

UPDATED BAT SURVEY

BUILDINGS AT
MANOR FARM
LOWER ROAD
ERLESTOKE
SN10 5UE



Survey dates:	11 September 2024 12 September 2024
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1 Summary

1.1 Survey purpose:

- 1.1.1 This survey was carried out on 11 and 12 September 2024 to update bat surveys carried out in 2023 in relation to applications to make alterations to/convert existing buildings on the site.
- 1.1.2 A summer roost of Lesser Horseshoe bats was known to be present on the site.
- 1.1.3 The previous surveys were carried out on 1 June 2023, 6 July 2023, 3 August 2023 and 24 August 2023. This survey report should therefore be read in conjunction with the reports of these previous surveys.
- 1.1.4 Details of these applications are as follows:
 - Application 1 - Building 8 (toilets) & Building 9 (communal kitchen and meeting room) being converted into communal accommodation to support the offices in building 10 and 11 (retrospectively as the work has already been carried out).
 - Application 2 - Building 2 & Building 3 being converted into annexed residential accommodation.

1.2 Survey findings

- 1.2.1 Lesser Horseshoe bats remain present in the known bat roost in building 9.
- 1.2.2 Lesser Horseshoe bats are continuing to use buildings 2 and 3 as a route for roost access and dark flying space and may occasionally be roosting within these two buildings.
- 1.2.3 No bats of any other species were observed emerging from the buildings surveyed.
- 1.2.4 Common and Soprano pipistrelles were active in the local area during survey.

1.3 Conclusions

- 1.3.1 Without mitigation the proposed work is likely to result in modification of a summer roost used by Lesser Horseshoe bats, likely to be a maternity roost, by the destruction of the access point to the roost and loss of dark flying space.
- 1.3.2 There is a risk of negative impact of spillage of domestic lighting as a result of the proposed work on bats and other nocturnal wildlife.

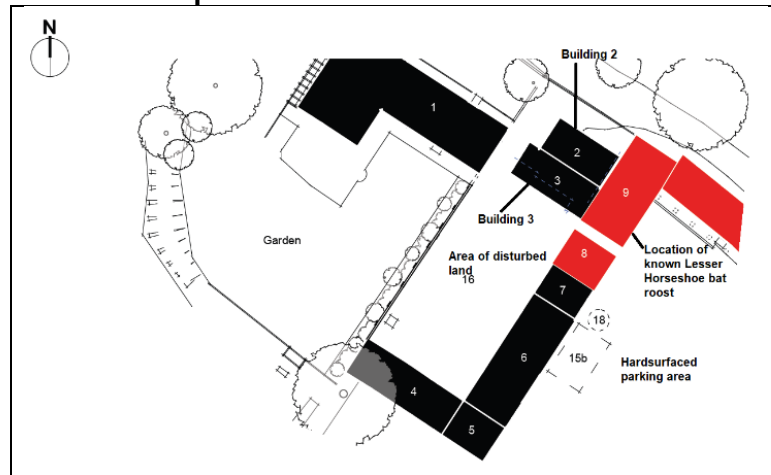
1.4 Recommendations

- 1.4.1 An application to Natural England for a full mitigation licence to include modification of a bat roost used in summer by Lesser Horseshoe bats is likely to be necessary. This can only be applied for following the granting of planning permission.

- 1.4.2** A lighting strategy for the site should be drawn up in accordance with Guidance Note 8 Bats and Artificial Lighting at night ILP/BCT 2023 <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>
- 1.4.3** A key element of this strategy should be the use of low transmittance glass to minimise the risk of spillage of domestic lighting on the routes used by Lesser Horseshoe bats emerging from the roost at dusk and careful design of external lighting.

2 Introduction (refer Appendix 1 Site photographs)

Figure 1 Site plan



- 2.1** Chalkhill was commissioned to carry out a bat survey to update the bats surveys carried out in June, July, August and September 2023 when the continued presence of a known summer roost of Lesser Horseshoe bats was confirmed.
- 2.2** The buildings remained as previously surveyed in 2023 and were a traditional former agricultural building with a single storey lean-to extension constructed against the northern elevation.
- 2.3** The site GB grid reference is ST 96250 54948.

3 Methodology

- 3.1** The buildings were surveyed in the early evening externally and internally.
- 3.2** The evening emergence surveys commenced 15 minutes before sunset and continued for 90 minutes after sunset. These surveys were carried out in optimal weather conditions.
- 3.3** One surveyor licenced by Natural England to CLS 19 and 20 levels 3 and 4 was used during each of two surveys carried out on consecutive nights. This surveyor was familiar with the site and had carried out the previous surveys of 2023.
- 3.4** Because of the small size and structure of the buildings surveyed this was considered sufficient survey effort to make an accurate assessment of the status of bats on the site and in particular to confirm the continued presence of Lesser Horseshoe bats. All elevations of the buildings were covered and were within the field of view during these two surveys.
- 3.5** A further assessment was made of the buildings surveyed for potential bat roost features, points of crawling and flying access for bats and evidence of the presence of bats.
- 3.6** Potential bat roost features include:
- lifted roof, hip and ridge tiles
 - deteriorating timber fascias and soffits
 - cracks and crevices in walls
 - gaps surrounding poorly fitting door and window frames and timber beams embedded in walls
 - lifted lead flashing at chimney bases
 - deteriorating weather boarding
 - points of crawling access to the building structure

- potential flying access to the building interior
- 3.7** Evidence of the presence of bats includes:
- deposits of bat droppings associated with potential bat roost features
 - areas worn smooth or roughened as a result of bat access to potential bat roost features or areas stained as a result of deposits of oil from the fur of roosting bats
 - droppings adhering to internal and external walls
 - deposits of bat dropping and urine splashes on internal surfaces and stored items
 - the presence of dead remains of adult and young bats
- 3.8** Survey was aided by close focus binoculars, an Elekon stereo hand held bat detector and an Anabat Express zero crossing bat detector placed in the building interiors.

4 Results of updated bat surveys

4.1 Building survey

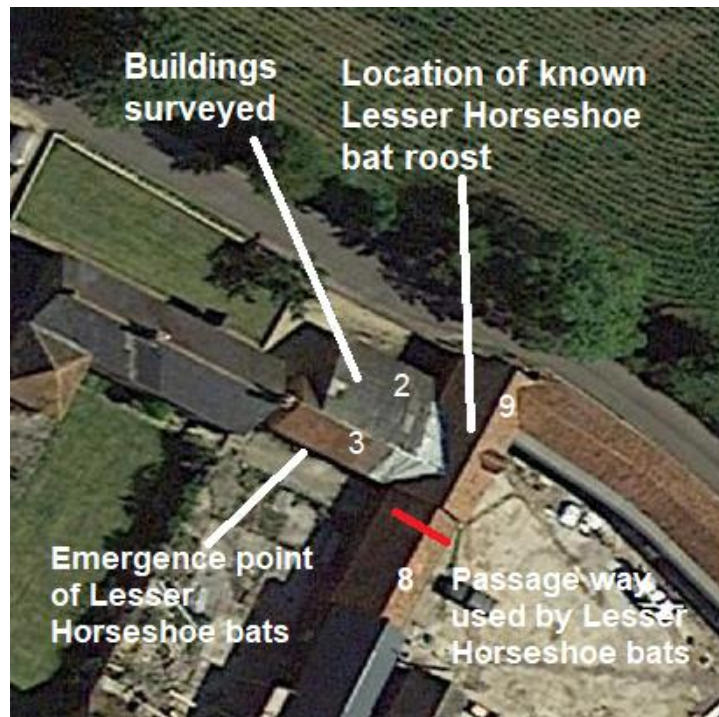
Figure 2 Annotated aerial view of site



- 4.1.1** Only buildings 2 and 3 were surveyed since no evidence of bats or potential bat roost features (other than in the loft space of building 9) was found on previous survey of the other buildings on the site and the risk of bats being present in the other buildings was assessed as nil.
- 4.1.2** Buildings 2 and 3 had previously been identified as access routes being used by Lesser Horseshoe bats to the roost in building 9 and as dark flying space.
- 4.1.3** Building 3 remained as previously surveyed with dense climbing vegetation reaching up the wall to the roof on the south west corner of the building. Building 2 remained as previously surveyed although since previous survey a large rectangular opening had developed in the north east corner of the roof slope.
- 4.1.4** No bats were observed roosting within these buildings although no access was possible to the roof void of building 3 due to the unsafe condition of the floor. No bats were seen or detected flying within these buildings as a result of disturbance of survey on a warm late summer day.
- 4.1.5** Building 2 intersected with the roofs of building 9 and 3 at the eastern end and this connectivity remained. During previous survey Lesser Horseshoe bats had been observed flying through this gap into building 2.

4.2 Evening emergence survey of 11 September 2024

Figure 3 Buildings and features used by Lesser Horseshoe bats as a roost, dark flying space and emergence point

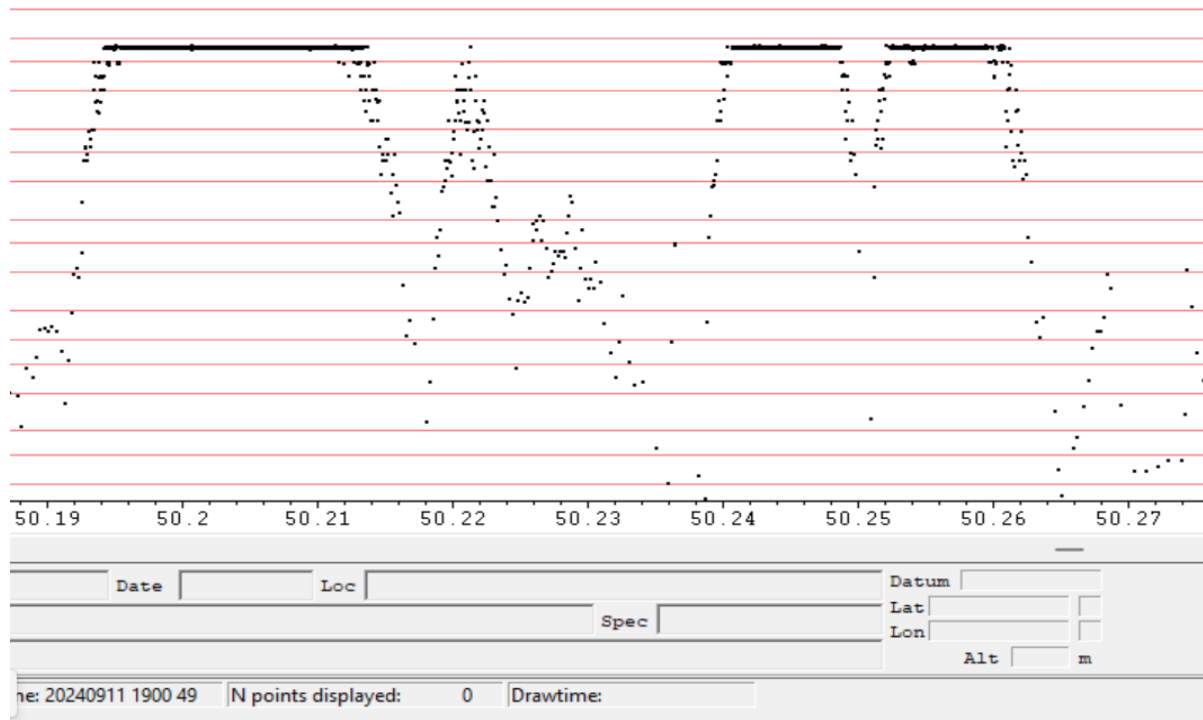


Date of survey: 11 September 2024	Sunset time: 19:23 hrs	Survey start time: 19:00 hrs	Survey end time: 20:30 hrs	Weather conditions: Air temperature 19 C, wind speed Beaufort scale 0, precipitation 0, cloud cover high light cloud.
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Field of view indicted by white line and location of surveyor indicated by red star



Sonograms from echolocation calls of Lesser Horseshoe bats flying within building 2 and recorded on an Anabat Express bat detector located within building 2

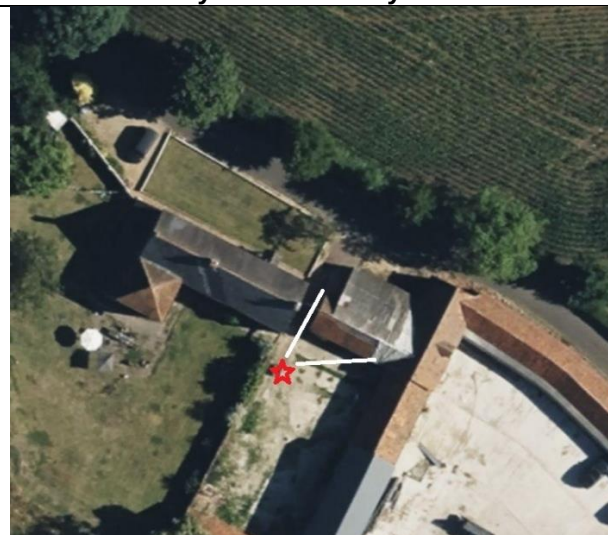


- 4.2.1** The focus of survey of 11 September 2024 was the northern and western elevations of the buildings surveyed. These elevations included the lean-to (building 2) with a monopitch roof and the western gable ended elevation of building 3 where some deterioration of the structure had occurred and timber weatherboarding was present.
- 4.2.2** No bats were observed emerging from the structure of these buildings but Common and Soprano pipistrelles were active in the area flying in from the west along the lane and through the gap between the building surveyed and adjacent farmhouse. These bats could be seen and detected feeding in the area to the south of the building surveyed together with bats which flew into this area from the south west.
- 4.2.3** Lesser Horseshoe bats were detected and observed flying within the lean-to building and recorded on an Anabat Express bat detector left running overnight in the interior of the lean-to building. No Lesser Horseshoe bats were observed or detected flying in the area to the north of building 2.

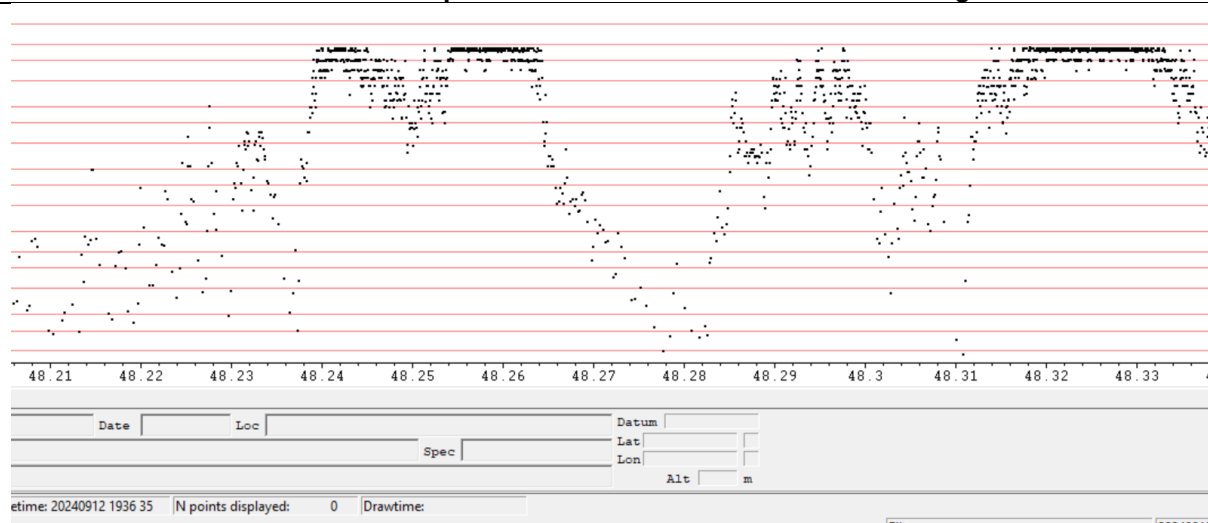
4.3 Evening emergence survey 12 September 2024

Date of survey: 12 September 2024	Sunset time: 19:21 hrs	Survey start time: 19:00 hrs	Survey end time: 20:30 hrs	Weather conditions: Air temperature 14 C, wind speed Beaufort scale 1, precipitation 0, cloud cover 0
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Field of view indicated by white line and location of surveyor indicated by red star



Sonograms from echolocation calls of Lesser Horseshoe bats flying within building 2 and recorded on an Anabat Express bat detector located within building 2



- 4.3.1** The focus of survey of 12 September 2024 was the southern and western elevations of the buildings surveyed. These elevations included the barn (building 3) and its western gable ended elevation where some deterioration of the structure had occurred and timber weatherboarding was present.
- 4.3.2** Lesser Horseshoe bat activity appeared reduced compared to the survey of the previous night when bats were very active within building 2 although some were observed emerging from gaps in the door present on the southern elevation of building 3 and detected and observed flying within its interior. Air temperature was several degrees lower than on survey of 11 September 2024. After emergence these bats seemed to prefer route through the covered passageway between buildings 8 and 9 flying through this in an easterly direction.
- 4.3.3** No other bat species were observed emerging from the structure of the building but Common and Soprano pipistrelles were active in the area to the south of building 3 flying in from the west and from the north through the gap between the farmhouse and building 3. These bats

were seen and detected and spent some time feeding above the area to the south of building 3.

- 4.3.4 Lesser Horseshoe bats were detected on an Anabat Express bat detector left running overnight in building 3 but recorded activity levels were less compared to those recorded in building 2 during survey of 11 September 2024.

5 Discussion and analysis of results

- 5.1 The surveys of 11 and 12 September 2024 confirm that the Lesser Horseshoe bat roost remains present in building 9 and bats continue to use building 3 as an emergence route and building 2 as dark flying space and perhaps an emergence route.
- 5.2 The proposed conversion of buildings 2 and 3 will have a significant impact on the Lesser Horseshoe bat roost by destroying the roost access route and areas used by Lesser Horseshoe bats as dark flying space.
- 5.3 The proposed building conversions will not result in any loss in area of the existing roost which measures 6 metres in length by 13 metres in width by 3 metres. This exceeds the minimum recommended dimensions for a Lesser Horseshoe bat roost of 2.8m in height and 5m in length and width.
- 5.4 Conversion of the buildings is also likely to result in spillage of domestic lighting onto an area not previously illuminated and particularly on the observed routes used by emerging Lesser Horseshoe bats during survey. Bats are light avoiders and spillage of domestic lighting can result in behaviour changes which can have a negative impact on bat populations.
- 5.5 No other bat species were observed emerging from the building although Common pipistrelles and Soprano pipistrelles were present commuting through and feeding in the surrounding area during survey.

6 Conclusions

- 6.1 A mitigation licence from Natural England is likely to be required since there appears to be a significant risk of negative impact on a summer roost of Lesser Horseshoe bats as a result of the proposed work as a result of destruction of a roost access point and loss of dark flying space.
- 6.2 There is a significant risk of negative impact of spillage of domestic lighting on nocturnal wildlife species and in particular on bats as a result of the proposed work.

7 Recommendations

- 7.1 A mitigation licence from Natural England should be applied for. Appropriate mitigation would be the creation of sheltered flying access to the site of the known roost of a size appropriate for Lesser Horseshoe bats. A suitable location for such access would be high up in the southern gable end of building 9 which is sheltered by a roof and by building 8. This would also provide an area of dark flying space in which Lesser Horseshoe bats have been observed flying shortly after emergence. It is not considered that creating flying access elsewhere in building 9 would be a viable option due to lack of shelter into which bats could emerge and fly.
- 7.2 A lighting strategy for the site should be drawn up in accordance with Guidance Note 8 Bats and Artificial Lighting at night ILP/BCT 2023 <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>
- 7.3 A key element of this strategy should be the use of low transmittance glass to minimise the risk of spillage of domestic lighting on the routes used by Lesser Horseshoe bats emerging from the roost at dusk and careful design of external lighting.

8 Appendices

Appendix 1 Site photographs

Building 3	
	
Southern elevation of building 3 showing growth of colonising ivy, intersection of the roof with building 9 and passageway between buildings 8 and 9	Western gable end of building 3
	
Timber and corrugated metal door with timber frame and likely former ventilation gap above, also showing window	Undersurface of roof void of building 3 showing surrounding pitching gap
	
Undersurface of roof void of building 3 showing surrounding pitching gap	Gap between rafters of roof frame where the roof of building 3 intersects with the roof of building 9 (location of known Lesser Horseshoe bat roost)



Roof void of building 3 taken by inserting camera through pitching gap

Building 2



Northern elevation of building 2



Western elevation of building 2 showing intersection with building 3



Eastern interior of building 2



Western interior of building 2

	
Unlined under surface of corrugated sheet metal roof covering and timber roof frame	Single skinned weatherboarding which tops the northern rear wall of building 2,
	
Light entering the dark interior of building 2 where corrugated metal roof sheet overlap	Intersection of roof frames of building 2, 3 and 9

Appendix 2 Summary of legislation relating to bats

All species of British bat are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the European Conservation (Natural Habitats etc.) Regulations 1994. As well as giving full protection from intentional and deliberate killing, injuring, disturbing and taking of bats, the cited legislation protects bat breeding and resting places (roosts) from damage, destruction and preventing access to such places. The legislation regarding roosts applies irrespective of whether the bats are present or not. The Countryside and Rights of Way Act 2000 added the word “reckless” to existing protection against “intentional and deliberate” actions. □The law requires that reasonable effort be made to ensure that any actions, plans or projects do not detrimentally affect bats or their roosts. Proposed developments that affect bats or bat roosts may require a licence from Natural England. The threshold above which a person will commit the offence of deliberately disturbing bats has been raised. Now, a person will commit an offence only if he deliberately disturbs such animals in a way as to be likely significantly to affect (a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or (b) the local distribution or abundance of that species. However, the recent amendments to the Habitat Regulations have also removed many of the defences. This includes the commonly relied upon ‘incidental result defence’, which previously covered acts that were the incidental result of an otherwise lawful activity and which could not reasonably have been avoided. If the work cannot be done in a manner that does not affect the bats and their roosts, and a licence is needed, the licence application must include a Method Statement detailing measures to be taken to avoid, mitigate or compensate for any potential impacts upon bats. Note that Natural England requires 30 working days to process licence applications. These are usually applied for upon granting of planning permission – although, due to a recent change in licensing arrangements, licences can now be applied for in

advance of planning permission but the Method Statement in the licence (which is a legally binding document) must concur with the detail of the planning permission.

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All reasonable effort was taken to ensure an accurate assessment of the situation at the time of the survey. However, the absence of recorded presence or sign should not be taken as an absolute guarantee that the site was not being used by a particular species. There is also no guarantee that any particular species will not use the site at any time in the future. Survey results may be weather or seasonally dependent. Any interpretation of legislation is based on our understanding and experience of the law. The relevant statutory authority can provide a more definitive interpretation.

This report is the responsibility of Chalkhill Environmental Consultants. It should be noted, that whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.