrelle	1 pass, not seen.
23	22:18	NC	Common Pipistrelle	Came from the west, flew south along west aspect of building.

24	22:19	NC	Nyctalus sp.	1 pass, not seen.
25	22:20	NC	Common Pipistrelle	1 pass, not seen. Social call detected.
26	22:24	NC	Common Pipistrelle	1 pass, not seen.
27	22:27	NC	Common Pipistrelle	1 pass, not seen.
28	22:28	NC	Common Pipistrelle	1 pass, not seen.
29	22:31	NC	Common Pipistrelle	1 pass, not seen.
30	22:34	NC	Common Pipistrelle	1 pass, not seen.
31	22:39	NC	Common Pipistrelle	1 pass, not seen.
32	22:43	NC	Common Pipistrelle	1 pass, not seen.
33	22:44	NC	Common Pipistrelle	1 pass, not seen.
34	22:45	NC	Common Pipistrelle	1 pass, not seen.
35	22:46	NC	Common Pipistrelle	1 pass, not seen.
36	22:47	NC	Common Pipistrelle	1 pass, not seen.
37	22:48	NC	Myotis sp.	1 pass, not seen.
No.	Time	Surveyor	Species	Observation
1	21:34	AR	Common Pipistrelle	1 faint pass, not seen.
2	21:40	AR	Common Pipistrelle	1 faint pass, not seen.
3	21:45	AR	Common Pipistrelle	1 pass, not seen.
4	22:06	AR	Common Pipistrelle	1 foraging alongside trees to N of hotel, 1 pass
5	22:07	AR	Common Pipistrelle	1 foraging alongside trees to N of hotel, 1 pass
6	22:18	AR	Noctule	1 faint pass, not seen.
7	22:19	AR	Common Pipistrelle	1 faint pass, not seen.
8	22:20	AR	Common Pipistrelle	1 faint pass, not seen.
9	22:26	AR	Common Pipistrelle	1 pass, not seen.
10	22:29	AR	Common Pipistrelle	Foraging, not seen. 1 pass.
11	22:43	AR	Common Pipistrelle	1 faint pass, not seen.
12	22:46	AR	Common Pipistrelle	1 faint pass, not seen.

Appendix 2 - Procedure for if a bat is discovered during works when an ecologist is not present

- ✓ If at any point in the building works bats are discovered, then contractors must stop work immediately and telephone BJ Collins Protected Species Surveyors on 01636 830058 or 07957 122217.
- ✓ B J Collins PSS will either provide an appropriately licensed bat worker to the site or provide a member of staff who may liaise directly with Natural England. Actions will then be taken following advice given.
- ✓ Bats are a protected species and there should be no attempt to handle a bat if discovered. The bat should be covered with a light material (cloth) and the bat worker called out to carry out the rescue.
- ✓ Should it transpire that the operation being carried out is of more risk to bats than was originally thought, then works will be stopped until they can be supervised by an appropriately licensed bat worker.
- ✓ If a bat is found under a tile or within any other niche to the building fabric, works will stop immediately (as above). If the bat does not voluntarily fly out, then the aperture will be carefully covered over to protect the bat(s) from the elements, leaving a small gap for the bat to escape voluntarily. Any covering should be free from grease or other contaminants, and should not be a fibreglass-based material