

2025 Updated Nocturnal Bat Survey Report

Site: Littleborough Community Primary School, Calderbrook Road,
Littleborough, OL15 9HW

Ref: 231665/E1

Client: Rochdale Borough Council



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SUMMARY

On 26th August 2020, a daytime bat inspection of Littleborough Community Primary School on Calderbrook Road in Littleborough near Rochdale, was undertaken by ecologists from Wardell-Armstrong.

No evidence of bat activity was found during the inspection, but some of the school buildings were identified as having moderate suitability for bat roosting, with others low suitability. Given the suitability, nocturnal surveys were recommended to determine the presence or absence of roosting bats.

On the evening of 2nd July and the morning of 22nd July 2021, nocturnal emergence and dawn return surveys were carried out. The emergence survey commenced 15 minutes before sunset and continued for up to one and three quarter hours after sunset. The dawn return survey started in the dark an hour and a half before sunrise and ended 10 minutes after sunrise.

During the evening survey, a maternity roost of 82 Common Pipistrelle Bats *Pipistrellus pipistrellus* was discovered in the east elevation of the infant block. The roost site was behind a fascia. Bats from the roost were subsequently recorded flying round the school complex as they dispersed across the area to feed.

On the dawn return survey, just nine Common Pipistrelles were recorded returning to the roost, with two more entering a fascia gap on the south elevation of the infant block. However, at least 10-12 additional Common Pipistrelles were noted flying round the school grounds, but these all flew off southeast to roost elsewhere.

From the evidence of these surveys and the diurnal inspection, the status of bats at Littleborough Community Primary School is considered thus:

- Common Pipistrelle – maternity roost for at least 82 bats in the infant block.

The variation in numbers is due to the roost having broken up early in the season, with bats dispersing to other, smaller roosts nearby. This is undoubtedly due to the weather conditions in July 2021, as other maternity roosts in England and Wales also disbanded during this period (personal observations and pers comms).

On the evenings of 1st June, 13th July and 7th August 2023, the school was re-surveyed to update the report.

On 1st June 2023 just one Common Pipistrelle emerged from the maternity roost site, with another Common Pipistrelle emerging from the fascia on the south elevation of the infant block. There were no other emerging bats. However, small numbers of Common Pipistrelles and a single Soprano Pipistrelle *Pipistrellus pygmaeus* were noted flying round, having emerged from the adjacent residential areas.

No bats emerged from the building on 13th July 2023, with low levels of foraging by the same species. On 7th August 2023, four Common Pipistrelles emerged from the maternity roost site.

An updated survey of the roost site was carried out on 16th May 2025. No bats emerged from the fascia gap, but again small numbers of Common and Soprano Pipistrelles were noted flying round having emerged from the nearby residential area.

The latest survey confirms the maternity roost is no longer present, and individual pipistrelles now only appear to roost intermittently.

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It should also be noted that a pair of House Sparrows *Passer domesticus* were nesting in another gap in the same section of fascia in 2023, but these were not present in 2025 and the nesting site is no longer in use.

1. INTRODUCTION

On 26th August 2020, a daytime bat inspection of Littleborough Community Primary School on Calderbrook Road in Littleborough near Rochdale, was undertaken by ecologists from Wardell-Armstong.

No evidence of bat activity was found during the inspection, but some of the school buildings were identified as having moderate suitability for bat roosting, with others low suitability. Given the suitability, nocturnal surveys were recommended to determine the presence or absence of roosting bats.

On the evening of 2nd July and the morning of 22nd July 2021, nocturnal emergence and dawn return surveys were carried out.

On the evenings of 1st June, 13th July and 7th August 2023, and 16th May 2025, the school was re-surveyed to update the report.

The results of the surveys are contained in this report.

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CROW) and the Natural Environment and Rural Communities Act 2006 (NERC), which add an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations (the Habitats Regulations), which defines 'European protected species of animals'. In England this is the Conservation of Habitats and Species Regulations 2010, in Scotland the Habitat Regulations 1994 (as amended), and in Northern Ireland the Conservation Regulations 1995.

All bats are also protected under the Bern Convention Appendix II, the Bonn Convention Appendix II, and the Wild Mammals (Protection) Act 1996.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats;*
- ❑ *Deliberately disturb bats (whether in a roost or not);*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts;*
- ❑ *Damage or destroy roosts;*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*

- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

2. METHODOLOGY

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2023) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal emergence surveys.

The preliminary roost assessment (PRA) is usually in the form of a diurnal walkover and can be carried out at any time of the year. It provides an opportunity to check for signs of bat occupancy and/or the suitability for bat roosting.

Evidence of bat activity includes droppings, scratch marks, feeding remains, carcasses, or even roosting animals, whilst suitability is determined by the type and number of potential roost features (PRFs) typically used by bats.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats *Plecotus auritus*, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus*/*M. brandtii*), and Lesser Horseshoes *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where these butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, a roost characterisation survey is undertaken. The results are used to inform the impact assessment and design of mitigation measures. Roost characterisation includes nocturnal emergence surveys, unless sufficient information has already been collected using robust survey methods with no significant constraints.

Nocturnal emergence surveys allow numbers and species of bats to be confirmed, and should only be undertaken when bats are out of hibernation and in their summer roosts.

The bat active period is generally considered to be between April and October, although particularly cold weather will affect the level and extent of bat activity. Indeed, the air temperature at the start of each survey should be at least 10°C or above, with no strong wind or heavy rain.

The survey starts 15 minutes before sunset and continues for one and a half to two hours after sunset.

Visits will be a minimum of three weeks apart, and the number of surveys and timing is dependent on the evidence found or the suitability of the site to bats. This will be determined by the ecologist.

In general, at least two emergence nocturnal surveys will be carried out, but a third visit may be necessary if the results are inconclusive or further information is required.

Nocturnal emergence surveys are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but the suitability for bat roosting is considered to be low, moderate or high.

For a site with no evidence but low suitability, just one nocturnal emergence survey is required, this to be in the period May to August.

For moderate suitability a minimum of two visits are needed between May and September, of which one must be in the period May to August.

With high suitability, three visits will be necessary between May and September, of which two must be in the period May to August.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

The number of surveyors and/or the use of night vision aids (NVAs) is determined by the ecologist, and is dependent on the complexity of the structure. For simple structures just one surveyor using an appropriate number of NVAs will be sufficient, but for larger sites and/or more complex or irregularly shaped structures, e.g. those with multiple elevations and/or roof slopes, more surveyors will be required.

On 26th August 2020, a daytime bat inspection was undertaken by ecologists from Wardell-Armstrong.

On the evening of 2nd July and the morning of 22nd July 2021, the evenings of 1st June, 13th July and 7th August 2023, and the evening of 16th May 2025, nocturnal emergence and dawn return surveys were carried out.

The emergence survey commenced 15 minutes before sunset and continued for up to one and three quarter hours after sunset. The dawn return survey started in the dark an hour and a half before sunrise and ended 10 minutes after sunrise.

The surveys were aided by the use of electronic Echo Meter Touch and BatBox Duet bat detectors with i-pad recording equipment. The latter facilitates the detection of bats, and computer analysis of recordings aids in the identification of individual species, in particular those which might be utilising different frequencies simultaneously.

A total of up to eight surveyors were present for the emergence surveys: Andy Warren (Natural England bat licence No. 2015-16489-CLS-CLS), Neil Musgrave (Natural England bat licence No. 2020-44602-CLS-CLS), James Warren (Natural England bat licence No. 2023-10988-CL18-BAT) and five experienced assistants.

On the dawn return, just six surveyors were required, Andy Warren, Neil Musgrave and four experienced assistants.

Pulsar Accolade LRF XP50 Pro Thermal Binoculars were also used to check for roosting bats and to assess bat activity around the site.

The results of the surveys are detailed in Section 3, with the positions of the surveyors shown in Plans 1-6.

3. RESULTS

3.1 02/07/21 Emergence Survey

The first emergence survey was conducted on 2nd July 2021, commencing at 21:15 and finishing at 23:00. The weather conditions during the time of the survey were recorded and are presented in Table 1.

Parameter	Value
Temperature (°C)	19.0 start, 17.0 finish
Cloud cover (%)	100
Precipitation	None
Wind speed (Beaufort scale)	< 1W
Sunset	21:28

Table 1 Weather conditions during the 1st emergence survey

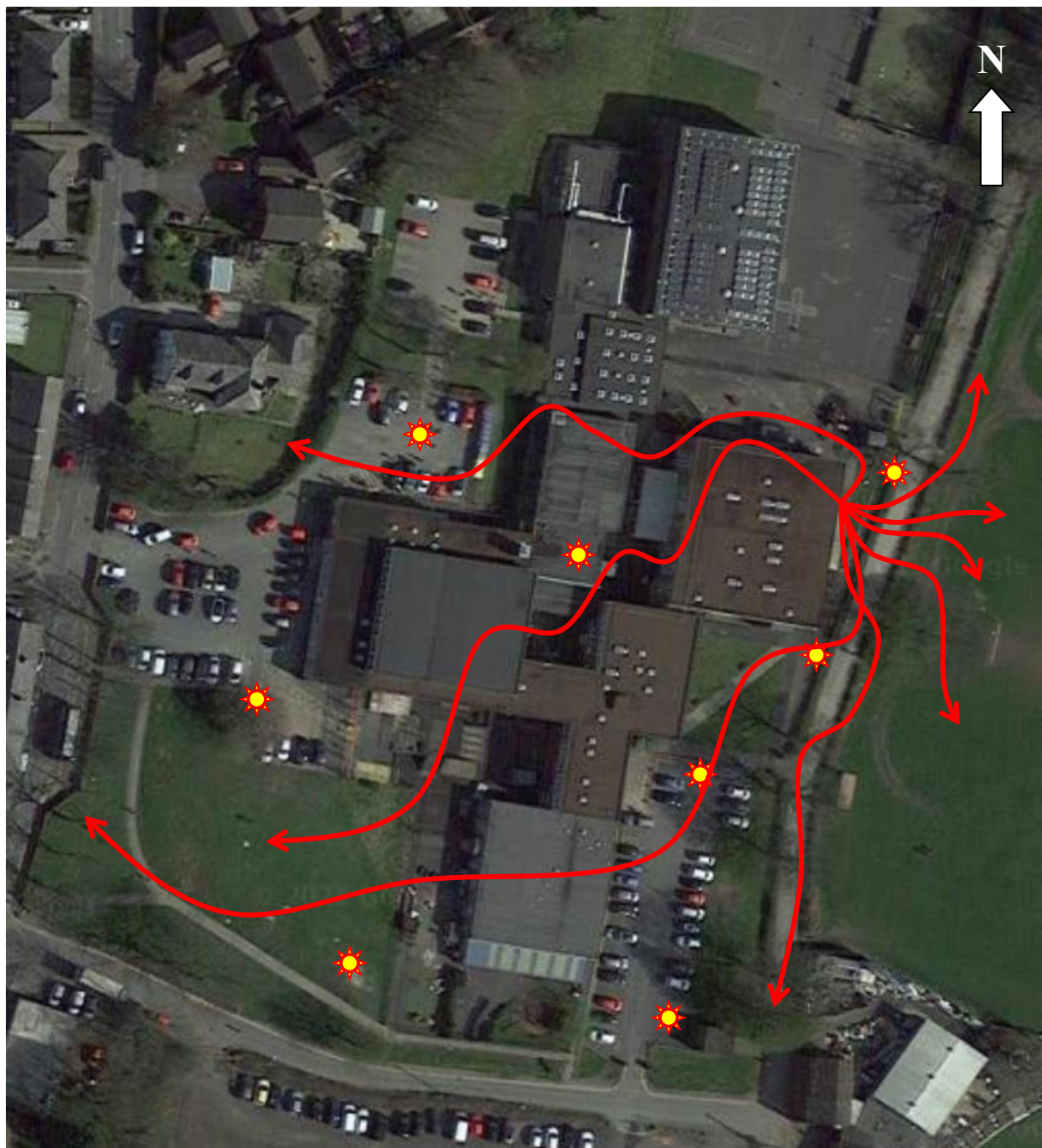
A maternity roost of 82 Common Pipistrelle Bats was discovered in the east elevation of the infant block. The roost site was behind a fascia. Bats from the roost were subsequently recorded flying round the school complex as they dispersed across the area to feed.

The times of bat detections and observations are shown in the table below.

Time	Observation
21:38	Common Pipistrelle appeared from east elevation of the infant block
21:40	2 nd Common Pipistrelle emerged from infant block
21:48-22:00	A further 39 Common Pipistrelles emerged from infant block
22:00-22:05	A further 33 Common Pipistrelles emerged from infant block
22:05-22:21	A further 8 Common Pipistrelles emerged from infant block
22:30	2 or 3 Common Pipistrelles flying round the site
22:32	Still 1-2 Common Pipistrelles present
23:00	No more observations or detections after 22:32 and the survey ended

The bat flight paths at emergence are shown on Plan 1 overleaf.

Plan 1 Bat flight paths at emergence on 2nd July 2021



Common Pipistrelle Bats →

Positions of surveyors ★

3.2 22/07/21 Dawn Re-entry Survey

The dawn re-entry survey was carried out on 22nd July 2021, commencing at 03:30 and finishing at 05:20. The weather conditions during the time of the survey were recorded and are presented in Table 2.

Parameter	Value
Temperature (°C)	18.0 start, 18.5 finish
Cloud cover (%)	0
Precipitation	None
Wind speed (Beaufort scale)	0
Sunrise	05:08

Table 2 Weather conditions during the dawn return survey

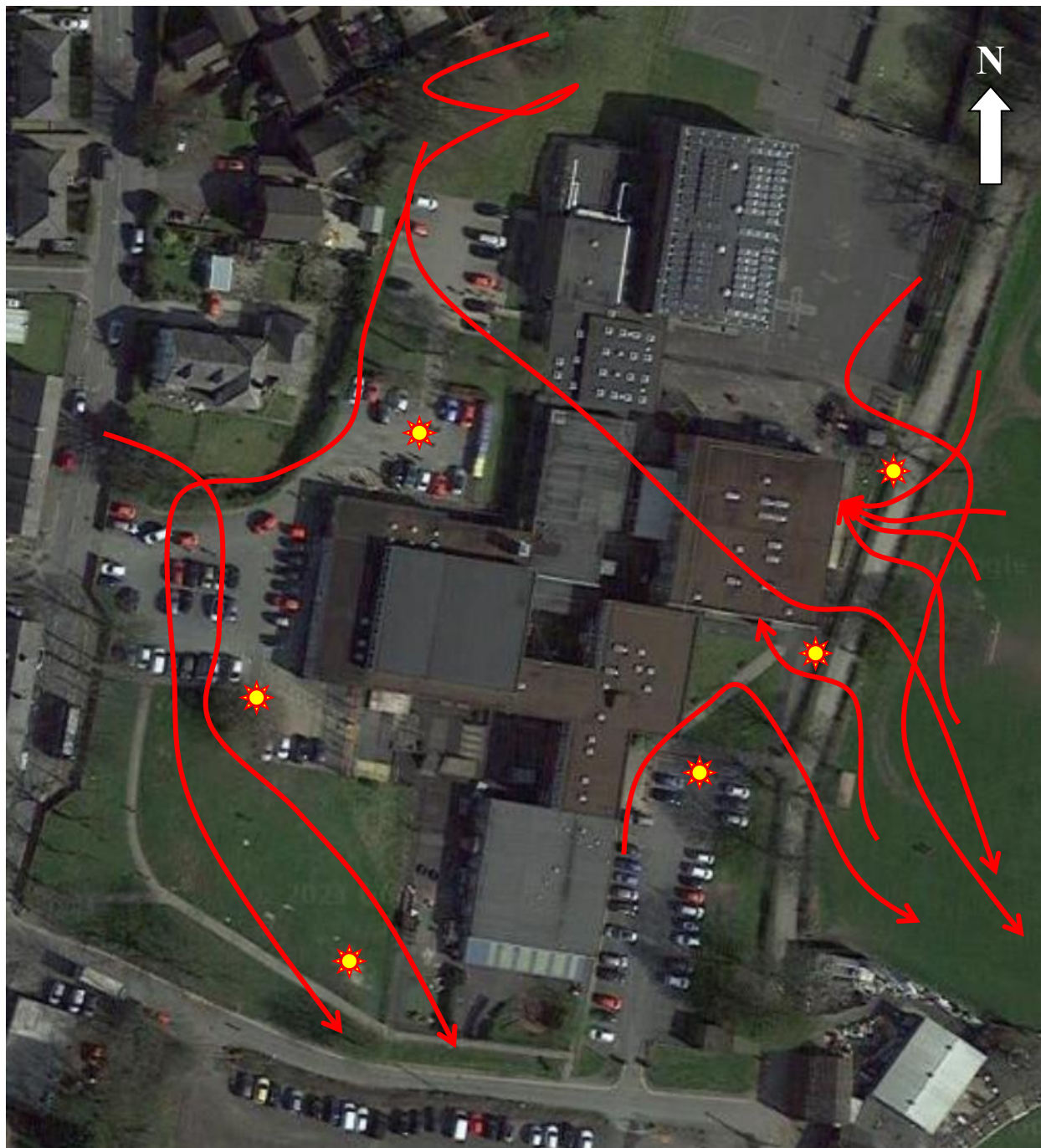
Just nine Common Pipistrelles were recorded returning to the roost, with two more entering a fascia gap on the south elevation of the infant block. However, at least 10-12 additional Common Pipistrelles were noted flying round the school grounds, but these all flew off southeast to roost elsewhere.

The times of bat detections and observations are shown in the table below.

Time	Observation
03:35	At least two or three Common Pipistrelles flying round the school
03:40	Now at least 10 Common Pipistrelles around the area
03:48	Common Pipistrelles beginning to swarm up to roost site on east elevation of infant block
03:53	Still 10-12 Common Pipistrelles flying round
04:00-04:15	4 x Common Pipistrelles entered the roost site in infant block
04:15-04:30	5 x Common Pipistrelles present
04:32-04:35	2 x Common Pipistrelles entered fascia gap on south elevation of infant block
04:38-04:41	Still at least 5-6 Common Pipistrelles flying round, then all began drifting off southeast
04:51	Common Pipistrelle flew past heading southeast
05:20	No more observations or detections and the survey ended

The bat flight paths at dawn return are shown on Plan 2 below.

Plan 2 Bat flight paths at dawn return on 22nd July 2021



Common Pipistrelle Bats



Positions of surveyors



3.3 01/06/23 Emergence Survey

The updated emergence survey was conducted on 1st June 2023, commencing at 21:30 and finishing at 22:50. The weather conditions during the time of the survey were recorded and are presented in Table 3.

Parameter	Value
Temperature (°C)	10.0 start, 10.0 finish
Cloud cover (%)	100
Precipitation	None
Wind speed (Beaufort scale)	1-3 NE
Sunset	21:29

Table 3 Weather conditions during the first 2023 emergence survey

A pre-survey inspection revealed no sign of bats within the buildings.

Just one Common Pipistrelle emerged from the maternity roost site, with another Common Pipistrelle emerging from the fascia on the south elevation of the infant block. There were no other emerging bats.

However, small numbers of Common Pipistrelles and a single Soprano Pipistrelle were noted flying round, having emerged from the adjacent residential areas.

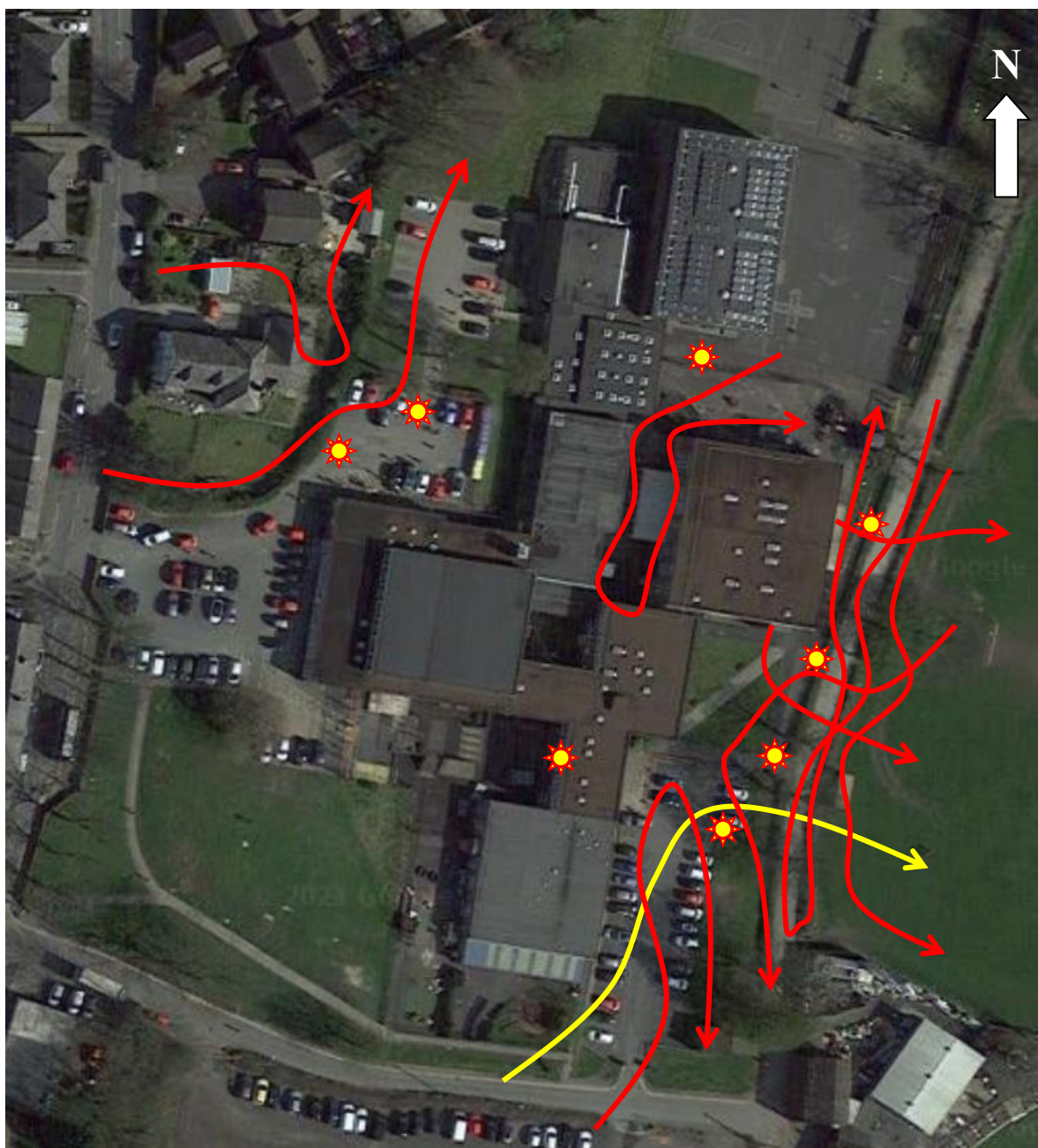
Details of the bat observations and detections are listed below.

Time	Observation
21:32	Common Pipistrelle heard at the northeast corner of the building
21:39	Common Pipistrelle in the east car park
21:39	Common Pipistrelle at the northwest corner
21:41	Common Pipistrelle looped through the east car park and returned to the adjacent park
21:42-21:43	Common Pipistrelle foraging along the edge of the park
21:45	Two Common Pipistrelles foraging along the edge of the park
21:47	Common Pipistrelle emerged from the maternity roost site and flew off east towards the park

21:48	Common Pipistrelle in the lane east of the site
21:48	Soprano Pipistrelle in the east car park
21:50	Common Pipistrelle approached the building before flying off
21:50	Two Common Pipistrelles in the alleyway
21:50	Common Pipistrelle in the gardens northwest of the building
21:52	Common Pipistrelle in the east car park
21:53	Common Pipistrelle in the east car park
21:53	Two Common Pipistrelles in the lane
21:53	Common Pipistrelle emerged from south elevation of infant block
21:56	Common Pipistrelle in the yard near the gym
21:56-21:57	Common Pipistrelle in the east car park
21:58	Common Pipistrelle in the yard near the gym
21:58	Two Common Pipistrelles in the lane
22:00-22:01	Common Pipistrelle in the east car park
22:03	Common Pipistrelle foraging in the lane
22:06-22:08	Common Pipistrelle in the east car park
22:10-20:50	Intermittent Common Pipistrelle activity in the lane until survey ended

The bat flight paths at emergence are shown on Plan 3 overleaf.

Plan 3 Bat flight paths at emergence on 1st June 2023



Common Pipistrelle Bats →

Soprano Pipistrelle Bat →

Positions of surveyors ★

3.4 13/07/23 Emergence Survey

The second updated emergence survey was conducted on 13th July 2023, commencing at 21:00 and finishing at 23:00. The weather conditions during the time of the survey were recorded and are presented in Table 3.

Parameter	Value
Temperature (°C)	16.0 start, 15.0 finish
Cloud cover (%)	90
Precipitation	None
Wind speed (Beaufort scale)	0
Sunset	21:25

Table 3 Weather conditions during the second 2023 emergence survey

A pre-survey inspection revealed no sign of bats within the buildings.

No bats were seen to emerge from the building. However, small numbers of Common Pipistrelles and a single Soprano Pipistrelle were noted flying round, having emerged from the adjacent residential areas.

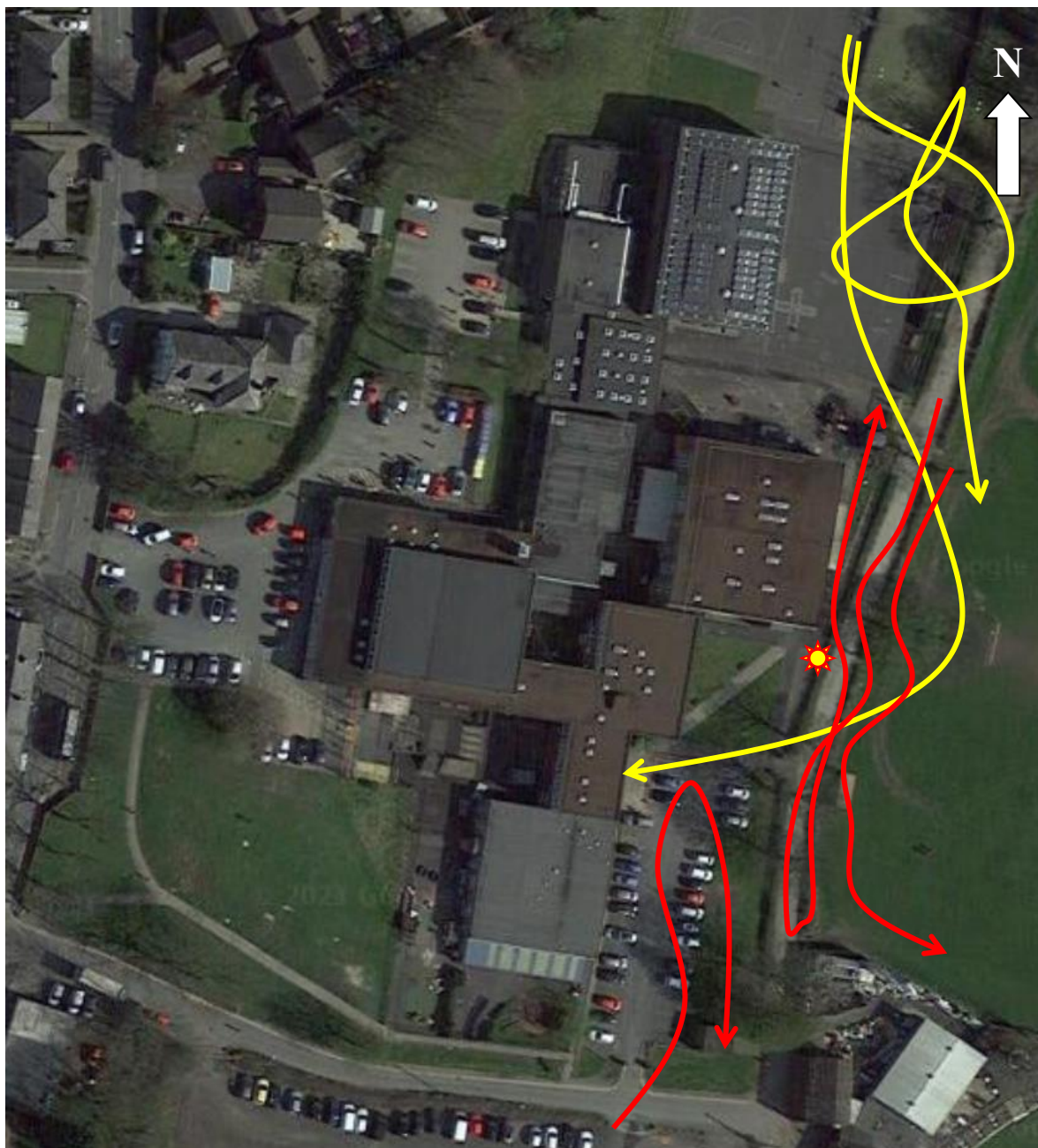
Details of the bat observations and detections are listed below.

Time	Observation
21:38	Common Pipistrelle heard but not seen
21:39	Common Pipistrelle foraging to the east
21:43	Common Pipistrelle foraging along the lane
21:45	Common Pipistrelle foraging around the site
22:02	Soprano Pipistrelle foraging along the edge of the park
22:07	Common Pipistrelle heard but not seen
22:18	Soprano Pipistrelle in the east car park
22:20	Common Pipistrelle heard but not seen
22:30	Soprano Pipistrelle foraging along the edge of the park
22:40	Common Pipistrelle heard but not seen

22:44	Soprano Pipistrelle foraging along the edge of the park
22:52	Common Pipistrelle in the east car park
23:00	Intermittent Common Pipistrelle activity until survey ended

The bat flight paths at emergence are shown on Plan 4 overleaf.

Plan 4 Bat flight paths at emergence on 13th July 2023



Common Pipistrelle Bats →

Soprano Pipistrelle Bat →

Positions of surveyors ★

3.5 07/08/23 Emergence Survey

The third updated emergence survey was conducted on 7th August 2023, commencing at 20:30 and finishing at 22:30. The weather conditions during the time of the survey were recorded and are presented in Table 4.

Parameter	Value
Temperature (°C)	13.5 start, 12.0 finish
Cloud cover (%)	5
Precipitation	None
Wind speed (Beaufort scale)	0
Sunset	20:54

Table 4 Weather conditions during the third 2023 emergence survey

The nocturnal survey revealed four Common Pipistrelles emerging from the east elevation of the school. Common Pipistrelles were active around the site. No other species were observed.

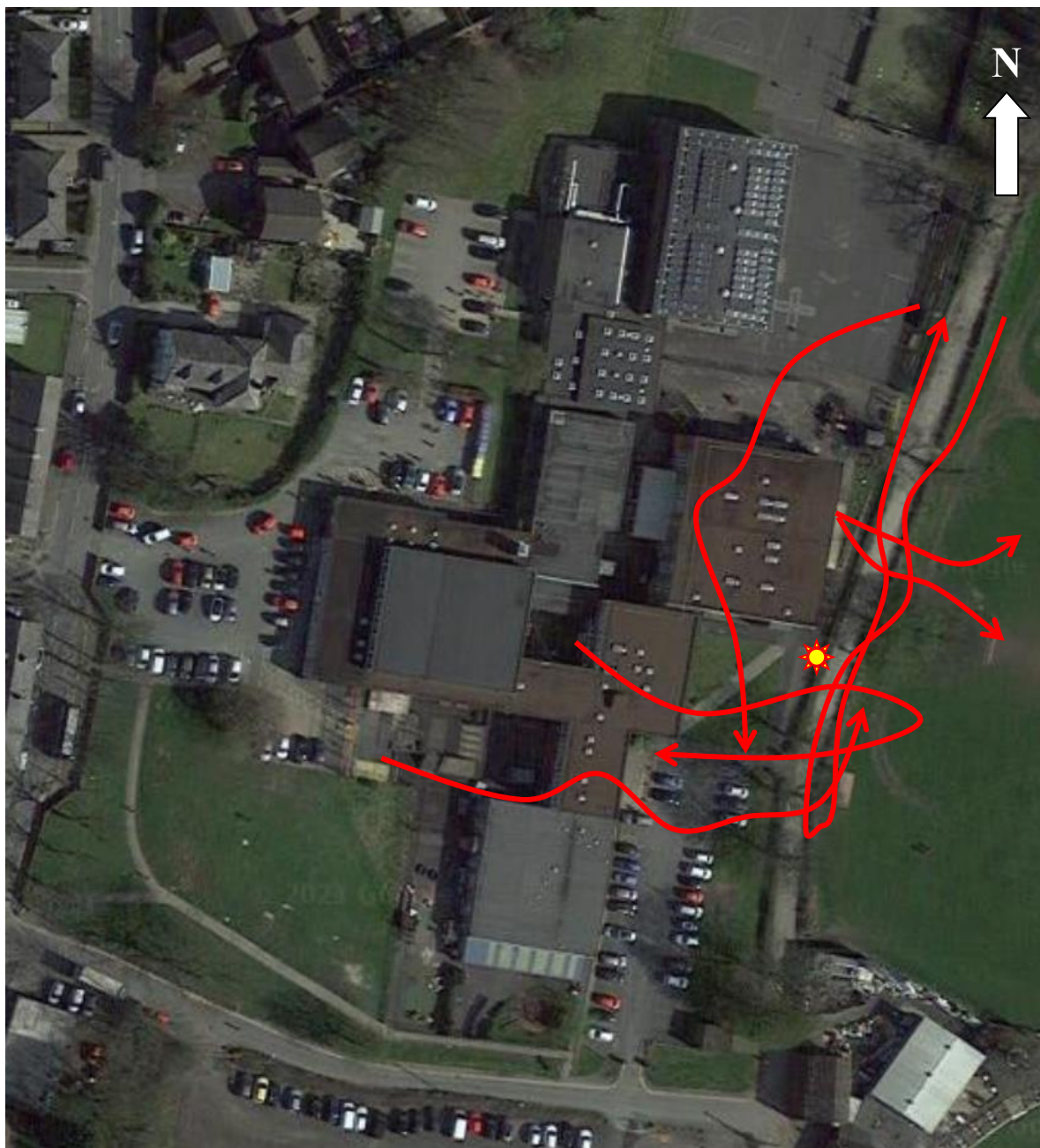
Details of the bat observations and detections are listed below.

Time	Observation
21:12	Three Common Pipistrelles emerged from the guttering of the east elevation of the buildings and flew north along the access road
21:14	Common Pipistrelle emerged from the east elevation and flew towards the park east of the school
21:18	Common Pipistrelle flew east over the building and to the park
21:23	Common Pipistrelle flew along the north elevation and over the park, heading east
21:25	Common Pipistrelle circled the east elevation
21:28	Common Pipistrelle circled the east elevation
21:33	Common Pipistrelle flew from the park, circled the east elevation, and returned to the park
21:39	Common Pipistrelle flew from the park to the east elevation and over the building
21:42	Common Pipistrelle flew from the park to the east elevation and over

	the building
21:57	Common Pipistrelle flew from the south to the east elevation and over the building
22:01	Multiple Common Pipistrelles flew north to south along the east elevation
22:04	Three Common Pipistrelles flew eastwards over the building
22:05 – 22:17	Common Pipistrelles foraged the area
22:30	No further detections were made and survey ended

The bat flight paths at emergence are shown on Plan 5 overleaf.

Plan 5 Bat flight paths at emergence on 7th August 2023



Common Pipistrelle Bats →

Positions of surveyors ★

3.6 16/05/25 Emergence Survey

The 2025 updated emergence survey was conducted on 16th May 2025, commencing at 20:50 and finishing at 22:30. The weather conditions during the time of the survey were recorded and are presented in Table 5.

Parameter	Value
Temperature (°C)	12.5 throughout
Cloud cover (%)	0
Precipitation	None
Wind speed (Beaufort scale)	0
Sunset	21:05

Table 5 Weather conditions during the 2025 emergence survey

During the nocturnal survey, two or three Common Pipistrelles flew back and forth along the lane by the school, and one Soprano Pipistrelle flew past.

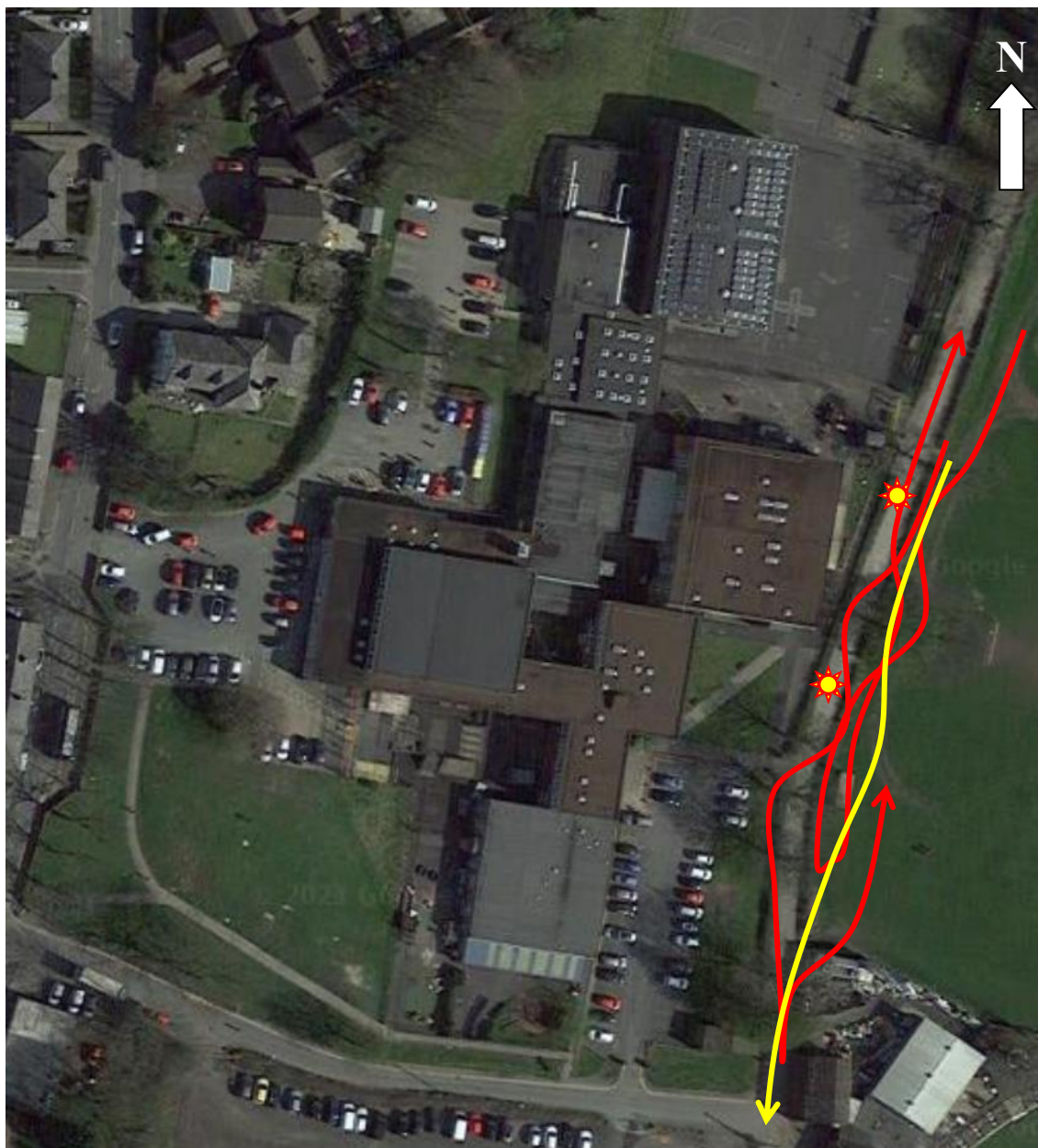
No bats emerged from the maternity roost site.

Details of the bat observations and detections are listed below.

Time	Observation
20:50	Survey commenced
21:24	Common Pipistrelle flew by
21:33	Common Pipistrelle flew by
21:36	Soprano Pipistrelle flew down the lane
21:36	Common Pipistrelle flew around the site
21:37	Common Pipistrelle flew up and down the lane
21:41	Common Pipistrelle flew up and down the lane
22:30	No further detections were made and survey ended

The bat flight paths at emergence are shown on Plan 6 overleaf.

Plan 6 Bat flight paths at emergence on 16th May 2025



Common Pipistrelle Bat →

Soprano Pipistrelle Bat →

Positions of surveyors ★

It should be noted that a pair of House Sparrows were nesting in another gap in the same section of fascia in 2023, but these were not present in 2025 and the nesting site is no longer in use.

4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties, and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October. Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls. As such they can be difficult to find, so the suitability for roosting was also assessed.

This was originally considered by Wardell-Armstrong to be low to moderate, but the nocturnal surveys subsequently confirmed the absence of roosting pipistrelles in all but one building. This was the infant block, where a maternity roost of Common Pipistrelles was discovered behind a fascia on the east elevation of the building.

During the evening survey on 2nd July 2021 up to 82 bats emerged from the roost, but only nine returned to the roost site three weeks later, although two others roosted in the same building in a fascia gap on the south elevation. A significant number of Common Pipistrelles flew past the site heading southeast, and were clearly roosting at another site nearby.

The variation in numbers is due to the roost having broken up early in the season, with bats dispersing to other, smaller roosts nearby. This is undoubtedly due to the weather conditions in July 2021, as other maternity roosts in England and Wales also disbanded during this period (personal observations and pers comms).

On the evenings of 1st June, 13th July and 7th August 2023, the school was re-surveyed to update the report.

On 1st June 2023 just one Common Pipistrelle emerged from the maternity roost site, with another Common Pipistrelle emerging from the fascia on the south elevation of the infant block. There were no other emerging bats. However, small numbers of Common Pipistrelles and a single Soprano Pipistrelle were noted flying round, having emerged from the adjacent residential areas.

No bats emerged from the building on 13th July 2023, with low levels of foraging from the same species. On 7th August 2023, four Common Pipistrelles emerged from the maternity roost site.

It was clear that the maternity roost was not occupied in 2023.

No bats emerged from the fascia gap on 16th May 2025, but again small numbers of Common and Soprano Pipistrelles were noted flying round having emerged from the nearby residential area.

The latest survey confirms the maternity roost is no longer present, and individual pipistrelles now only appear to roost intermittently.

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A pair of House Sparrows were nesting in another gap in the same section of fascia in 2023, but were not present in 2025, and the nest site is no longer in use.

5. REFERENCES

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