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6th January 2025

Ref: The Potting Shed at The Holt, Ardingly.

To whom it may concern,

The Ecology Co-op undertook a bat scoping assessment at the Holt Property on Selsfield Road near Ardingly on the 23rd of December 2024 at the request of Philip Stinson. This assessment was undertaken further to a proposal to renovate this building, which is in a serious state of decline. The survey was undertaken in accordance with best practice guidance produced by the Bat Conservation Trust¹.

The site is situated on the eastern side of Selsfield Road in a rural location with very few nearby properties and in close proximity to mixed woodland (including Chiddingly Wood) and a small watercourse. The site includes The Holt detached residential dwelling, an outbuilding to the south of the property and the potting shed at the northern boundary of a large surrounding garden that is bounded by a tall wall that screens the property from the B2028 to the west. Given the nature and small scale of the proposal to renovate the potting shed, this report has focussed upon localised site impacts

¹ Collins, J.(ed.) (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). The Bat Conservation Trust, London.

only. The site location is shown in

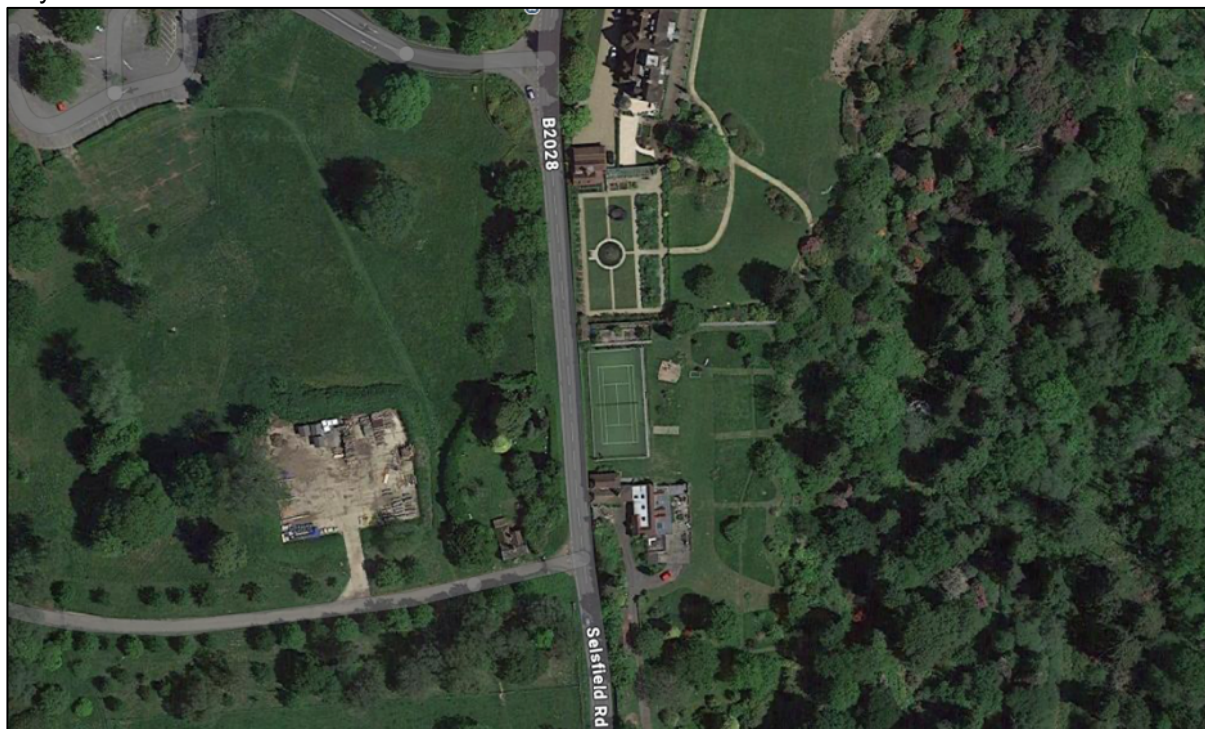


Figure 1, Appendix 1.

The proposals include urgent repairs to the building and its refurbishment. Part of the roof on the western face has badly degraded and has slumped away from the wall plate, whilst underlying damage to the western wall was also visible. This work will include the replacement of the roof, with damage to the rafters visible.

Table 1 below summarises the building assessed for bat roosting potential. Both the exterior and interior of the building were inspected as part of the survey.

Table 1. Summary of structures assessed for Potential Roost Features (PRFs).

Building section	Description of features	Assessment of suitability (Collins 2016)
External aspects	The potting shed is traditionally brick-built and once housed a heating system for a now removed greenhouse. The roof is a simple gable structure with factory formed clay roof tiles and ridge tiles. The roof has some sagging due to degraded rafters and the soffit board along the eastern side is rotten and guttering is filled with debris and vegetation. The roof is partially covered by what appears to have been Virginia creeper (<i>Parthenocissus quinquefolia</i>) vines that are now dead. The roof on the western side could not be closely inspected due to its proximity to the B2028, however no notable gaps were visible on this roof face and it is covered in dense vines. On the eastern face the tiles were similarly largely tight-fitting, with no clear gaps sufficiently large to provide access for roosting bats. On the southern gable end wall, there is a very small area of hanging tiles covered in thick vines, with several large gaps visible around some of the tiles, with two slipped tiles visible. The large gaps in this location likely detract from the value of the potential roost crevices present, with access possible by other small mammals and birds, particularly due to a short catslide roof section on the side. This feature was closely inspected using a ladder and no direct evidence of use by bats was	Low bat roost suitability

Building section	Description of features	Assessment of suitability (Collins 2016)
	possible through torching these gaps and carefully lifting some of the tiles.	
Interior	Internally the building is open to roof height and is clad with timber sarking. Some light cobwebbing was visible along the ridge of the roof. At the northwestern corner a partial collapse in the roof has led to a section of the roof dropping below the wall plate. A chimney breast is present on the western wall, with a large crack visible up most of its length, though this is not a sufficient crevice for bats. The internal aspects are lit via a small window on the northern face and two larger windows within the eastern wall. An underground former heating room for a former greenhouse positioned next to the potting shed was inspected for its potential to support hibernating bats. This space has a concrete lintel roof that is devoid of features that might support bats and similarly the brick walls appear largely featureless. Whilst the whole space could not be explored extensively, it appears to lack suitable features for hibernation, though of note a single egg sack for a cave spider (<i>Meta sp.</i>) was noted. No evidence of use by bats could be found inside the building, through close inspection.	Low bat roost suitability

Overall, the suitability of the building to support roosting bats is rated as 'low', considering the condition of the building and its context within suitable foraging habitat for bats. The condition of the building, which is clearly in a significant state of decline and requiring quite urgent attention is notable, as it is appropriate to consider the longevity of structures with the potential to support bat roosts and the opportunity to create an improved building condition for roosting bats. Left for much longer, this building would ultimately degrade further and any roosting suitability would be lost along with the collapse or further degradation of the structure, which sits adjacent to a road.

Given the low suitability rating of this building to support roosting bats and in consideration of this risk, a precautionary approach to the development is recommended in line with Bat Conservation Trust guidelines (section 5.2.9), where it states that 'an ecologist should make a professional judgement on how to proceed based on all of the evidence available'. This consideration takes into account the condition of the building, its state of repair and the opportunity to create new roost features within the structure following refurbishment. An appropriate precautionary Method Statement has been provided at Appendix 4 accompanying the report and must be strictly followed.

To mitigate disturbance to foraging and commuting bats from artificial lighting, the proposed development should include an 'ecologically sensitive lighting scheme' in accordance with guidance produced by the Bat Conservation Trust (summarised in Appendix 3), should any external lighting be proposed for the refurbished structure.

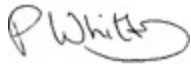
The building can be enhanced for bats by incorporating three tile wedges on each side of the roof (six in total) just below the ridge line. Tile wedges should be inserted to create 15mm gaps between roof tiles, thus creating an access point that can be exploited by small crevice-roosting bats, such as the pipistrelle species and small myotis species of bats. Further, as new roost features are to be created

within the fabric of the building, it is essential that should any vapour-proof membrane be considered over the timber sarking, or behind the small area of hanging tiles, it must either be a Type 1 F bitumen lining, or a breathable membrane that has been declared 'bat-safe' by passing the Natural England snagging propensity test.

These enhancement measures will help illustrate that the proposals are in adherence of Paragraphs 187 (d) of the National Planning Policy Framework (NPPF) and should therefore be considered favourably within the planning process.

If you have any queries about the findings of this assessment, then please do not hesitate to contact me.

Kind regards,

A handwritten signature in black ink, appearing to read 'P Whitby', with a stylized flourish at the end.

Paul Whitby

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APPENDIX 1 – Figures



Figure 1. Aerial image showing the location of The Holt property, with the potting shed identified with a white arrow. Site plan. Image produced courtesy of Google maps (map data ©2025 Google).

APPENDIX 2 – Site Photographs



Photograph 1. The eastern face of the potting shed roof, with generally tight-fitting roof tiles, but clear signs of decay.



Photograph 2. A restricted view of the western face of the shed, which sits directly adjacent to the B2028



Photograph 3. The southern face of the building, where there are some large tile gaps there were closely inspected from a ladder. No evidence of use by bats was found.



Photograph 4. An underground area understood to have formerly been used for heating a greenhouse.



Photograph 5. A degraded section of roof on the western side of the building where the rafters have detached from the wall plate.



Photograph 6. The internal aspect of the shed, which is open to roof height and well lit.

APPENDIX 3 – Reducing Impacts of Artificial Light

Bright external lighting can have a detrimental impact upon foraging and commuting bat flight paths, but more importantly can also cause bats to remain in their roosts for longer. Artificial lighting can also cause significant impacts to other nocturnal species, most notably moths and other nocturnal insects. It can also result in disruption of the circadian rhythms of birds, reducing their fitness.

Guidelines issued by the Bat Conservation Trust² should be referred to when designing the lighting scheme. Note that lighting designs in very sensitive areas should be created with consultation from an ecologist and using up-to-date bat activity data where possible. The guidance contains techniques that can be used on all sites, whether a small domestic project or larger mixed-use, commercial or infrastructure development. This includes the following measures:

Avoid lighting key habitats and features altogether

There is no legal duty requiring any place to be lit. British Standards and other policy documents allow for deviation from their own guidance where there are significant ecological/environmental reasons for doing so. It is acknowledged that in certain situations lighting is critical in maintaining safety, such as some industrial sites with 24-hour operation; however, in the public realm, while lighting can increase the perception of safety and security, measurable benefits can be subjective. Consequently, lighting design should be flexible and be able to fully consider the presence of protected species.

Apply mitigation methods to reduce lighting to agreed limits in other sensitive locations – lighting design considerations

Where bat habitats and features are considered to be of lower importance or sensitivity to illumination, the need to provide lighting may outweigh the needs of bats. Consequently, a balance between a reduced lighting level appropriate to the ecological importance of each feature and species, and the lighting objectives for that area will need to be achieved. The following are techniques which have been successfully used on projects and are often used in combination for best results:

- dark buffers, illuminance limits and zonation;
- sensitive site configuration, whereby the location, orientation and height of newly built structures and hard standing can have a considerable impact on light spill;
- consideration of the design of the light and fittings, whereby the spread of light is minimised ensuring that only the task area is lit. Flat cut-off lanterns or accessories should be used to shield or direct light to where it is required. Consideration should be given to the height of lighting columns. It should be noted that a lower mounting height is not always better. A lower mounting height can create more light-spill or require more columns. Column height should be carefully considered to balance task and mitigation measures. Consider no lighting solutions where possible such as white lining, good signage, and LED cat's eyes. For example, light only high-risk stretches of roads, such as crossings and junctions, allowing headlights to provide any necessary illumination at other times;
- screening, whereby light spill can be successfully screened through soft landscaping and the installation of walls, fences and bunding;
- glazing treatments, whereby glazing should be restricted or redesigned wherever the ecologist and lighting professional determine there is a likely significant effect upon key bat habitat and features;
- creation of alternative valuable bat habitat on site, whereby additional or alternative bat flightpaths, commuting habitat or foraging habitat could result in appropriate compensation for any such habitat being lost to the development;
- dimming and part-night lighting. Depending on the pattern of bat activity across the key features

² Bat Conservation Trust and Institute for Lighting Professionals (2018) Guidance note 8. Bats and Artificial Lighting. <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

identified on site it may be appropriate for an element of on-site lighting to be controlled either diurnally, seasonally or according to human activity. A control management system can be used to dim (typically to 25% or less) or turn off groups of lights when not in use.

Demonstrate compliance with illuminance limits and buffers

- *Design and pre-planning phase*; it may be necessary to demonstrate that the proposed lighting will comply with any agreed light-limitation or screening measures set as a result of your ecologist's recommendations and evaluation. This is especially likely to be requested if planning permission is required.
- *Baseline and post-completion light monitoring surveys*; baseline, pre-development lighting surveys may be useful where existing on or off-site lighting is suspected to be acting on key habitats and features and so may prevent the agreed or modelled illuminance limits being achieved.
- *Post-construction/operational phase compliance-checking*; as a condition of planning, post-completion lighting surveys by a suitably qualified person should be undertaken and a report produced for the local planning authority to confirm compliance. Any form of non-compliance must be clearly reported, and remedial measures outlined. Ongoing monitoring may be necessary, especially for systems with automated lighting/dimming or physical screening solutions.

Lighting Fixture Specifications

The Bat Conservation Trust recommends the following specifications for lighting on developments to prevent disturbance:

- lighting spectra: peak wavelength >550nm
- colour temperature: <2700k (warm)
- reduction in light intensity
- minimal UV emitted
- upward light ratio of 0% and good optical control.

Further reading:

Buglife (2011) A review of the impact of artificial light on invertebrates.

Royal Commission on Environmental Pollution (2009) Artificial light in the environment. HMSO, London. Available at: <https://www.gov.uk/government/publications/artificial-light-in-the-environment>

Rich, C., Longcore, T., Eds. (2005) Ecological Consequences of Artificial Night Lighting. Island Press. ISBN 9781559631297.

CPRE (2014) Shedding Light: A survey of local authority approaches to lighting in England. Available at: <http://www.cpre.org.uk/resources/countryside/dark-skies/item/3608-shedding-light>

Planning Practice Guidance guidance (2014) When is light pollution relevant to planning? Available at: <https://www.gov.uk/guidance/light-pollution>

Institution of Lighting Professionals (2021) Guidance Notes for the Reduction of Obtrusive Light GN01:2011. Available at: <https://www.theilp.org.uk/resources/free-resources/>

Voigt, C.C., Azam, C., Dekker, J., Ferguson, J., Fritze, M., Gazaryan, S., Hölker, F., Jones, G., Leader, N., Lewanzik, D. and Limpens, H., 2018. *Guidelines for consideration of bats in lighting projects*. Unep/Eurobats. Available at:

https://cdn.bats.org.uk/uploads/pdf/Resources/EUROBATGuidelines8_lightpollution.pdf?v=15421093

Appendix 4. Precautionary Method statement

To ensure the works to the Potting Shed building at The Holt do not risk killing or injuring bats, the timing and method of demolition must adhere to the following:

1. A tool-box talk will be given to all contractors prior to any works commencing which will detail the protection afforded to bats, instructions for the approach taken and the reasons why. This method of works will be made available to the project team, construction contractors and upon request, any third party with legitimate interest in the works, to serve as a reference copy that must remain on site at all times.
2. Prior to commencement the loose tiles identified must be inspected with an endoscope by a suitably licensed ecologist where practically accessible. In the unlikely event that bats are found roosting within these features, works will not be allowed to commence until a bat licence has been applied for and approved by Natural England. This may require further surveys to inform the licence.
3. Once pre-commencement checks have confirmed that no bats are using the potential roosting features, the roof and hanging tiles may be removed by hand only under direct supervision of a licensed bat handler.
4. In the unlikely event that bats, or evidence of bat roosts are found, the supervising licensed ecologist would order work to stop immediately, and Natural England would be consulted on how to proceed lawfully. Further survey work and an European Protected Species (EPS) licence may be required from Natural England in order for work to continue.
5. The removal of any hanging tiles or roof tiles must only take place between mid-March and the end of October where evening temperatures have been above 8°C for three consecutive days (in line with CIEEM Bat Mitigation Guidelines) to avoid disturbing bats that could be in hibernation.
6. A check for the presence of breeding birds must be completed before any works commence, and any nests that are identified at the time of this check will need to be retained and protected until the young have fledged.
7. Once the removal of potentially suitable features has been completed under the supervision of the bat licensed ecologist and all features with bat roosting potential are deemed to have been removed by the bat licensed ecologist, the remaining proposed works can continue unsupervised.
8. In the unlikely event that any bats are identified at any other time on site during the demolition or construction phase, then work must cease immediately, and advice sought from a suitably qualified ecologist.
9. Under no circumstance will a member of the building/construction team handle a bat. If the ecologist is absent when a bat is discovered, then a licensed ecologist must be contacted immediately for advice.
10. If any bat is injured, the UK Bat National Hotline must be contacted for advice – 03451 300228.