

# *Bat Survey Report*

for

## *Rye's Farm, Gosbeck, Suffolk*

Carried out for:

Tim Owens

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## **Executive Summary**

Abrehart Ecology was commissioned by Tim Owens to conduct a Preliminary Roost Assessment (PRA) and bat survey Rye's Farm, Gosbeck (hereafter referred to as 'the Site').

This PRA showed that the site had moderate potential roost features identified on the cart lodge and low potential on the adjacent storage buildings. Bat surveys were required to inform assessment of the potential impact of the proposals on them, and the degree of mitigation required to offset any impacts to roosting bats.

During the 2020 survey period the Site was found to have low levels of bat activity, with foraging and commuting by a total of five species of varying levels of activity recorded. A total of one common pipistrelle and one soprano pipistrelle emerged from the cart lodge on the dusk survey of 29/08/2020. The proposals comprising the renovation to residential development are likely to disturb and destroy potential bat roosts with the Site.

**Therefore, an application for a low impact bat class license will be required.**

## **1 Introduction**

### **Background**

- 1.1 Abrehart Ecology Ltd was commissioned by Tim Owen, to carry out bat emergence/return to roost surveys of Rye's Farm barns (hereafter referred to as 'the Site').
- 1.2 This was required following a Preliminary Roost Assessment (PRA) by Toby Abrehart FLS MCIEEM and Natural England Bat Survey Class Licence (WML-CL17) on the 20 August 2020 which recorded a variety of potential roost features within/on the surveyed structures.
- 1.3 Evidence of use by bats was found, with droppings of common pipistrelle and a brown long eared bat feeding perch recorded. Due to these findings' the cart lodge was considered to have moderate bat roost potential and the storage building a low potential.
- 1.4 The survey was required to inform a future permitted development application at the Site; the site is proposed for development – to include conversion of the cart lodge and storage building to residential development using the existing infrastructure (access, parking, and landscaped garden).
- 1.5 The survey aimed to ascertain the level of site use by bats (including identification of roosts) so that appropriate mitigation could be carried out where necessary.

### **Legislative Context**

- 1.6 All bat species and their roosts are protected under the Wildlife and Countryside Act 1981 (as amended) (WCA) and the Conservation of Habitats and Species Regulations 2017. Under this legislation it is an offence to intentionally or recklessly:
  - Capture, injure or kill a bat;
  - Disturb a bat; and
  - Destroy or obstruct access to a bat roost.
- 1.7 The National Planning Policy Framework (NPPF) 2018 places responsibility on Local Planning Authorities (LPAs) to aim to conserve and enhance biodiversity in and around developments. Section 40 of the NERC Act requires every public body to “have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”. Biodiversity, as covered by the Section 40 duty, is not confined to habitats and species of principal importance but refers to all species and habitats. However, the expectation is that public bodies would refer to the Section 41 list (of species and habitats) through compliance with the Section 40 duty.

### **Survey Objectives**

- 1.8 The objectives of this survey were:
  - To determine the presence or likely absence of roosting bats within the Site;
  - Identify species and roost locations within the Site, should bats be recorded; and
  - To make recommendations for development impact mitigation and post development enhancements.

## Site description

- 1.9 The Site is located to the south of the B1120, off Pettaugh Lane, West of Helmingham Hall and park in Suffolk. It is approximately 2 ha in extent, comprising of a residential building with clay pan tiled roof and a range of outbuildings. With a stand-alone cart lodge and a series of outbuildings in an L shape to the north of the main house. This is surrounded by areas of hardstanding, newly sown lawn with a few scattered trees around the edge of the site. It has been landscaped in the spring and early summer, the main house is currently occupied. There were three ponds two of which were dry and one supported a high density of fish. The boundaries are currently delineated by fences with a section to the north west being covered by dense vegetation.
- 1.10 All the land surrounding the site is arable fields with limited amounts of hedging and a wooded track to the south east. The nearest house is 350m to the west with arable fields in between. (see Figure 1).

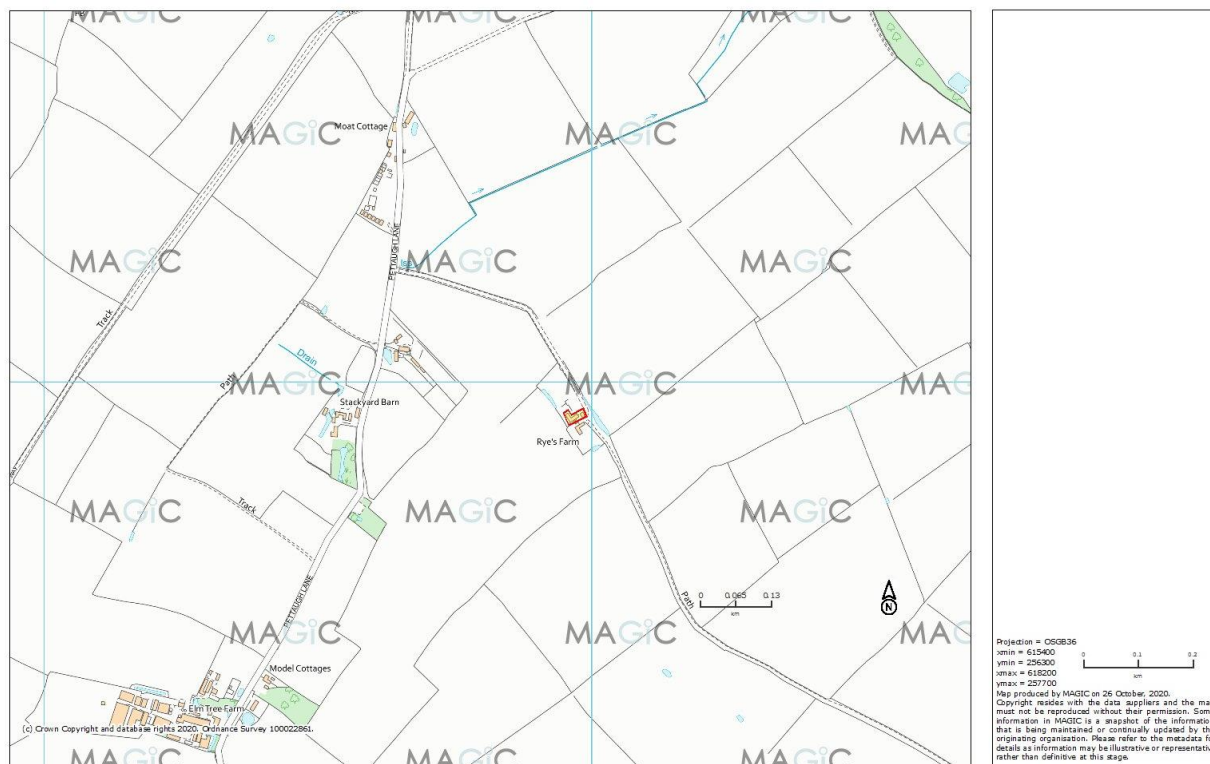


Figure 1. Site location.

## Proposals and Potential Impacts

- 1.11 Proposals include the conversion of the existing cart lodge and storage building to the north-west of the main house. The garden has already been landscaped prior to our commission.
- 1.12 Opportunities exist to enhance the Site for bats within landscaping as well as mitigating the loss of any roosts during development.

## Bat Ecology

- 1.13 There are eighteen species of bat found in the UK, of which seventeen are known to be breeding. Thirteen species have been recorded in Suffolk, five of these are subject to National Biodiversity Action Plans: these are lesser horseshoe (*Rhinolophus hipposideros*), barbastelle (*Barbastella barbastellus*), noctule (*Nyctalus noctula*), brown long-eared (*Plecotus auritus*), and soprano pipistrelles (*Pipistrellus pygmaeus*).
- 1.14 Bats are the only flying mammal, their wings have a similar structure to the hand and arm of a human, with skin stretched between long fingers and the body. In Britain, bats range in size from 4-7g (pipistrelles) to 40g (noctules).
- 1.15 Bats are found around the world and many species eat fruit and nectar; however, all British bats are insectivorous. Bats utilise different methods to hunt (such as catching insects on the wing and gleaning), hunt a variety of prey species (including midges, beetles and spiders), and use echolocation, passive hearing, and vision to find their prey at night (passive hearing is used by gleaning bats that capture non-flying insects on the ground or trees). Echolocation is a very sophisticated sonar system, whereby bats emit short, high frequency sounds and use the information/echoes returning to them to construct an image of their environment and locate their prey.
- 1.16 Roosts provide bats with shelter from predators and variable weather conditions. Bats use different roost sites throughout the year, selected based on current physiological requirements. These can be used for hibernation, reproduction, and as transient day roosts. Bats utilise natural roost sites (including tree-holes, caves, and cavities in exposed rocks) and those provided by human construction (such as houses), which mimic natural roost sites. Opportunities are abundant within residential housing; bats use roof spaces, cavity walls, window frames, weather-boarding, tiles, and many other crevices and cavities. Roost sites are often near to foraging habitat or commuting routes, most likely this is near woodland or water, however roost sites can, and have, been found in apparently isolated locations.
- 1.17 Foraging habitat generally consists of any habitat which attracts invertebrate prey, such as trees, hedgerows, woodland, scrub, rivers, and waterbodies and open areas such as grassland (particularly where this is grazed, as livestock attract some invertebrates). Linear features such as hedgerows, woodland edges and rides, tree lines and rivers are typically used for commuting between roosting locations and foraging habitat, particularly by smaller bat species which seek cover from predators and shelter from weather. Such corridors are also used by migratory bat species, such as Nathusius' pipistrelle *Pipistrellus nathusii* and noctule *Nyctalus noctula* when moving longer distances between maternity and hibernation areas.

## 2 Methods

### Desk Study

- 2.1 A 2km data search for bat records was requested from Suffolk Biodiversity Information Service (SBIS). Data were provided by SBIS on the 2<sup>nd</sup> of September 2020. Data were used to determine whether any records of bats had been submitted for the Site, and what species had been recorded within the area. The type of record (e.g. roosting, detector record, droppings etc.) were also noted.

### Field Survey

#### Habitat Assessment - Preliminary Ecological Assessment (PEA)

- 2.2 A Preliminary Ecological Appraisal was undertaken by Toby Abrehart MCIEEM (Natural England Level 1 Bat Class Survey Licence WML-CL18), on the 21 of August 2020. Weather conditions during the survey were 10% cloud cover, a light breeze (Beaufort Scale 2), and a temperature of 20°C, with good visibility.
- 2.3 All accessible areas of the existing dwelling were inspected for their potential to support, or signs of, roosting bats including entry/egress points, droppings, urine splashes, staining, scratch marks, feeding remains, bat-fly (*Nycteribiid*) cases, squeaking noises, odours and live or dead bats, according to methods described by Collins (2016). The buildings were surveyed using a 'bottom up' approach (beginning with external assessment and finishing with areas considered most likely to contain bats at the time), to maximise data collection while minimising disturbance to bats.
- 2.4 Equipment included Clulite Clubman torch and Leica 10x42 binoculars.

#### Emergence / Return to Roost Surveys

- 2.5 In 2020; two survey visits were undertaken by ecologists Toby Abrehart MCIEEM, FLS, (Natural England Level 1 Bat Class Survey Licence WML-CL18), Jenni Fincham BSc (Hons) MSc GradCIEEM, Alister Killingsworth BSc (Hons) MSc GradCIEEM (Natural England Level 1 Bat Class Survey Licence WML-CL18), Thomas Jordan BSc and Ana Pino-Blanco BSc, MSc (see Table 1 for dates and weather details). The surveys were conducted following methods described by The Bat Conservation Trust (Collins, 2016).
- 2.6 Surveyors watched potential roost features (identified within previous preliminary ecological survey and re-assessed prior to the start of bat surveys) and building entry/exit points from stationary positions and recorded bats emerging or returning to roost. Using bat detectors, the surveyors noted species, number of bats, roost locations, and access points. Surveyor locations are shown in Appendix I; these locations were chosen based on the position of previously identified access points and areas of highest roost potential, and ensuring full coverage of each building aspect with roost potential. Where possible, bat activity surrounding the surveyed buildings (commuting, foraging etc.), including flight direction, flight height, and number of bats, was also recorded.
- 2.7 Emergence surveys started at least 20 minutes before sunset and continued for at least 90 minutes after sunset (or until light levels became insufficient to accurately survey bat activity) and return to roost surveys started an hour and a half before sunrise and continued until sunrise, in accordance with best practice guidelines (Collins, 2016). Survey timings can be found in Appendix III.
- 2.8 The surveys were carried out within the optimal weather conditions for bat surveys; with temperatures at sunset above 10°C, no rain, and little/gentle breeze.

- 2.9 Equipment used on surveys included Wildlife Acoustics Echo Meter Touch EMT2 Pro and EM3+ detectors, (with Apple iPad), Batbox Duet detectors and Anabat swift static detectors. Recorded bat calls were analyzed using AnalookW and Kaleidoscope software where necessary, to confirm species recorded emerging or returning to roost.

### 3 Results

#### Desk Study

- 3.1 The data search returned 26 records of barbastelle (*Barbastella barbastellus*), serotine (*Eptesicus serotinus*), noctule (*Nyctalus noctula*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Pipistrellus sp., Nathusius pipistrelle (*Pipistrellus nathusii*) and brown long-eared (*Plecotus auritus*) bats within 2km of the Site. This includes brown long-eared breeding colony over 1km to the east. The closest records were approximately 500m east of the site at Moat Farm of a common pipistrelle.

#### Field Survey

**Table 1:** Survey Timings Summary and Weather Conditions

Survey Date	Survey Type	Temperature (°C)	Precipitation	Wind Speed (mph)	Cloud Cover (%)
31/08/2020	Dusk Survey	13	Dry	Beaufort 1	90
28/09/2020	Dawn Survey	10	Dry	Beaufort 5	80

#### Habitat Assessment (PEA – 20/08/2020)

- 3.2 Habitats to the south and west of the Site provided foraging habitat for bats, with mature trees along a green lane and the adjacent Helmingham Hall parkland. There is an area of woodland to the south west Gosbeck Wood SSSI with high quality foraging, hibernation and breeding habitat 2.2km south west of the site.


#### Building Assessment (PRA – 21/08/2020)

- 3.3 The Site contained one two storey cart lodge and an L shaped storage buildings.
- 3.4 **Cart Lodge:** The building was of timber construction with two open bays on to the south west with a door in front of a narrow staircase leading to the upper floor. The first floor internally had a low ceiling with wooden lathes and horse-hair plaster falling down. The void above was clear of material with exposed roof timbers. The pan tiled roof was under laid with bitumous roofing felt. The Clay pantile roof was entire with no missing tiles. The gable ends of the building were clad in timber feather boards with a window in the northern and southern sides with some missing pane of glass.
- 3.5 The pantiles though without missing tiles did have numerous potential entry points as they were old Suffolk clay tiles which don't always fit tightly. The timber cladding also had gaps for possible access into the voids behind.
- 3.6 **L shaped storage building:** These buildings were to the north of the main house and to the west of the cart lodge. The buildings are of brick and concrete block work for the lower half to third of the walls. Above these are areas of vertical timber cladding. The roofing material was fibre cement boards with the eastern roof covered in Russian vine. There were numerous doors allowing entry into the separate store sheds. Some were missing and the timber cladding to the western side of the barns was mostly missing giving a very open aspect to the northern section of the stores. The southern sides of the stores were brick in the lower section with timber vertical cladding and wooden doors.



- 3.7 Several areas of the timbers were raised allowing possible ingress. The open fronted buildings facing west were very bright inside with concrete and wooden partitions. A single area of brown long-eared bats droppings and some small tortoiseshell wings were on some material on the ground. Indicating a single feeding perch. No other sings were noted.
- 3.8 A map showing an aerial image of the building on Site can be seen in Appendix I.

*Table 1. Recorded Features During the PEA*

Photos	Notes
	<p><b>Cart Lodge</b></p> <p>The ridge tiles were considered potential access for roosting bats.</p> <p>The windows on either side had missing glass and allowed easy ingress.</p> <p>Timber cladding was loose in places allowing possible ingress into eh framework behind</p> <p>The internal space was open with easy access into the roof void, the horse-hair plaster was falling down allowing easy access above.</p>



Five bat droppings were observed on the floor of the main roof void. loft interior had a pitched timber frame.



#### **Storage building**


The northern shed had a single pitched roof, with timber cladding and soil floors. They were open fronted with a corrugated mineral roof. There were limited possible areas for a roosting bats.



The southern sheds had the same basic design to the northern shed, but without the open fronts. All were enclosed and regularly used. There was no underfelt in any of the buildings and there was plenty of light coming into each building. No bat droppings were found.





	<p>A potential brown long-eared feeding perch was observed within the northern space, with only around 30 droppings, many of which were old.</p>
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### Emergence / Return to Roost Surveys

- 3.3 Surveyor locations during each survey are shown in Appendix I
- 3.4 Field survey data and post survey sound analysis of bat echolocation calls recorded on detectors are shown in Appendix II.

#### 31/08/2020 – Dusk Survey (Sunset: 19:44)

- 3.5 Surveyors recorded six species of bat including common and soprano pipistrelle (*Pipistrellus pipistrellus*) and (*Pipistrellus pygmaeus*), noctule (*Nyctalus noctula*), Leisler's (*Nyctalus leisleri*), barbastelle (*Barbastella barbastellus*) and brown long eared (*Plecotus auritus*) pass.
- 3.6 Surveyors recorded a common pipistrelle (*P. pipistrellus*) emerging from the south side of the cart lodge through the window and a soprano pipistrelle (*Pipistrellus pygmaeus*) from the roof on the west of the cart lodge.
- 3.7 Overall activity was moderate around surveyors' positions with up to four common pipistrelles recorded at one time.

#### 28/09/2020 – Dawn Survey (Sunrise 06:52)

- 3.8 Surveyors recorded three species of bat including common and soprano pipistrelle (*Pipistrellus pipistrellus*) and (*Pipistrellus pygmaeus*) and brown long eared (*Plecotus auritus*).
- 3.9 No re-entering was recorded.
- 3.10 Overall activity was low, around surveyor positions.

### Survey Limitations

- 3.11 There were no limitations for either the emergence or return to roost survey. Data from the static detectors from 25/08/2020 became corrupted so statics were placed back out in October 2020.

## 4 Conclusions and Recommendations

- 4.1 The desk study returned 26 bat records within a 2km radius of the Site; the nearest record was over 500m north of the Site, these records relate to serotine, noctule and common pipistrelle with the most recent record from 2010-11. Not all bat returns had exact locations given.
- 4.2 One common pipistrelle was observed emerging from the southern window of the cart lodge and one soprano pipistrelle from the cart lodge roof on the dusk survey.
- 4.3 The brown long-eared bat feeding perch was little used in the northern storage building with only three new droppings over the period from the dusk to dawn survey.
- 4.4 Other bat species recorded passing during the surveys with less frequency were, noctule, Leisler's, and a single Barbastelle. These species were recorded foraging and commuting only.
- 4.5 Proposals include the development of the buildings over two years to additional residential development. Current proposals are likely to destroy potential bat roosts within the cart lodge and the northern storage building. As there are no more than four low conservation significant roosts, affecting no more than two common bat species in low numbers, **a low impact class license will be required.**
- 4.6 Post construction mitigation features, such as bat boxes & sensitive lighting, would ensure that bats, which are known to use the site for commuting and foraging, as well as other nocturnal species, will not be impacted by the development.

## 5 References

### Literature

Abrehart Ecology Ltd (2020). Preliminary Ecological Assessment of Valley Farm, Huntingfield. Carried out for Argus Hardy.

Altringham, J.D. (2003) *British Bats*. Harper Collins Publishers, 77-85 Fulham Palace Road, Hammersmith, London, W6 8JB. ISBN 000 220147 X.

Bat Conservation Trust (2015) *Amazing Bats: An introduction to the bats of Britain & Ireland*. The Bat Conservation Trust, London.

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edn)*. The Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1.

### Websites

<http://www.magic.gov.uk.html>


<http://www.suffolkbis.org.uk/biodiversity/speciesandhabitats/specieslist>

<http://www.suffolkwildlifetrust.org/node/4932>

## Appendix I – Site Map

Aerial image of site with emergence points highlighted.



Key	
	Emergence



*Indicative Surveyor Locations – 31/08/2020 and 28/09/2020*



Survey date		Surveyor
31/8/20	●	TRA JF
28/9/20	●	TRA JF
28/9/20	●	TJ APB AJK

Indicative surveyor locations from 31/08/2020 and 29/09/2020 surveys.



Static detector placement – 26/8/2020 and 08/10/2020 and infra-red camera placement 28/08/2020



## Appendix II – Bat Survey Results

### Surveyor Results – 31/08/2020 (Sunset– 19.44)

Surveyor: Toby Abrehart			
Time	Species	# Bats	Activity
19.15	-	-	SURVEY START
19.53	<i>Pipistrellus pygmaeus</i>	1	Moving east from behind the cart lodge to the trees behind possible emergence from roof.
19.56	<i>Pipistrellus pipistrellus</i>	1	Foraging around the trees behind the surveyor.
20.04	<i>Pipistrellus pipistrellus</i>	1	HNS
20.10	<i>Pipistrellus pipistrellus</i>	1	Several passes around the barn foraging.
20.12	<i>Pipistrellus pipistrellus</i>	1	Possible emergence from the open window on the southern side of the cart lodge.
20.16	<i>Pipistrellus pipistrellus</i>	1	Passing south to the green lane
20.17	<i>Pipistrellus pipistrellus</i>	1	Passing south to the green lane
20.18	<i>Pipistrellus pygmaeus</i>	1	Passing south to the green lane
20.24	<i>Pipistrellus pipistrellus</i>	1	Passing south to the green lane
20.31	<i>Pipistrellus pipistrellus</i>	1	Foraging around the trees behind the surveyor
20.36	<i>Pipistrellus pipistrellus</i>	1	Foraging around the trees behind the surveyor
20.47	<i>Barbastellus barbastella</i>	1	HNS
20.55	<i>Pipistrellus pipistrellus</i>	1	Foraging around the trees behind the surveyor until the end of the survey period.
21.15			Survey end

Surveyor: Jenni Fincham			
Time	Species	# Bats	Activity
19.15	-	-	SURVEY START
20.10	<i>Pipistrellus pipistrellus</i>	1	Passing through to the south
20.14	<i>Pipistrellus pipistrellus</i>	1	Foraging around the north of the cart lodge
20.21	<i>Pipistrellus pipistrellus</i>	1	Passing through to the south
20.33-20:37	<i>Pipistrellus pipistrellus</i>	1	Foraging around the cartlodge
20.37-20:58	<i>P. pipistrellus</i> and <i>P.pygmaeus</i>	Up to 2 bats	Numerous passes around the surveyor and the cart lodge
20:58	<i>Plecotus auritus</i>	1	HNS one pass
20.58-21.12	<i>P. pipistrellus</i> and <i>P.pygmaeus</i>	4	Passing between buildings and the tree line to the south
21.12	<i>Barbastellus barbastella</i>	1	HNS 3 passes
21.15			Survey end

**Surveyor Results – 28/09/2020 (Sunrise – 06.52)**

<b>Surveyor: Toby Abrehart</b>			
<b>Time</b>	<b>Species</b>	<b># Bats</b>	<b>Activity</b>
05.22	-	-	SURVEY START
05.26	<i>Pipistrellus pipistrellus</i>	1	Travelled N-S along end gable
05.42	<i>Pipistrellus pipistrellus</i>	1	Foraging and circling in front of building
06.03	<i>Pipistrellus pipistrellus</i>	1	N-S along gable end
06.17	<i>Plecotus auritus</i>	1	Circling above roof top
06.28	<i>Pipistrellus pipistrellus</i>	1	Social calls
06.35-42	<i>Pipistrellus pipistrellus</i>	1	Social calls
07.10			SURVEY END

<b>Surveyor: Alister Killingsworth</b>			
<b>Time</b>	<b>Species</b>	<b># Bats</b>	<b>Activity</b>
05.22	-	-	SURVEY START
			No bats heard or seen
07.10			SURVEY END

<b>Surveyor: Thomas Jordan</b>			
<b>Time</b>	<b>Species</b>	<b># Bats</b>	<b>Activity</b>
05.22	-	-	SURVEY START
			No bats heard or seen
07.10			SURVEY END

<b>Surveyor: Jenni Fincham</b>			
<b>Time</b>	<b>Species</b>	<b># Bats</b>	<b>Activity</b>
05.22	-	-	SURVEY START

			No bats heard or seen
07.10			SURVEY END

Surveyor: Ana Pino Blanco			
Time	Species	# Bats	Activity
05.22	-	-	SURVEY START
06.18	<i>Pipistrellus pygmaeus</i>	1	Very faint calls
06.29	<i>Pipistrellus pipistrellus</i>	1	HNS
06.31	<i>Pipistrellus pipistrellus</i>	1	HNS + social calls
06.34	<i>Pipistrellus pipistrellus</i>	1	HNS
06.36	<i>Pipistrellus pipistrellus</i>	1	HNS
07.10			SURVEY END

## Appendix II - Sound Analysis Table:

Date	Sunset/sunrise time		PIPPIP			PIPPYG			BLE		
			Swift 3	Swift 4	Swift 5	Swift 3	Swift 4	Swift 5	Swift 3	Swift 4	Swift 5
08/10/2020		18:16			18:18-18:19						
# passes					2						
09/10/2020	07:11	18:14				18:27-20:08		18:26-20:07			22:49
# passes						32		5			2
10/10/2020	07:12	18:11									
# passes											
11/10/2020	07:14	18:09									
# passes											
12/10/2020	07:16	18:07									
# passes											
13/10/2020	07:17	18:05			18:34						
# passes					1						
14/10/2020	07:19	18:02	19:04-19:05								
# passes			3								
15/10/2020	07:21	18:00									
# passes											
16/10/2020	07:23	17:58	18:47-19:46			20:12-20:15					
# passes			6			3					
17/10/2020	07:24	17:56	18:19-18:50			18:18-18:49					
# passes			5			7					
18/10/2020	07:26	17:54	18:54-19:16			18:06-18:54					
# passes			6			25					
19/10/2020	07:28	17:52									
# passes											
20/10/2020	07:30	17:50									
# passes											
20/10/2020	07:30										
# passes											

## Appendix III – Data Search Results

Common_Name	Latin_Name	Location	Site_detail	Grid_Ref	Longitude	Latitude	Year
Western Barbastelle	Barbastella barbastellus	Gosbeck	Greenway Farm Gosbeck	TM157565	1.154243571	52.16414224	2010
Pipistrelle	Pipistrellus pipistrellus	Gosbeck	Greenway Farm Gosbeck	TM157565	1.154243571	52.16414224	2010
Soprano Pipistrelle	Pipistrellus pygmaeus	Gosbeck	Greenway Farm Gosbeck	TM157565	1.154243571	52.16414224	2010
Brown Long-eared Bat	Plecotus auritus	Gosbeck	Greenway Farm Gosbeck	TM157565	1.154243571	52.16414224	2010
Pipistrelle	Pipistrellus pipistrellus	Gosbeck		TM165569	1.166178022	52.16742018	2013
Western Barbastelle	Barbastella barbastellus	Helmingham Hall Park	Helmingham Park	TM182579	1.191640896	52.17572829	2011
Unidentified Bat	Myotis	Helmingham Hall Park	Helmingham Park	TM182579	1.191640896	52.17572829	2011
Noctule Bat	Nyctalus noctula	Helmingham Hall Park	Helmingham Park	TM182579	1.191640896	52.17572829	2011
Pipistrelle	Pipistrellus pipistrellus	Helmingham Hall Park	Helmingham Park	TM182579	1.191640896	52.17572829	2011
Soprano Pipistrelle	Pipistrellus pygmaeus	Helmingham Hall Park	Helmingham Park	TM182579	1.191640896	52.17572829	2011
Pipistrelle	Pipistrellus pipistrellus	Helmingham		TM183569	1.192457834	52.16671123	2011
Unidentified Bat	Myotis	Helmingham Hall Park	Helmingham Park	TM183576	1.19290812	52.17299549	2011
Noctule Bat	Nyctalus noctula	Helmingham Hall Park	Helmingham Park	TM183576	1.19290812	52.17299549	2011
Pipistrelle	Pipistrellus pipistrellus	Helmingham Hall Park	Helmingham Park	TM183576	1.19290812	52.17299549	2011
Soprano Pipistrelle	Pipistrellus pygmaeus	Helmingham Hall Park	Helmingham Park	TM183576	1.19290812	52.17299549	2011
Western Barbastelle	Barbastella barbastellus	Helmingham Hall Park	Helmingham Park	TM183577	1.19297246	52.17389324	2011
Unidentified Bat	Myotis	Helmingham Hall Park	Helmingham Park	TM183577	1.19297246	52.17389324	2011
Noctule Bat	Nyctalus noctula	Helmingham Hall Park	Helmingham Park	TM183577	1.19297246	52.17389324	2011
Pipistrelle	Pipistrellus pipistrellus	Helmingham Hall Park	Helmingham Park	TM183577	1.19297246	52.17389324	2011
Soprano Pipistrelle	Pipistrellus pygmaeus	Helmingham Hall Park	Helmingham Park	TM183577	1.19297246	52.17389324	2011
Western Barbastelle	Barbastella barbastellus	Helmingham Hall Park	Helmingham Park	TM189574	1.201540024	52.17096234	2011
Serotine	Eptesicus serotinus	Helmingham Hall Park	Helmingham Park	TM189574	1.201540024	52.17096234	2011
Unidentified Bat	Myotis	Helmingham Hall Park	Helmingham Park	TM189574	1.201540024	52.17096234	2011
Noctule Bat	Nyctalus noctula	Helmingham Hall Park	Helmingham Park	TM189574	1.201540024	52.17096234	2011
Pipistrelle	Pipistrellus pipistrellus	Helmingham Hall Park	Helmingham Park	TM189574	1.201540024	52.17096234	2011
Soprano Pipistrelle	Pipistrellus pygmaeus	Helmingham Hall Park	Helmingham Park	TM189574	1.201540024	52.17096234	2011