stark ecology ltd

BAT SURVEY REPORT

NEW COTTAGES AT ASHBYS, TYTHERINGTON, WILTSHIRE

BY

stark ecology ltd

JULY 2023

stark ecology ltd

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INTRODUCTION

Stark Ecology Ltd was asked by Chris Hocken to carry out emergence and re-entry surveys for bats of a pair of semi-detached cottages at Ashbys, Tytherington, Wiltshire. The cottages are proposed for demolition and replacement and have been confirmed as a bat roost by ABR Ecology Ltd.

The site is located at OS Grid Reference ST915410 and is in a rural location surrounded by mixed farmland which supports good hedgerow networks and woodland connectivity.

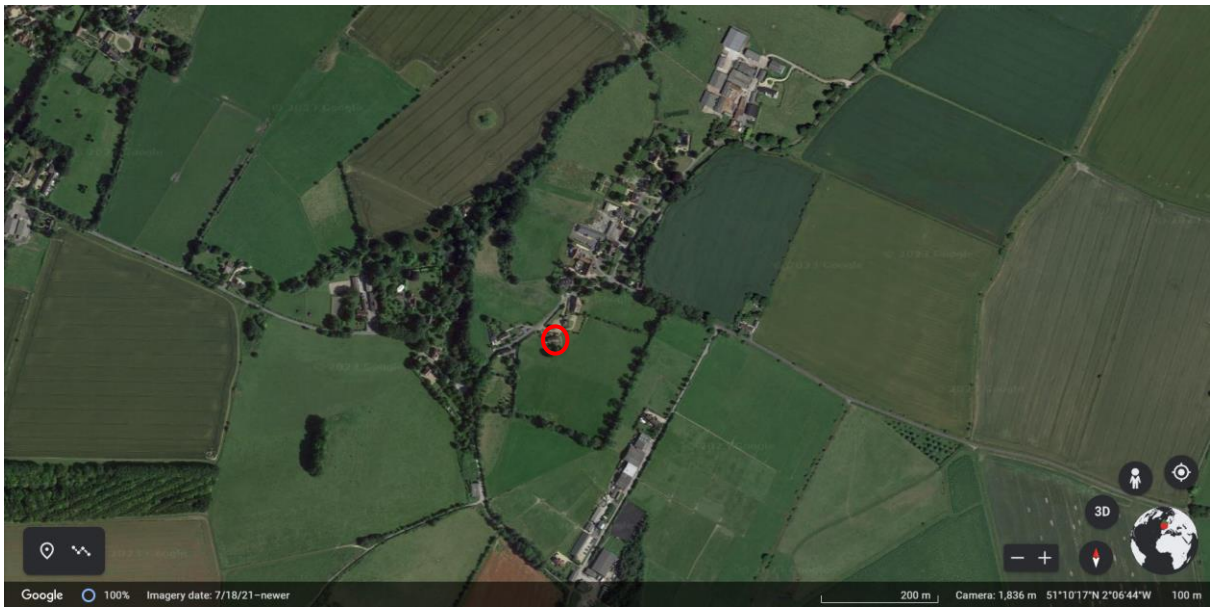


Fig 1: The cottages at Ashbys are surrounded by mixed farmland with good hedgerow and woodland connectivity.

Emergence surveys were carried out by Georgie Starkie BSc (Hons) MSc MRSB (Natural England Class 2 Bat Licence Number 2015-13123-CLS-CLS) , Adam Young (Natural England Class 2 Bat Licence) and Katherine Dedman on 24th May 2023 when the weather was clear and dry throughout with a light wind and the temperature was between 11 and 16°C and on 20th June when the weather was overcast but dry with no wind and when the temperature was between 13 and 20°C.

A re-entry survey was carried out by Georgie Starkie, Adam Young and Liz Young on 6th June 2023 when the weather was overcast but dry with a light wind. The temperature was between 5 and 13°C.

METHODOLOGY

Emergence Surveys

Emergence surveys were carried out from 15 minutes before sunset until 90 minutes after sunset on 24th May and 20th June 2023. EM Touch Pro detectors were used to confirm the species observed and a Panasonic HC-VX870 with infra-red, supported by a Nightfox XC5 850nm torch, was used to aid visual assessment of bat activity associated with the cottages. Bat activity in the surrounding area was also noted.

Re-entry Survey

One re-entry survey was conducted from 90 minutes before sunrise until 15 minutes after sunrise on 6th June 2023. EM Touch Pro detectors were used to confirm the species observed and a Panasonic HC-VX870 with infra-red, supported by a Nightfox XC5 850nm torch, was used to aid visual assessment of bat activity associated with the cottages. Bat activity in the surrounding area was also noted.

Limitations

This survey provides a brief snapshot of the site at the time the work was carried out and while every step was taken to ensure that the results of the survey are accurate, features of ecological value can change and therefore this report is only valid for 12 months.

RESULTS

Site Description

1 & 2 New Cottages at Ashbys are a pair of semi-detached brick built cottages that were constructed in 1959. The roof is interlocking cement tiles that are lined with bitumen roofing felt.



Fig 2: 1 & 2 New Cottages.

This photo taken from the north in June 2023.

There are two brick chimneys which support no crevice features and the lead flashing sealing the base of the chimneys is not lifted in any area.



Fig 3: 1 & 2 New Cottages.

This photo taken from the southeast in June 2023.

The property is tightly sealed at the eaves, where there are uPVC soffits and cement fibre board. The mortar at the roof verges is in good condition with none noted to be damaged or missing.

The loft spaces of the properties are insulated with fibreglass material.



Fig 4: The loft spaces of the two cottages are insulated with fibreglass material.

This photo taken inside the loft space of 1 New Cottages in June 2023.

Bats

A building inspection survey carried out by ABR Ecology Ltd earlier in 2023 identified low numbers of bat droppings from common pipistrelle *Pipistrellus pipistrellus* and brown long-eared *Plecotus auritus* (confirmed through DNA analysis) in the loft spaces of the two cottages.

Emergence Survey – 24th May 2023

The results of this survey are set out in Appendix 2.

This survey was carried out at an optimum time of the year in good weather conditions and bat activity was recorded in the habitat surrounding the cottages throughout.

No bats were recorded emerging from any feature of the cottages and no other behaviour to indicate use of the building by roosting bats was recorded.

Commuting and foraging, was recorded by common pipistrelle, soprano pipistrelle *P. pygmaeus*, serotine *Eptesicus serotinus* and brown long-eared bats in the habitat surrounding the cottages.

Re-entry Survey – 6th June 2023

The results of this survey are set out in Appendix 3.

This survey was carried out at an optimum time of the year in good weather conditions and bat activity was recorded in the habitat surrounding the cottages throughout.

No bats were recorded entering or emerging from any feature of the cottages and no other behaviour to indicate use of the buildings by roosting bats was recorded.

Commuting and foraging by common pipistrelle was recorded in the habitat around the cottages during this survey but no activity by other bat species was recorded.

Emergence Survey – 20th June 2023

The results of this survey are set out in Appendix 4.

This survey was carried out at an optimum time of the year in good weather conditions and bat activity was recorded in the habitat surrounding the cottages throughout.

No bats were recorded emerging from any feature of the cottages and no other behaviour to indicate use of the buildings by roosting bats was recorded.

Commuting and foraging was recorded by common pipistrelle, soprano pipistrelle, noctule *Nyctalus noctula* and serotine throughout this survey.

LEGISLATION

Bats

Bats are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2017 and under Section 9 of the Wildlife and Countryside Act 1981.

Under this legislation it is an offence to:

- Kill, injure or handle a bat;
- Possess a bat (whether alive or dead);
- Disturb a roosting bat; or
- Sell (or offer for sale) a bat (without an appropriate licence).

In addition, it is an offence to damage, destroy or obstruct access to a bat roost, whether it is currently in use or not.

Where bats are present within a feature or structure on a development site in England, a licence may be granted by Natural England for works to alter or remove the roost. Licence applications can only be made once full planning permission has been granted and a suitable mitigation strategy (set out in a detailed Method Statement) forms an essential part of this application process. Works are likely to be seasonally restricted and must be carried out in accordance with the Method Statement agreed with Natural England.

DISCUSSION AND CONCLUSIONS

Bats

A building inspection carried out by ABR Ecology Ltd has identified evidence of common pipistrelle and brown long-eared bat roosts in the loft spaces of 1 & 2 New Cottages, Ashbys, Tytherington. During emergence and re-entry surveys carried out by Stark Ecology Ltd during May and June 2023 (when the weather conditions were suitable) no bats were recorded emerging from or re-entering any part of the property. As a result, the pair of cottages are considered to support roosts of low numbers of both species that are not used on a regular basis.

All the roosts that are present within the roof and loft spaces of the cottages will be destroyed when the buildings are demolished and in order to proceed lawfully, work to remove the roof materials will require a licence from Natural England. An application to Natural England for a licence can be made once full planning permission has been granted and all conditions relating to wildlife discharged. Under the terms of the licence, and to maintain the Favourable Conservation Status of bats at the site, works to strip the roof (tiles, batten, timber and felt) will need to be carried out by hand under ecological supervision. The bat roosts at this site are of low conservation significance (Figure 4, Bat Mitigation Guidelines) so this work can be carried out at any time of the year, but not when daytime temperatures are below 8ºC, in heavy rain or strong winds.

Tiles, batten, timber, felt and other materials will be carefully removed by hand and will be lifted, not rolled, to prevent crushing any bats which may be present beneath. All materials will then be checked on all surfaces for bats before stacking or throwing.

Any bats that are found will be caught by the supervising ecologist and placed in a Schwegler 2F bat box (or suitable equivalent) which will be installed on a tree in a quiet area of the site, away from disturbance by construction works.

Mitigation

Prior to demolition commencing, two Schwegler 2F bat boxes (or suitable equivalents) will be placed on mature trees nearby. These bat boxes will remain in-situ on completion of development, to enhance roosting opportunities for bats across the wider site.

It will be necessary to include integrated features for bats in the new properties that are proposed and will need to include a void space for the benefit of brown long-

eared bats. It is recommended that this void space be provided in part of the loft space of House 1, as shown in Fig 5 below.

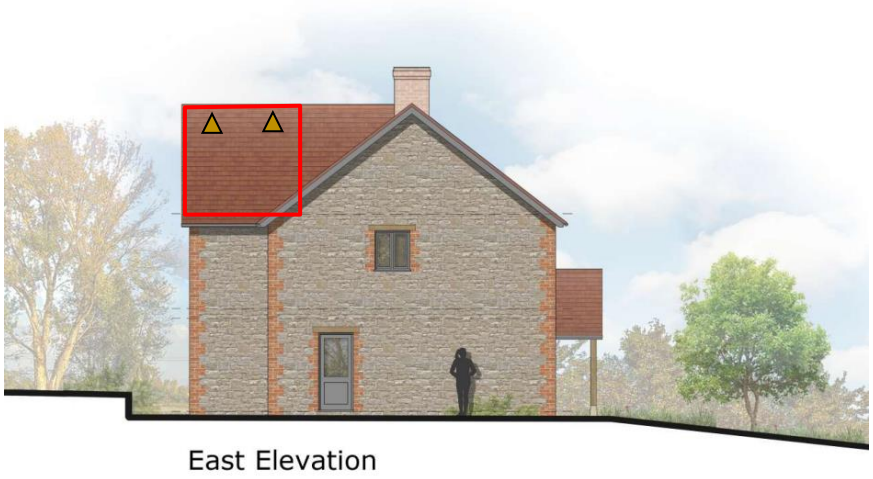


Fig 5: A bat loft will be provided in part of the loft space of House 1.

▲ Bat access tiles to be incorporated in the roof to provide access to the bat loft. Eg.:



The loss of common pipistrelle roosts will need to be mitigated through the provision of integrated bat tubes (eg. Vivara Pro Build-in WoodStone Bat Box | NHBS Practical Conservation Equipment) in the gable ends of the new properties.



Fig 6: Integrated bat tubes in the gable ends of the new properties at the site.

★ Integrated bat tube suggested positions

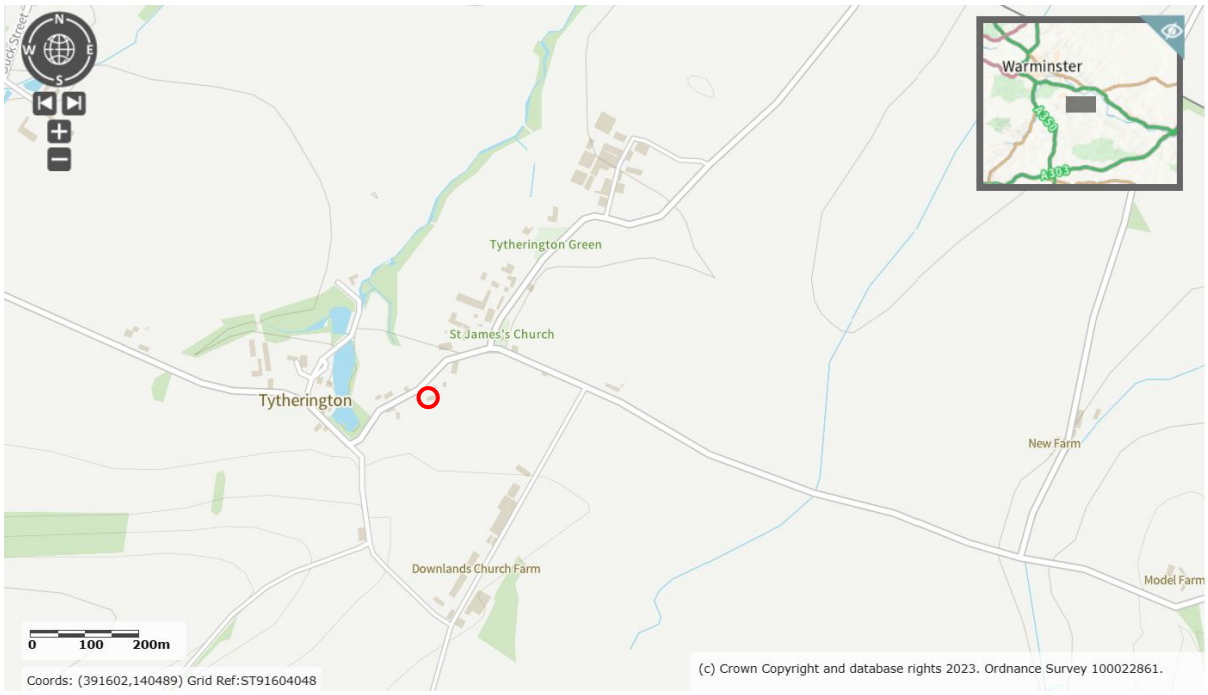
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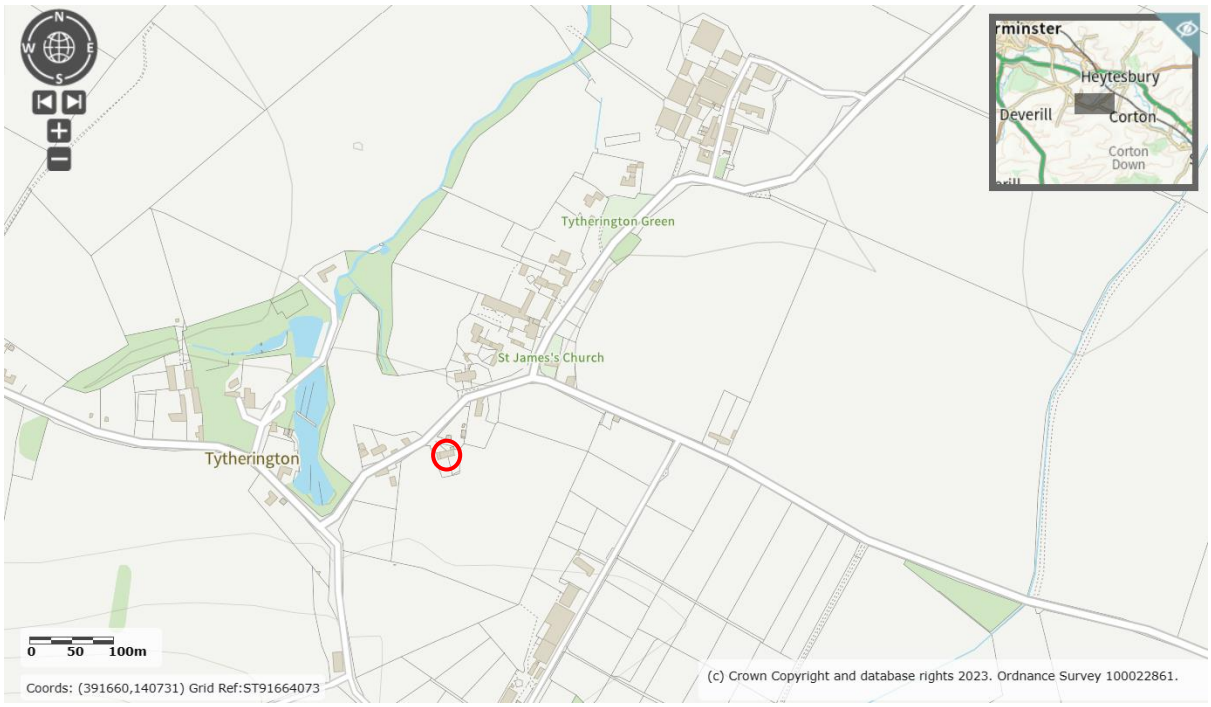
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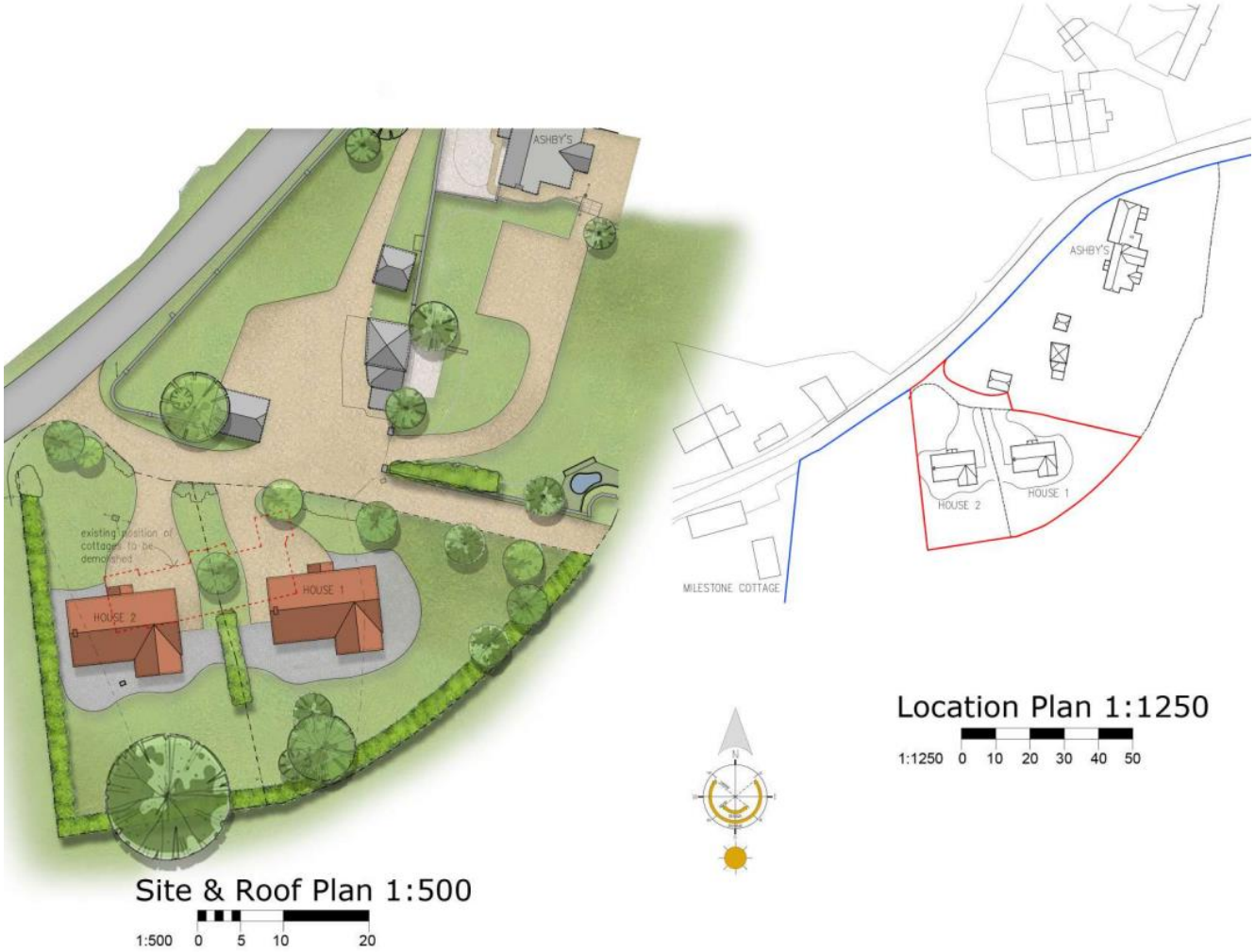
Bat Mitigation Guidelines. 2004. Mitchell-Jones, A.J. English Nature.

APPENDIX 1: SITE MAP

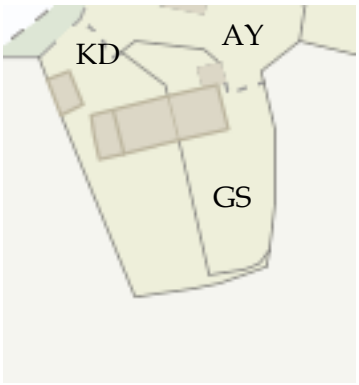




Site Proposals



APPENDIX 2: EMERGENCE SURVEY 24TH MAY 2023



Survey Sheet – Bat Activity

Survey Kit Used:
EM Touch Pro 2
Panasonic HC-VX870
Nightfox XC5

Site Name: New Cottages at Ashbys Date: 24/05/23

Weather Conditions: 0% cloud, no rain, wind B1

Max Temp: 15.9ºC Min Temp: 11.8ºC

Sunset Time: 2104 Survey Type: Emergence

Survey Starts: 2049 Survey Ends: 2234 Surveyor: GS

Time	Map Ref	Species	Activity
2139		45 pip	Flying south past eastern gable end
2143		45 pip	As before, flying south past eastern gable end
2149		45 pip	HnS
2150		45 pip	Foraging over gardens
2157		45 pip	Foraging over gardens
2159		45 pip	Foraging over gardens ongoing
2203		45 pip	1 bat continues to forage over gardens
2206		Serotine	2 bats chasing over gardens
2206		45 pip	Foraging over gardens

Time	Map Ref	Species	Activity
2210		Noctule	Faint call HnS
2216		Serotine	Faint calls HnS
2218		Serotine	HnS
2227		45 pip	HnS
2233		Serotine	HnS

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Survey Kit Used:

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Survey Sheet – Bat Activity

Site Name: New Cottages at Ashbys Date: 24/05/23

Weather Conditions: 0% cloud, no rain, wind B1

Max Temp: 15.9ºC Min Temp: 11.8ºC

Sunset Time: 2104 Survey Type: Emergence

Survey Starts: 2049 Survey Ends: 2234 Surveyor: AY

Time	Map Ref	Species	Activity
2125		45 pip	HnS
2130		55 pip	Flew N to S past cottages
2142		45 pip	Flying around E gable end of garage (off site)
2145		BLE	Flew N to S past E gable of cottages
2151		55 pip	Flew N to S over KD
2155		55 pip	Flew N to S past E gable of garage (off site)
2158		Pip	HnS
2200		Serotine	Foraging over driveway
2205		Pip	Foraging around garage (off site)
2224		55 pip	Flew E to W
2225		55 pip	HnS

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Survey Kit Used:

EM Touch Pro 2

Survey Sheet – Bat Activity

Site Name: New Cottages at Ashbys Date: 24/05/23

Weather Conditions: 0% cloud, no rain, wind B1

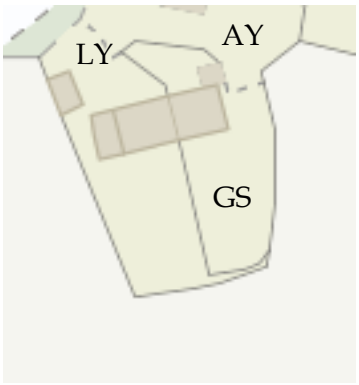
Max Temp: 15.9ºC Min Temp: 11.8ºC

Sunset Time: 2104 Survey Type: Emergence

Survey Starts: 2049 Survey Ends: 2234 Surveyor: KD

Time	Map Ref	Species	Activity
2126		55 pip	HnS
2133		45 pip	HnS
2136		45 pip	HnS
2142		45 pip	HnS
2200		BLE	HnS
2202		45 pip	HnS
2206		BLE	HnS
2208		Serotine	HnS foraging
2224		45 pip	HnS foraging
2225		BLE	HnS
2238		45 pip	HnS

APPENDIX 3: RE-ENTRY SURVEY 6TH JUNE 2023



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Survey Sheet – Bat Activity

Survey Kit Used:
EM Touch Pro 2
Panasonic HC-VX870
Nightfox XC5

Site Name: New Cottages at Ashbys Date: 06/06/23

Weather Conditions: 50-100% cloud, no rain, wind B2

Max Temp: 13.1ºC Min Temp: 5.7ºC

Sunrise Time: 0455 Survey Type: Re-entry

Survey Starts: 0325 Survey Ends: 0510 Surveyor: GS

Time	Map Ref	Species	Activity
0339		45 pip	Faint call HnS
0355		45 pip	Brief call HnS
0356		45 pip	Commuting past S face of cottages
0410		45 pip	Commuting N past E gable of cottages
0422		45 pip	Commuting N past E gable of cottages
0427		45 pip	Commuting N past E gable of cottages

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Survey Kit Used:

EM Touch Pro 2

Survey Sheet – Bat Activity

Site Name: New Cottages at Ashbys Date: 06/06/23

Weather Conditions: 50-100% cloud, no rain, wind B2

Max Temp: 13.1°C Min Temp: 5.7°C

Sunrise Time: 0455 Survey Type: Re-entry

Survey Starts: 0325 Survey Ends: 0510 Surveyor: AY

Time	Map Ref	Species	Activity
0327		45 pip	Pass HnS
0337		45 pip	Pass HnS
0348		45 pip	Pass HnS
0410		45 pip	Commuting N past E gable of cottages
0422		45 pip	Commuting N past E gable of cottages
0427		45 pip	Commuting N past E gable of cottages

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Survey Kit Used:

EM Touch Pro 2

Survey Sheet – Bat Activity

Site Name: New Cottages at Ashbys Date: 06/06/23

Weather Conditions: 50-100% cloud, no rain, wind B2

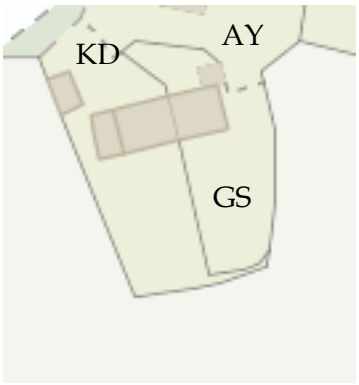
Max Temp: 13.1°C Min Temp: 5.7°C

Sunrise Time: 0455 Survey Type: Re-entry

Survey Starts: 0325 Survey Ends: 0510 Surveyor: LY

Time	Map Ref	Species	Activity
0337		45 pip	Brief call HnS
0348		45 pip	Commuting W to E over driveway
0349		45 pip	HnS
0352		45 pip	HnS
0357		45 pip	Commuting W to E over driveway
0358		45 pip	Commuting W to E over driveway
0422		45 pip	HnS

APPENDIX 4: EMERGENCE SURVEY 20TH JUNE 2023



Survey Sheet – Bat Activity

Survey Kit Used:
EM Touch Pro 2
Panasonic HC-VX870
Nightfox XC5

Site Name: New Cottages at Ashbys Date: 20/06/23

Weather Conditions: 50-100% cloud, no rain, wind B1

Max Temp: 19.5°C Min Temp: 13°C

Sunset Time: 2127 Survey Type: Emergence

Survey Starts: 2112 Survey Ends: 2257 Surveyor: GS

Time	Map Ref	Species	Activity
2156		Noctule	HnS foraging
2202		45 pip	HnS foraging behind surveyor
2204		45 pip	1 bat commuting through garden
2211		45 pip	Foraging over garden
2213		45 pip	From AY direction, commuting through site
2216		45 pip	From AY direction, commuting through site
2220		45 pip	From AY direction, commuting through site
2221		45 pip	From AY direction, commuting through site
2247		45 pip	HnS

Time	Map Ref	Species	Activity
2255		Serotine	HnS
2257		55 pip	HnS

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Survey Kit Used:

EM Touch Pro 2

Survey Sheet – Bat Activity

Site Name: New Cottages at Ashbys Date: 20/06/23

Weather Conditions: 50-100% cloud, no rain, wind B1

Max Temp: 19.5ºC Min Temp: 13ºC

Sunset Time: 2127 Survey Type: Emergence

Survey Starts: 2112 Survey Ends: 2257 Surveyor: AY

Time	Map Ref	Species	Activity
2154		Noctule	HnS
2207		45 pip	Commuting over driveway
2208		45 pip	Flew from direction of garage (off site)
2209		45 pip	Commuting past S of cottages
2211		45 pip	Foraging around KD
2214		45 pip	Foraging around garage (off site)
2218		55 pip	Foraging over driveway
2219		45 pip	Foraging over field to E
2224-31		45 pip	Foraging HnS – ongoing
2239		45 pip	Foraging HnS
2245		45 pip	Foraging HnS
2251		Serotine	HnS commuting

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Survey Kit Used:

EM Touch Pro 2

Survey Sheet – Bat Activity

Site Name: New Cottages at Ashbys Date: 20/06/23

Weather Conditions: 50-100% cloud, no rain, wind B1

Max Temp: 19.5°C Min Temp: 13°C

Sunset Time: 2127 Survey Type: Emergence

Survey Starts: 2112 Survey Ends: 2257 Surveyor: KD

Time	Map Ref	Species	Activity
2145		Noctule	HnS
2154		Noctule	HnS
2157		45 pip	Foraging HnS
2200		45 pip	Foraging HnS
2203		Noctule	HnS
2209		45 pip	HnS
2228		Noctule	HnS
2256		55 pip	HnS