External Memo: technical note

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| From | Neil Davidson, CEnv CIEEM CMLI Lepus Consulting |
| Subject | Additional information relating to bats at Bicester Heritage |
| Code | LC-293 |
| Date | 16 th August 2017 |
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Summary

This note has been prepared to clarify information already submitted as part of a series of bat surveys undertaken at Bicester Heritage in Oxfordshire.

Background

- 1. To assist with determining planning matters at Bicester Heritage, a request for further information about bat species in a building at Bicester Heritage has been made.
- 2. Information concerning winter building bat surveys in ecological report number LC-293_Bicester 4th bat survey_110117JE.docx, titled 'Detailed daytime building assessment at Bicester Heritage, Bicester' has been submitted to the client team and local planning authority.
- 3. The report surveyed several buildings and recorded evidence of a roosting location for a bat species. Building 123 was identified as having a high suitability for supporting bats. Strong evidence was found to suggest the loft space was being used by at least one bat for feeding.

Extract from para 3.6.1 of the January 2017 report.

Building 123

Building 123 is a long and rectangular former school building with multiple storeys. The building has good access points for bats between the roofing and soffit board. Bat droppings were found on window ledges and suitable crevices identified between the outer wall and roof. On the first floor multiple tortoiseshell butterfly (Aglais urticae) wings were found, suggesting the building was used by bats. In the loft space a concentrated pile of butterfly and moth wings (orange underwing, Archieans parthenias) was accompanied by a concentrated distribution of bat droppings, suggesting the loft has been used by a single bat for feeding. Samples

of dropping were collected and sent for analysis. In conclusion:

- Strong evidence of use by bats was found;
- The rooms on the ground and first floors are considered to be of low suitability for bats; and
- The loft space is considered to be of high suitability for supporting bats.
- 4. Subsequent DNA testing by Warwickshire University confirmed that droppings found at this location were that of a brown long eared bat (Plecotus auritus).
- 5. Surveys at this location have been carred out twice in recent history, once in 2017 and previously in 2015; on both occasions the loft space was found to be in the same state; that of having some droppings and a small pile of moth wings where the bat had been feeding at a perch in the loft. All dropping and wings were found in the same location on both occasions suggesting that this is an old roost. See Figure 1 and 2.
- 6. Small scale roof repair work has been undertaken outside of the bat hibernation period and no interior work has been undertaken in the loft space. Access points into the roof exist above the eaves where the roof adjoins the walls of the building. I understand that these have been retained following advice in the January 2017 report. This allows bats to still use the location without interference.

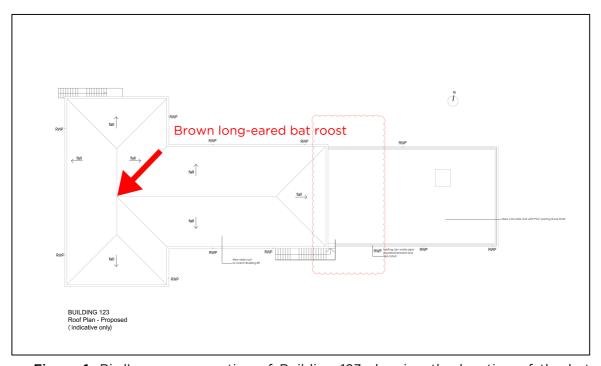


Figure 1: Bird's eye perspective of Building 123 showing the location of the bat roost

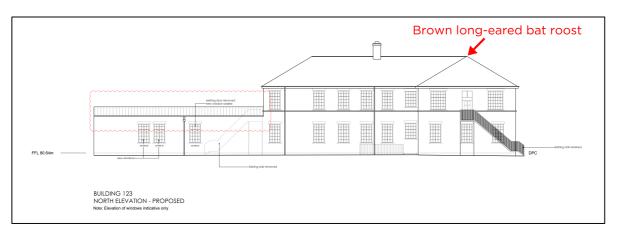


Figure 2: North elevation perspective of Building 123 showing the location of the bat roost