

AGENDA ITEM 7

APPENDIX 4

2016/0110/DET

BAT SURVEY REPORT



Seafield Lodge Hotel, Highland

Bat Survey Report

(August 2016)



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Project no.	P16012	Document version	FINAL
Project name	Seafield Lodge Hotel		
Location	Seafield Lodge Hotel, Grantown-on-Spey, Highland		
Document reference	Bat Survey Report		
Date	22 nd August 2016		
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Qualifications	<p>Full Member of the Chartered Institute of Ecology and Environmental Management</p> <p>BSc (Hons) in Environmental Science and Agricultural Ecology</p>		
Quality Assurance	<p>All staff employed by The Wildlife Survey Unit Ltd are full members of the Chartered Institute of Ecology and Environmental Management and follow the Institutes' Code of Professional Conduct (CIEEM 2011) whilst undertaking ecological survey work and reporting.</p> <p>This survey report follows the standard bat report template produced by the Bat Conservation Trust in their 2016 publication <i>Bat Surveys – Good Practice Guidelines 3rd Edition</i>, the industry standard.</p>		

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1 EXECUTIVE SUMMARY

The Wildlife Survey Unit Ltd were commissioned by Matt Hamlett Architecture and Design on behalf of the Seafield Lodge Hotel in May 2016, to undertake a preliminary roost assessment survey for bats of the hotel in Grantown, Highland.

This is in relation to a proposed planning application for the property that is seeking to renovate the building converting from a hotel into flats.

Following the initial preliminary roost assessment, further emergence/re-entry surveys were recommended and undertaken in July and August 2016.

In summary three individual roosts were identified of a single species, Soprano Pipistrelle. One roost was identified as a maternity roost, the others as non-breeding summer roosts. The peak count for bats on the site was 351, with 349 recorded from the maternity roost, this included juveniles on the wing.

The building is assessed as a confirmed bat roost.

The current proposals for the building have been modified such that none of the three identified roosts will be directly affected by the works. Due to the sensitivity of bat roosts a non-licensed method statement has been prepared such that the development can be undertaken in a legal manner.

A recommended approach is detailed in Section 6.2.

2 INTRODUCTION

2.1 Background

The Wildlife Survey Unit Ltd were commissioned by Matt Hamlett Architecture and Design on behalf of the owners of the Seafeld Lodge Hotel in May 2016, to undertake a preliminary roost assessment survey for bats of the hotel in Grantown on Spey, Highland.

Following this original survey further surveys emergence/re-entry surveys during the summer maternity roost period were recommended. This report details the results of all these surveys.

2.2 Site description

Seafeld Lodge Hotel is a large hotel complex on Woodside Avenue in Grantown on Spey, centred on Ordnance Survey grid reference NJ033276.

Photographs of the building can be seen in Appendix 2.

2.3 Full details of proposed works

The proposed planning application to Highland Council is being sought to undertake the following:

- Conversion of hotel to form residential units (6 Flats and 1 House), demolition of existing steel escape stairs and single storey extension to rear and alterations to existing building, as detailed in the proposed plans in Appendix 3 (16/01532/FUL).

Full details can be found in the planning application documents available on CNPA/Highland Council's website.

2.4 Aims of the survey

The aims of the bat surveys were to:

- Undertake an external and internal bat inspection survey of the building to identify whether bats are, or have been, present and, if so, which species.
- Undertake further bat emergence and re-entry surveys to identify current roosts, species, and type of roost.
- Identify measures needed to be taken to ensure legal compliance and recommend mitigation measures suitable for biodiversity enhancement.

2.5 Planning and legislative context

The full legal and planning framework relating to bats can be found in Appendix 1. This includes the current national and international legislation protecting all species of bat in Scotland.

3 METHODS

3.1 Pre-survey data search

A desk study was undertaken to identify any bat records from the site or within the surrounding area, as well as identifying potential bat roosting, feeding and commuting habitats and protected sites.

As the scale of the survey is small, a datasearch from the Local Biological Records Centre was not undertaken, however the following source was used:

- The National Biodiversity Network (NBN) website (www.nbn.org.uk) for records from the 10km square in which the site sits.

3.2 Surveyor information

The bat surveys were undertaken by Wildlife Survey Unit Ltd surveyor, Peter Stronach MIEEM (SNH licence no.22656) and James Bunyan of Tracks Ecology (SNH licence no 15102).

Peter Stronach is a terrestrial and marine ecologist with a specialist interest in bats, protected mammals and ornithology.

As owner and director of The Wildlife Survey Unit Ltd he has managed, designed and undertaken bat inspection, emergence surveys and activity surveys across Scotland, England and Wales. He has a working knowledge of the national and international legislation protecting bats and how that relates to development. He has been a licensed batworker for eight years, including handling of bats for identification and survey of hibernation sites.

James Bunyan is a terrestrial ecologist, specialising in bats and protected mammals. He is a licensed batworker.

3.3 Field survey methods

All bat surveys are undertaken in accordance with current best practice guidance with reference to:

- ❑ Hundt, L. (2012) *Bat Surveys. Good Practice Guidelines*. Bat Conservation Trust, London.
- ❑ Mitchell-Jones, A. J. & McLeish, A. P. (2004) *The Bat Workers' Manual*. 3rd ed. JNCC, Peterborough.
- ❑ Mitchell-Jones, A. J. (2004) *Bat Mitigation Guidelines*. JNCC, Peterborough.

The following equipment was used during the inspection survey:

- High power T7 LED Lenser torch
- 8 x 42 binoculars
- Sample bags

Bat emergence and re-entry surveys were undertaken at dusk from 15 mins before to approximately 1.5hrs after and then at dawn from 1.5hrs before dawn until dawn. Surveyors were placed as shown in Figure 1 below. Two surveyors were used for each survey, as shown in the figure below.

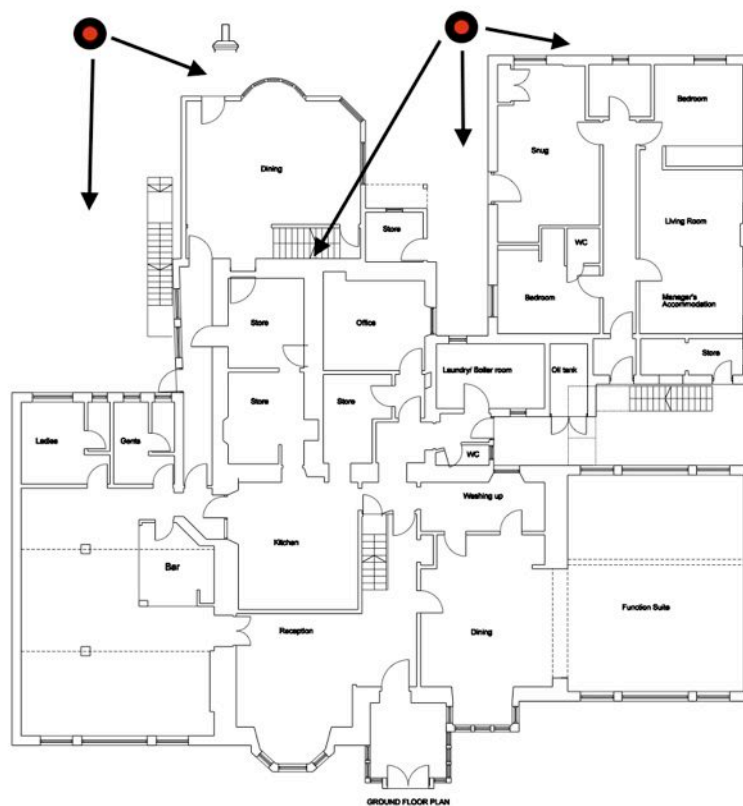


Figure 1 - Surveyor positions at Seafeld Lodge Hotel (red dots – surveyor positions, black arrows - direction of survey.)

Only two surveyors were used on the east side of the building as the west side of the building is not to be altered during the development works.

A static bat detector was left in the southeastern loft space, none was left in the northeasternmost loft space as the Soprano Pipistrelle maternity colony was present, and use was obvious.

The following equipment was used during and for the analysis of the emergence and re-entry surveys:

- Petterson D240x ultrasound detector.
- Anabat SD1 and SD2 CF bat detector.
- IPAD and echo meter touch bat detector.
- Edirol R-09HR mp3 recorder.
- Batsound sound analysis software.
- AnalookW 4.1t – sound analysis software.
- CFC read – SD card reader software.

3.4 Weather, survey dates and timing

The preliminary roost assessment was undertaken on the 2nd June 2016. The weather was dry and warm 11c, with a light wind and 5/8 cloud.

The bat emergence and re-entry surveys had the following weather:

Time of survey	Date	Weather notes
DUSK	15 th July 2016	At start 17.4c falling to 16c, calm, with 3/8 cloud cover and dry.
DUSK	2 nd August 2016	At start 15.5c falling to 14.4c, southwesterly 2-3 dropping to 1-2. 6/8 cloud cover at start increasing to 8/8 by end, dry all survey.
DAWN	12 th August 2016	12.5c all survey. Wind a southwesterly 3-4 falling to 2-3 by the end. 4/8 cloud cover at start falling to 1/8 cloud cover, dry all survey.

Table 1: Weather conditions and dates of survey

4 RESULTS

4.1 Desk study

A search on the National Biodiversity Network website returned the presence of bat records within the 10km square that the site lies within (<http://www.nbn.org.uk/> accessed June 2016).

The records included the following species: Common and Soprano Pipistrelle, Daubenton's, Natterer's and Brown Long-eared Bat. No records from the site itself.

4.2 Bat Inspection Survey Results

Bat habitat and surrounding area

The site is located on the western side of the town of Grantown. It is within the built up residential area, so the amount of mature trees and vegetation is limited and the areas suffers from light pollution at night. The lighting restricts the type of species, which would be likely to roost in the area.

The main commuting route is a good distance away from the site and is the river Spey, which runs east-west to the south of Grantown. Closer commuting routes would include the forest edge top the east of Grantown, which runs along the golf course boundary.

The surrounding farmland and forestry offers rich feeding habitats for all the native species of bat found in the area. The River Spey offers excellent foraging for the riverine species Daubenton's and Soprano Pipistrelle.

Potential access points and roosting areas

A full inspection was undertaken of the building (Photographs 1-5 in Appendix 2).

The building is a mixture of brick built and older stone built sections. The more modern sections are brick built with render on top.

The roof is mostly slate, only the southernmost section on the eastern side is felt roofed. The slates are in good condition, however the age and thickness of the slates means they naturally allow gaps for access, into the gap between the slates and the

sarking. On the eastern side of the building there are numerous dormers all with hanging slates, however they are mostly tight with very few gaps underneath.

The flashing on the roof is a mixture of steel and lead flashing. There are raised sections and areas where there is gap underneath the flashing allowing access underneath for crevice-dwelling species such as *Pipistrelle* sp.

The windows and doors are general in excellent condition and no gaps allowing access where seen throughout the whole building.

There are loft spaces in the building. The first is in the southern part of the building and is 2m high, approximately 6m wide and 12m long. It is internally sarked, there was no evidence of bats within this loft space. Below the ridge was heavily cobwebbed and nothing had disturbed the cobwebs at all.

The second loft was in the central part of the building above Room 5. This was 2.5m high, 5m wide and 10m long. There were 4 *Pipistrelle* sp. droppings on the loft floor, but no sign of any bats or entrance or exit points.

The third loft was in the north of the building above the Trout and Salmon suite. This did have evidence of bats, with 10 *Pipistrelle* sp. droppings at the west end of the loft against the gable. At the east gable there was a mass of *Pipistrelle* sp. droppings at the gable, 10-15cm deep in places. Above this there was *Pipistrelle* sp roosting between the timber and the wall, with 7 seen, but the noise suggested a lot more above the wall head. On the exterior of the loft space on the northern section of the east face, there was a gap at the apex of the gable allowing access in. There was approximately 100 *Pipistrelle* sp droppings against the gable end on the render and the windows.

The building is unlit, however along the street on the west face there is high pressure sodium streetlighting, which will light up the whole of the western face of the building.

As a hibernation roost, the building is unsuitable as it would be warm and insulated during the winter as it is occupied. This would create the wrong temperature regime for all bat species as they require cold, stable temperature with a high humidity.

Emergence and re-entry surveys

The results of the bat emergence and re-entry survey can be seen in Appendix 3 with diagrams of roost locations and access points.

The early survey on the 18th July recorded 177 Soprano Pipistrelle emerging from roost 1, 5 Soprano Pipistrelle emerging from roost 2 and 3 Soprano Pipistrelle emerging from roost 3.

The middle survey on the 2nd August recorded 349 Soprano Pipistrelle including juveniles emerging from roost1, and 2 Soprano Pipistrelles from roost 2.

The last survey on the 12th August recorded 86 Soprano Pipistrelle re-entering roost 1, but none confirmed re-entering roosts 2 and 3.

Strong lighting exists on the street on the western side of the building, completely lighting the whole face. Also the south-facing alcove on the south face is also completely lit by wall-mounted lights.

Evidence of bats

Three roosts were identified during the survey:

- ROOST 1 - A maternity colony of Soprano Pipistrelle roosting behind the timber on the internal gable of the northernmost loft space, at the east end. From the amount of droppings this roost has been present for several years. The exit point is on the external gable beneath a bargeboard at the apex of the gable. For the exact location see Appendix 3. Peak count of 349 on the second visit, which includes juveniles on the wing.
- ROOST 2 - A non-breeding summer roost of Soprano Pipistrelle. For the exact location see Appendix 3. This is a gap where the wall meets the roof, beneath it and against the wall were approximately 20 Pipistrelle sp. droppings. The amount of droppings would suggest a small roost or singleton bat. Peak count of 3 during the emergence/re-entry surveys.
- ROOST 3 – A non-breeding summer roost of Soprano Pipistrelle, see Appendix 3 for location. A gap behind drainage pipe where it meets soffit allows access. Droppings present in large numbers with approximately 1000 in two areas tucked behind drainpipe. Peak count of 5 during the emergence/re-entry survey, although more bats have obviously used this in the past judging by the number of droppings.

5 ASSESSMENT

5.1 Survey constraints

The preliminary roost assessment survey was undertaken in June in the middle of the main bat survey season, a perfect time to undertake the survey.

All three emergence/re-entry surveys were undertaken in good weather and during the period July to August.

All areas could be surveyed within the building and the loft spaces, and as such there was no constraints to the survey.

5.2 Impact assessment for Bats

Seafield Lodge Hotel is used as a roost by a single species of bat, Soprano Pipistrelle. The building is used as a maternity roost and as a non-breeding summer roost. Details of the roost sites in Section 4.2 above.

The proposals for the building have now been modified such that all three roosts sites will remain unaffected during the development. They will therefore be retained and bat use will continue throughout the development and afterwards.

Accidental disturbance of the maternity roost during the summer period, could easily lead to the roost being abandoned and effectively destroyed. Disturbance could take the form of lighting at night, inappropriate locations for scaffolding or disturbance from loft works.

5.3 Valuation of roosts

Tables 2 and 3 below detail the rarity status of each UK bat species and the geographic frame of reference valuing roosts of different types.

Rarity within range (UK populations)	Scotland
Rarest (under 10,000)	Whiskered Alcathoe? Nathusius' Pipistrelle Leisler's Noctule

	Brandt's
Rarer (10,000 – 100,000)	Natterer's Brown Long-eared Daubenton's
Common (over 100,000)	Common Pipistrelle Soprano Pipistrelle

Table 2: *Rarity assessment table for bat species within Scotland (adapted from Wray, S. et al. 2010)*

Geographic frame of reference	Roost types
Local	Feeding perches Individual bats of common species Small numbers of common species (not maternity sites) Mating sites of common species
County	Feeding perches of rarer/rarest species Small numbers of rarer/rarest species (not maternity sites) Hibernation sites for small numbers of common/rarer species Maternity sites of common species
Regional	Large swarming sites Mating sites for rarer/rarest species Maternity sites of rarer species Significant hibernation sites for rarer/rarest species or all species assemblages
National	Sites meeting SSSI guidelines Maternity sites of rarest species
International	SAC sites

Table 3: *Valuation of bat roosts according to roost type and geographic frame of reference (taken from Wray, S. et al. 2010)*

This would mean the following values for the roosts and bat assemblage present on the site:

Roosts or foraging area	Ecological Value
Soprano Pipistrelle maternity roost	County
Soprano Pipistrelle non-breeding summer roosts	Local

Table 4: *Valuation of Bat roosts*

6 CONCLUSION

The preliminary roost assessment survey assesses the Seafield Lodge Hotel in Grantown as being a *confirmed bat roost* with three Soprano Pipistrelle roosts present on the east face of the building, with a combined peak population of 351 individuals.

None of the roosts are to be affected by the works now that the plans have been modified. However they are obviously going to be in close proximity to a development project and therefore disturbance is the main threat to the roosts present.

This development would not require a bat EPS (European Protected Species) licence from SNH to proceed in a legal manner. However, this would be dependant on no bats being disturbed during the construction process, and the roost sites being protected throughout.

The conditioning of this report in the planning permission will act as the mechanism for ensuring all mitigation works.

6.1 Non-licensed method statement

This method statement details how the three identified Soprano Pipistrelle roosts at Seafield Lodge Hotel will be retained in situ and prevented from being disturbed during each stage of the construction works.

The proposed works around roost 1 are shown below:

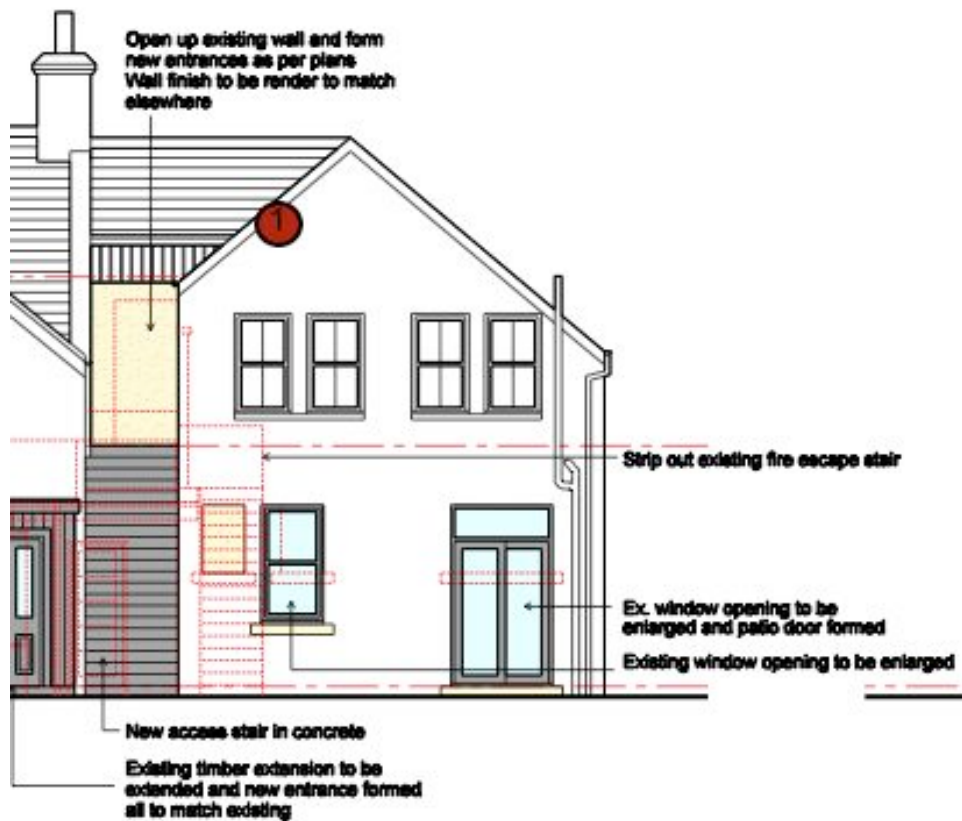


Figure 2: Proposed works around roost 1

Works around roost 1, mainly entail the removal of a steel fire escape staircase and its replacement, the enlargement of an existing ground floor window and the opening up of an existing wall and creation of new entrance. None of these works affect the roost area.

The proposed works around roosts 2 and 3 are as follows:



Figure 3: Proposed works adjacent to roosts 2 and 3.

There are no works directly adjacent to roost 2 and 3, the nearest is the removal of the single storey timber structure to the north and east of the roosts, which is a good 5m from the roosts themselves. The felt roof on the southeastern part of the building will have the felt replaced by slate roofing. The soffit box containing the roost will be unaffected by these works.

Post-planning, prior to any works

Prior to any works, and following planning permission gain, the following will occur:

- **Deflector** - A deflector will be fitted below the external access point of Roost 1 (See Appendix 4), this would prevent the build up of droppings on the exterior of the windows on that gable of the building and prevent any complaints in the future from residents. This will be fitted under supervision of a licensed batworker.

- **Dropping removal** - The bat dropping build-up will be removed in the internal gable of the northernmost loft space, at the east end. Following removal, plasticated weatherboard will be fitted and sealed beneath the roost, to make it easier to remove droppings in the future.
- **Signage** - Roost access points will be signed with small signs, such that they are only readable when you are close to the access point. Wording as follows "This area is a protected bat roost, do not disturb. Contact Scottish Natural Heritage for more information". The northernmost loft space will also be signed internally. Signage will be installed by a licensed batworker.

Immediately pre-construction

Immediately pre-construction, the following will occur:

- **Site meeting** – Prior to any works commencing the licensed batworker will meet the main contractor. The main contractor will be shown the bat roost areas and access points, which have been signed previously.
- **Toolbox talk** – A toolbox talk will be undertaken by the licensed batworker for all workers involved with the construction works to the building.
- **Roost protection** - The northernmost loft space will be locked following the sale of the building, keys kept by either CNPA or the licensed batworker. Roosts 2 and 3 are within inaccessible areas, within soffit boxes, and are therefore protected from inadvertent disturbance.

During construction

During construction the following will occur:

- **Timing** – No works will be undertaken in the northernmost loft space during the period May to September, at any other times they must be supervised by a licensed batworker.
- **Timing of roof works** – The replacement of the felt roof on the southeasternmost section of the building will not be undertaken during the period May to September to avoid disturbance to Roost 3 in the soffit box on the northern side of this section of the building.

- **Scaffolding** – Scaffolding to be erected under supervision of the licensed batworker. No Scaffolding against the northernmost gable on the east face, or in the alcove containing roost 2 and 3. A clear flight path east from the roosts must be retained at all times.
- **Timber treatment** – If timber is to be treated in the northernmost loft, use only bat-friendly chemicals and preservatives on exposed timber, list on following website (publications.naturalengland.org.uk/publication/31005).
- **Lighting** – Currently there is no external lighting, apart from an emergency light on the northernmost gable on the east face. No lighting will be installed on the east face of the building at all. No lighting to be installed within the northernmost loft space.

Post-construction

Following construction the following will occur:

- **Monitoring** – A bat inspection and emergence survey will be undertaken of the building, in July/August of the two years following construction. This will provide a direct comparison with data gathered during the baseline surveys. All data from the surveys will be passed on to the local biological records centre.

During occupation

Following the redevelopment of the hotel and conversion to residential units, the following will occur:

- ❑ **Welcome pack** – Residents in flats adjacent to the bat roosts will be given welcome packs, detailing the presence of protected bat roosts next to their properties. This will inform them that bats are completely harmless and will not affect their quality of life in the new flat.
- ❑ **Loft space** – There will be no access to the northernmost loft space for residents. This area will not be used for storage.

7 REFERENCES

HMSO (1981) *The Wildlife and Countryside Act 1981*. HMSO, London.

Hundt, L. (2016) Bat Surveys. *Good Practice Guidelines 3rd Edition*. Bat Conservation Trust. ISBN-13 9781872745985.

CIEEM (2011) *Code of Professional Conduct*. CIEEM, Winchester.

National Biodiversity Network website - <http://www.nbn.org.uk/> accessed June 2016

The Conservation of Habitats and Species Regulations 2010

The Scottish Government (2010) *Scottish Planning Policy*

The Scottish Government (2000) *Planning for Natural Heritage: Planning Advice Note 60*

8 APPENDIX 1 - LEGISLATION AND PLANNING POLICIES

Legislation for Bats

Annex II 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, the conservation of which requires the designation of Special Areas of Conservation (Sacs); Annex IV lists animal and plant species of community interest in need of strict protection, all bat species are listed in Annex IV; some are listed in Annex II (None of the species listed in Annex II occur in Scotland).

In Scotland, the EC Habitats Directive has been transposed into national law by means of the Conservation (Natural Habitats,&c.) Regulations 1994 (as amended).

As a result of this legislation, it is an offence to:

- Deliberately capture, injure or kill a bat
- Deliberately disturb a bat, in particular any disturbance which is likely: to impair bats ability to survive, to breed or reproduce, or to rear or nurture their young or; in the case of hibernating or migratory species, to impair their ability to hibernate or migrate, or; to affect significantly the local distribution or abundance of the species to which they belong.
- Damage or destroy a breeding site or resting place of a bat
- Possess, control, transport, exchange or sell a bat or parts of a bat, alive or dead.

European Protected Species (EPS) licensing is used to permit illegal activities relating to bats and their roosts for specific purposes, they are issued under the Habitats Regulations.

When the licensing authority decides whether to grant an EPS licence it must apply three tests to the proposed action:

- The main reason for undertaking the action must be one for which a licence can be issued, for example for the purpose of preserving public health or public safety, or other imperative reasons or overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.
- There must be no satisfactory alternative

- The proposed action must not be detrimental to the maintenance of the species concerned at “favourable conservation status” in its natural range.

In order for these tests to be correctly applied it is essential that survey information of a sufficient quality and standard is supplied, without this information a licence or planning application can't be assessed or issued.

More information can be found on the SNH website (<http://www.snh.gov.uk/protecting-scotlands-nature/protected-species/legal-framework/habitats-directive/euro/>) and on the Online Bat Planning Protocol (http://www.biodiversityplanningtoolkit.com/stylesheet.asp?file=211_interactive_bat_protocol)

Planning policies for protected species

Scottish Planning Policy (SPP) superceded NPPG14 Natural Heritage and states the following in relation to protected species:

“If there is evidence to suggest that a protected species is present on site or may be affected by a proposed development, their presence must be established, the requirements of the species factored into the planning and design of the development and any likely impact on the species fully considered prior to the determination of the planning application.

Planning permission must not be granted for development that would be likely to have an adverse effect on a European protected species²¹ unless the planning authority is satisfied that:

- *there is no satisfactory alternative, and*
- *the development is required for preserving public health or public safety or for other*

imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.

In no circumstances can development be approved which would be detrimental to the maintenance of the population of a European protected species at a favourable conservation status in its natural range.

Planning permission must not be granted for development that would be likely to have an adverse effect on a species protected under the Wildlife and Countryside Act 1981 unless the development is required for preserving public health or public safety.

Applicants should submit supporting evidence for any development meeting these tests, demonstrating both the need for the development and that a full range of possible alternative courses of action have been properly examined and none found to acceptably meet the need identified.”

PAN60 Planning for Natural Heritage commits the Scottish Government to safeguarding Scotland's natural heritage and integrating the principles of sustainable development into all Government policies.



Photograph 1: Western face of the hotel.



Photograph 2: Southern face of the hotel.



Photograph 3: Eastern face of the hotel.



*Photograph 4: Interior gable, at the north end of the eastern face of the building. Note *Pipistrelle* sp. droppings beneath timber.*



Photograph 5: Interior gable, at the north end of the eastern face of the building. Pipistrelle sp. droppings beneath maternity colony.

[illegible]

12 APPENDIX 4 – BAT EMERGENCE AND RE-ENTRY SURVEY RESULTS

Summary of Bat Emergence Survey on the 18th July 2016

Time	Species	Notes
21.53	Dusk	
21.35-22.51	Soprano Pipistrelle x 177	Emerged from roost 1
22.11-22.22	Soprano Pipistrelle x 5	Emerged from roost 2
22.16-22.23	Soprano Pipistrelle x 3	Emerged from roost 3
22.35	Soprano Pipistrelle	Individuals start to re-enter roost 1
Bats recorded in area not emerging or re-entering Common Pipistrelle recorded feeding and commuting		

Summary of Bat Emergence Survey on the 2nd August 2016

Time	Species	Notes
21.24	Dusk	
21.18-22.14	Soprano Pipistrelle x 349	Emerged from roost 1, juveniles present.
21.45-21.50	Soprano Pipistrelle x 2	Emerged from roost 2.
22.26	Soprano Pipistrelle	Individuals started re-entering roost 1.
Bats recorded in area not emerging or re-entering No other species.		

Summary of Bat Re-entry Survey on 12th August 2016

Time	Species	Notes
04.20	Pipistrelle sp.	Chirping from roost 1
04.34	Soprano Pipistrelle x 86	Re-entered roost 1
04.26-04.48	Soprano Pipistrelle	Attempting re-entry to roost 2 but none confirmed to enter.
05.36	Dawn	
Bats recorded in area not emerging or re-entering Common Pipistrelle foraging over garden		

Diagrams of roost locations and access points





□
Eastern elevation of the Seafeld Lodge Hotel with roost locations marked and numbered.