

Bat – Daytime Inspection Report

Montpelier Estates Ltd

Dellwood Hospital, Reading

Ref: 19-1293
Version: V1
Date: 14/10/2019



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DISCLAIMER

It should be noted that the information above provides details of the Site's current ecological situation. In the event that the proposed development does not commence within 12 months of the date of this report, further advice should be sought from a suitably qualified ecologist as to whether the information provided requires updating in light of changing ecological conditions.

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1. INTRODUCTION

Terms of Instruction

- 1.1 This report has been commissioned by Montpelier Estates Ltd. It provides further detail on the overall suitability and likely usage of Dellwood Hospital by roosting bats in respect of the proposed redevelopment for a new care home.

Report Limitations

- 1.2 This is an ecological report and as such no reliance should be given to comments relating to buildings, engineering or other unrelated matters.

Site Description

- 1.3 The site is located at central grid reference SU693727 (hereafter referred to as “the Site”) and occupies an overall footprint of approximately 0.08ha.
- 1.4 The assessment covered the entirety of the main building and single storey extension to the south.
- 1.5 The Site was bound by hardstanding, access roads and a car park associated with the Duchess of Kent Hospice which was located behind the Site to the east. The wider site was bound to the north, east and south by residential houses and gardens. Prospect Park, a local wildlife site (LWS), was also located to the west of the Site.
- 1.6 The Site location plan is provided below at **Figure 1**.

Aim of Study

- 1.7 The purpose of this report is to provide an assessment of the overall suitability of the Site to support bats and whether there is evidence of the Site being used by roosting bats.

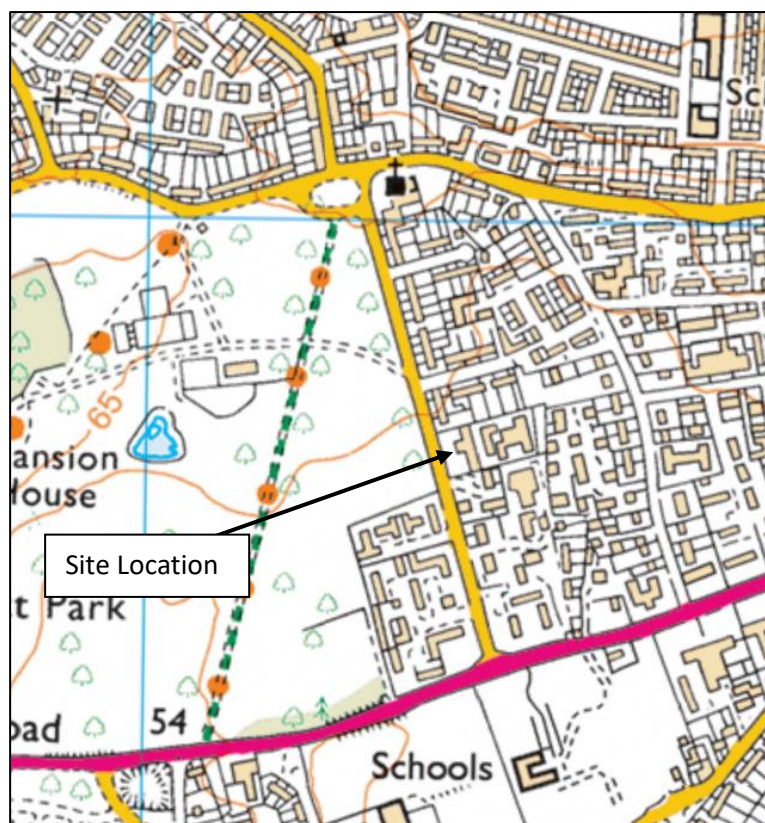


Figure 1: Site Location Plan

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2. METHODOLOGY

Desk Study

- 2.1 Existing ecological information on the Site and surrounding area was requested from the Thames Valley Environmental Records Centre (TVERC). The purpose of the desk study was to collect baseline information to identify which species of bats were present locally and whether or not any roosts were located nearby.
- 2.2 A review of online resources, including the Multi Agency Geographic Information for the Countryside (MAGIC) database was also undertaken to establish the ecological context for the Site (October 2019). The MAGIC website was also reviewed to identify any European Protected Species Mitigation Licences (Bats) within 5km of the Site.

Daytime Inspection

- 2.3 An internal and external assessment of Dellwood Hospital was undertaken to determine the building's potential to support roosting bats.
- 2.4 The survey was undertaken by a Natural England Bat Licence Holder (Class II) and included a detailed check of all suitable features for bats. Features searched and checked included cracks, wall cavities, enclosed roof voids and open joints.
- 2.5 A high powered pair of binoculars (8x44mm), as well as a range of larger and smaller hand torches (e.g. 1 million candle power to 200 lumens) were used where appropriate. A 5.96m ladder was also used to examine aerial features and gain access to rood voids where safe to do so.
- 2.6 As part of the survey, actual bats and signs of their usage including droppings, feeding remains and urine staining were also searched for as part of the assessment.
- 2.7 Based on the findings of the assessment the building was categorised as having negligible, low, moderate or high bat suitability based on the type and number of suitable bat features present, in accordance with best practice guidance, Bat Conservation Trust (2016) Bat Surveys: Good Practice Guidelines 3rd Edition.
 1. *High Potential – a structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat;*
 2. *Moderate Potential – a structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – this assessment is irrespective of species conservation status, which is established after presence is confirmed).*
 3. *Low Potential - a structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and / or suitable surrounding habitat to be used on a regular basis by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).*
 4. *Negligible Potential – negligible habitat features on site likely to be used by roosting bats.*

3. RESULTS

Desk Study

- 3.1 The full information collected during the desk study from the TVERC is summarised below.
- 3.2 Five species of bat were recorded within a 2km radius of the Site, these included; serotine *Eptesicus serotinus*, noctule *Nyctalus noctula*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and brown long-eared *Plecotus auritus*. A notable amount of unidentified bat records were also received from TVERC.
- 3.3 Records included direct observations of bats in flight, roost records, bat detector records and injured/grounded bat records.
- 3.4 The closest records were located approximately 350m south of the Site and included all species noted above it 3.2.

Daytime Inspection

- 3.5 The inspection was conducted on 8th October 2019 in good weather conditions (15°C, 80% cloud cover, Beaufort scale 1).

Field Survey Limitations

- 3.6 One roof void (Void B) was inaccessible. Tightly installed rafters did not allow for direct access into the void, however it was partially viewed through the rafters via torchlight.
- 3.7 The conclusions drawn as part of this assessment are based upon the findings of a single daytime inspection. No activity surveys have been completed as part of this assessment.

Building Description

- 3.8 Dellwood Hospital is a former NHS GP and palliative care unit which has been derelict since its closure some 8 years ago. The building itself comprises office and communal space, in addition to wards and treatment areas, all of which are empty.
- 3.9 The main building is of red brick construction and stands at two storeys with a partly converted loft space; overall the brickwork is in good condition. A large linear single storey extension is present on the southern elevation of the main building. Several other single storey extensions are present on the western elevation of the main building, which house the boiler and maintenance rooms. The main building was extended further within the last 20 years to accommodate an internal fire escape stairwell on the northern elevation.
- 3.10 The brickwork of the main building is constructed in a “header and stretcher” fashion, indicating that the walls are solid. The extended areas of the building, including the linear single storey extension to the south has cavity walls as only the “stretcher” face of the brickwork is visible.
- 3.11 The roof of the main building displays multiple pitches and hip-junctions and is clad with clay tiles. Ornamental clay ridge tiles are also present. The roof itself appears structurally sound, however, slipped and missing tiles were noted, in addition to gaps underneath many of the ridge tiles. The east facing pitch features numerous missing tiles and is in poorer condition.
- 3.12 The eaves of the south-west and western elevation overhang significantly and the remnants of three swallow/swift nest cups could be seen at the apex on the southern elevation.

- 3.13 The single storey extensions all display flat roofs lined with bitumen felt. Timber barge boards are also present across all single storey sections and are rotten in places creating access points behind the boarding.
- 3.14 Two chimney stacks are present on the main roof and lined at the base with lead flashing. The flashing is loose and warped in places creating potential access into the void and for crevice-dwelling species such as pipistrelle. Flashing is also present underneath several of the gable windows providing more access points for bats.
- 3.15 Several elevations are clad with clay hanging tiles, many of which are missing, dislodged or loose allowing for access across the wider elevation. A single blue tit was observed investigating gaps under hanging tiles on the northern elevation.
- 3.16 The window and door surrounds are generally well sealed. A broken door leading to a single storey maintenance room on the eastern elevation was noted with a partially collapsed ceiling.
- 3.17 The multiple pitched roof of the main building is split into four sections; these have been marked as Void A – D, as seen in **Figure 2** below. All other sections detailed in **Figure 2** are flat roofs with no voids to inspect.

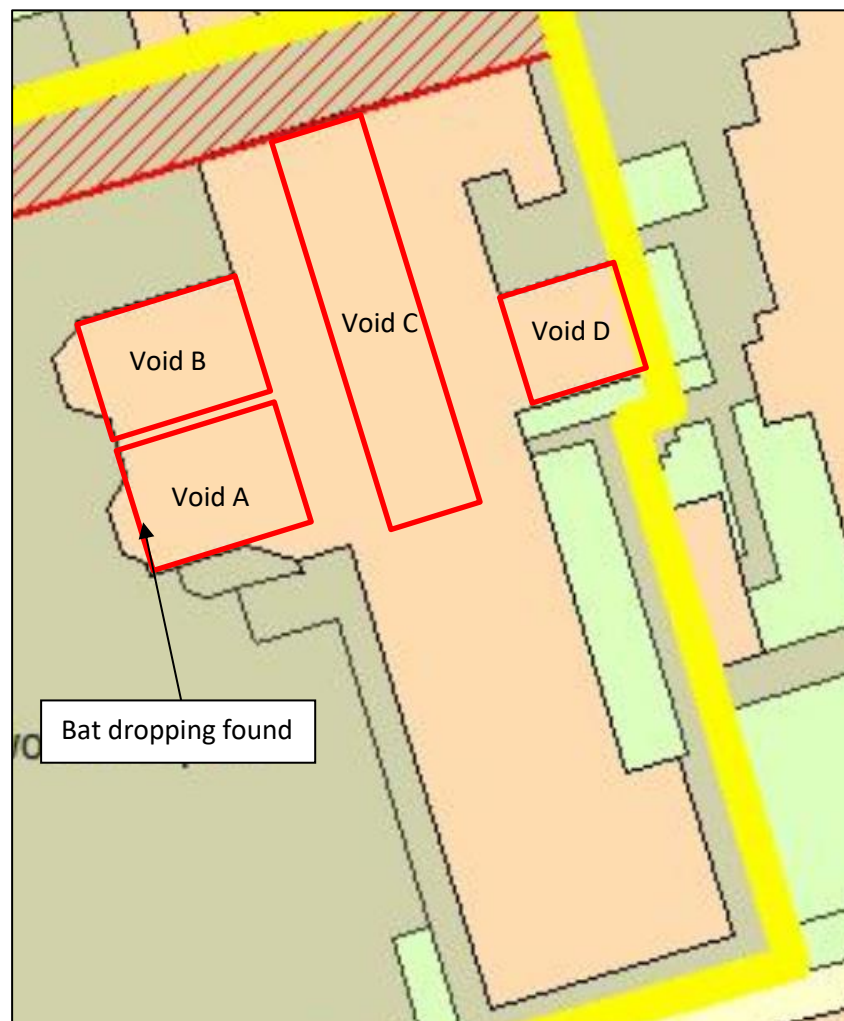


Figure 2. Void Plan (A – D)

- 3.18 Void A is of simple construction with two timber support ties and a single timber ridge beam. The void is boarded out and used for storage; no joists are visible. The roof is lined with timber

sarking (underside of clay tiles not visible) which is well sealed. One small inactive wasps nest was found along the ridge beam and signs of minor water ingress were also noted. Cobwebbing was present but considered to be minimal.

- 3.19 A single bat dropping was identified under the ridge at the western gable end and was similar in size and shape to a brown long-eared dropping.
- 3.20 Void B is of the same construction as Void A however, it was not fully accessible. A small room connected Voids A and B, with Void B having exposed rafters opening into the connecting area. These rafters were tightly spaced which did not allow for direct access into the void. The presence of bats, or evidence of bats could not be fully assessed.
- 3.21 Void C ran along the centre of the building following the main ridgeline. The wider void had been converted, accommodating a third floor type loft conversion (office space). The remaining loft space was less than 1m in height and ran the length of the building. Due to the tight crawl space the void could not be accessed safely all the way along.
- 3.22 The void was cobwebbed, with heavy webbing along the main ridge. There was a thick layer of rockwool type insulation at joist level and the roof itself was lined by timber sarking, similar to Voids A and B. No evidence of bats was found.
- 3.23 Void D was of a more complex construction supported by both timber and steel ties and struts. The roof was lined with bitumen felt which had several tears and sagged in places. Cobwebbing was present throughout the void, particularly at the gable ends and gable apex's. No evidence of bats was found.
- 3.24 In summary, the building offers a range of external and internal features with the potential to support roosting bats and has therefore been categorised as having High Suitability. The single dropping found in Void A also suggests that a bat has roosted within the smaller void at some point, therefore Void A can also be classified as a confirmed roost.

Table 1: : Summary of Findings for Daytime Bat Inspection

Features
A photograph showing a steeply pitched roof covered in dark, weathered tiles. A black downspout is visible on the right side. There are several missing tiles, particularly along the ridge and in the upper left section, revealing the underlying structure. Figure 3: Missing tiles on eastern elevation. A photograph of a roof section featuring a brick chimney or gable end. The roof is covered in dark tiles. A metal lead flashing is visible around the base of the brickwork. There are noticeable gaps between the tiles and the flashing, and also between the ridge tiles themselves. Figure 4: Gap under lead flashing and gaps under ridge tiles.

Features



Figure 5: Missing and slipped tiles on Void D.



Figure 6: Slumped and broken hanging tiles on east elevation.

Features



Figure 7: Gaps underneath tiles on north and west elevations.



Figure 8: Indeterminate nest cups (x3) on southern elevation.

Features



Figure 9: Void A, boarded and used for storage



Figure 10: Bat dropping found under ridge in Void A

Features

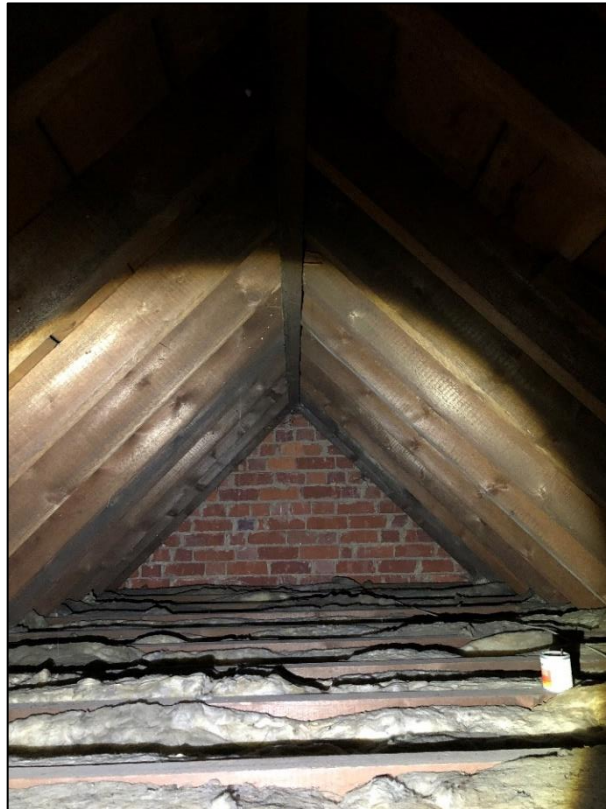


Figure 11: Void C



Figure 12: Void D

4. DISCUSSION & CONCLUSION

- 4.1 The daytime inspection undertaken in October 2019 revealed evidence of bats within roof void A (single dropping). No other evidence was identified, however, the wider building was categorised as having High Suitability to support roosting bats, both externally and internally.
- 4.2 The roosting features provided by the building were likely to support a range of different species, from crevice dwellers to void roosting bats. Based on the types of features present it was concluded that the building had potential to support day/night, transitional, maternity, satellite and breeding roosts.
- 4.3 The proposed redevelopment of the Site would result in the full demolition of the building and all single storey extensions. It is therefore recommended that further survey work be carried out to determine the presence/likely absence of bats on Site. More detail has been provided in Section 5 below.

5. RECOMMENDATIONS

Further Surveys

- 5.1 The Site offers external and internal roosting opportunities for bats and has been categorised as having High Suitability. Accordingly, further survey work is recommended to assess presence/likely absence of bats and levels of activity and building usage if bats are present.
- 5.2 A series of three nocturnal dusk emergence / dawn re-entry surveys are recommended to assess the building to be affected by the proposals. Surveys will be undertaken in accordance with best practice guidance and can be undertaken between May and September, with the optimum survey period being between May and August. A minimum of three separate survey visits will be required, comprising of dusk emergence and dawn re-entry surveys. Surveys should be undertaken in good weather conditions and spaced apart by a minimum of two weeks.
- 5.3 If bats are found to be roosting within the building then it will be necessary to apply to Natural England for a European Protected Species Derogation Licence in order to demolish the building. Appropriate mitigation will be determined during the Licence application process.

Birds

- 5.4 The Site has been shown to provide limited breeding opportunities for birds (possible swallow or swift and potentially blue tit). Therefore any destructive works to the building, such as removal of hanging tiles, should ideally take place outside the bird breeding season (March to August inclusive).
- 5.5 If in the event works need to proceed within this period then specialist advice from a suitable qualified ecologist should be sought. Typically removal of features which could be used by birds, during the bird breeding season would be informed by a pre-works nesting bird check by a suitably qualified ecologist.
- 5.6 It is also recommended that nesting opportunities are incorporated into the proposed plans. These should include:
 - X5 nest cups mounted at eaves level
 - X3 general purpose nest boxes mounted on retained and proposed trees

6. REFERENCES AND BIBLIOGRAPHY

Bat Conservation Trust (2016) Bat Surveys: Good Practice Guidelines 3rd Edition

Russ, J. (2012) British Bat Calls: A guide to species identification 1st Edition Pelagic

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