

Chiropteran report Land to the east of Ugley Village Hall 2023 – 2024

The published guidance for this report changed in September 2023 from Collins 3rd Edition 2016 to Collins 4th Edition.

Table 2.2 Recommended UK survey times for survey types described in these guidelines.

Survey type	Month											
	J	F	M	A	M	J	J	A	S	O	N	D
Daytime Bat Walkover (DBW)												
PRA – structures ^a												
Emergence survey for maternity or summer roosts ^b												
Emergence survey for transitional/occasional roosts ^b												
Re-entry surveys ^c												
Emergence survey for mating roosts ^b												
Hibernation survey – structures ^a												
GLTA ^d												
PRF inspection survey – trees												
Ground-level bat activity survey – night-time walkover surveys and automated/static												
Pre-, during and post-hibernation – automated/static bat activity survey												
Swarming survey ^a												
Back-tracking survey												
Trapping and radio-tagging survey ^f												

= optimal period
 = sub-optimal period
 = weather or location dependent (i.e. may not be suitable due to spring and autumn conditions in any one year or in more northerly latitudes). Note that October emergence surveys are not acceptable in Scotland.
 = it is not acceptable to trap bats when they are heavily pregnant and have dependent pups. Mothers need to optimise foraging due to the physiological demands of pregnancy and lactation, and pups need to be regularly fed. Interrupting these activities could potentially have an impact on breeding success in the year in question. The timing of birth can vary between years – it may be as early as the end of May or as late as the start of August, therefore caution should be exercised and local information gained on birth dates before trapping activities are carried out during the summer months. Any information gained and decisions made should be kept as a record.

a Not including trees.
b Please see Chapter 7 for recommended timings for surveys to give confidence in a negative result. For sites assessed as having low suitability, a survey should be carried out between May and August. For sites with moderate and high suitability, a proportion of the surveys should be carried out between May and August (to detect maternity roosts if present) but some of the surveys may be carried out later in the year in order to detect transitional and mating roosts. The survey season for presence/likely absence surveys is defined as May to September. Roost characterisation surveys may be appropriate in April and/or October depending on the need to characterise transitional/occasional roosts at these times.

Daytime Bat Walkovers

Firstly, there are so many trees around the perimeter of this application site it is difficult to study each tree in depth in one visit. The second visit was made prior to any equinoctial storms. January 2024 saw two systems capable of serious physical damage to the trees within the red application line. Storm Isha and Storm Jocelyn passed through the site leaving little significant damage. However, a further Daytime Bat Walkover was undertaken on March 13th 2024. This latter date was also the date of the GLTA survey.

August 4th, September 19th 2023 and March 13th 2024

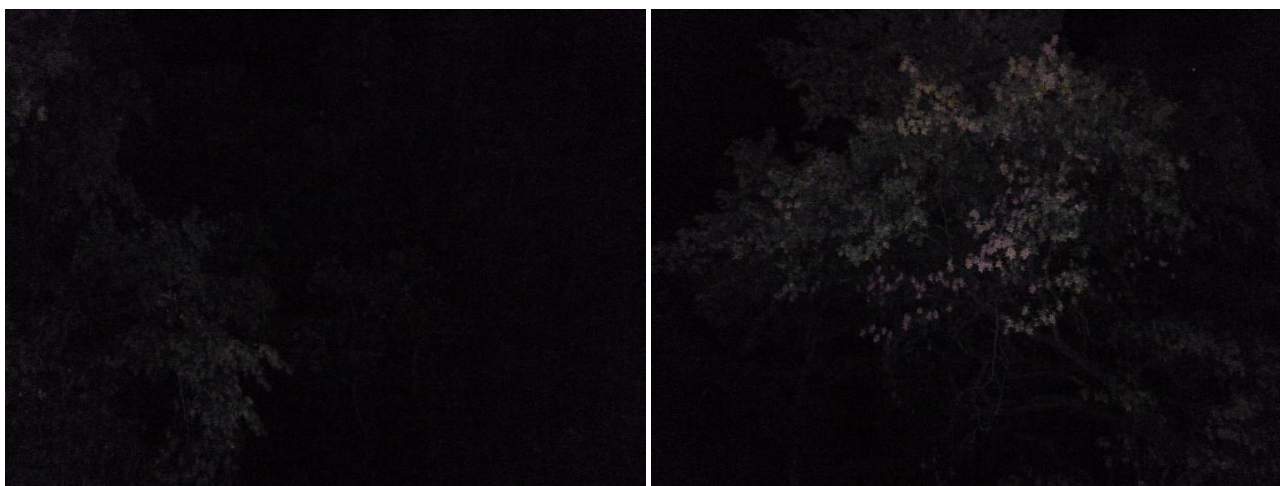




The daytime bat walkovers presented lines of mature and semi-mature deciduous trees around the perimeter. It is axiomatic that these trees provide a good opportunity for nocturnal season foraging for many species, particularly as Linnet’s Wood is immediately adjacent to the east. The open neutral grassland that occupies the vast majority of the application area would provide further foraging habitat were it not regularly cut.

The key conclusion from the Daytime Bat Walkover is that none of the perimeter trees are scheduled for removal. Only those individual trees in the northeast quarter are listed for removal. These were subject to a Ground Level Tree Assessment to establish if there are any PRFs present.

Ground level Bat Activity Survey.



Images 4th August 2023; equipment was Pettersson D240x Ultrasound Detector.

Date	Sunday 04 08 2023
Start time	19.50 hrs
End time	22.30 hrs
Temperature start	14 Degrees C

Temperature end	11 Degrees C
Wind speed start	2 mph
Wind speed end	3 mph
Wind direction start	W
Wind direction end	WNW
Precipitation	Zero rained at 12.00 hrs and 14.00 hrs.

All the perimeter trees are suitable for navigation and foraging. All these trees and the lone *Acer pseudoplatanus* are to be retained. The foraging patterns briefly recorded on the evening of the 4th August 2023 were 1 x *Pipistrellus pygmaeus* 55 kHz flying due west along the southern boundary and a *Pipistrellus pipistrellus* 44 kHz with a regular return of 3 minutes passed 6 times around the northeast corner. One would suggest that all perimeter trees should be considered as potential suitability: moderate. There are no established roost sites at present. One can assume that the woodland to the east, Linnet's Wood, is capable of supporting numerous species even though a good deal of that area is planted relatively recently.



Likely foraging pattern would recommend a further survey to Collins 4th Edition methodology showing more detailed foraging patterns, including thermal imaging, in May 2024. This was not available until mid-September 2023 very close to the end of the recognized volant season. This can then accurately inform all external lighting design.

Ground Level Tree Assessment

The trees along the southern boundary from east to west.







There are numerous trees along this boundary that have a confluent growth of *Hedera helix*; binocular searches are not sufficient.. These trees need a further investigation during the volant season, May 2024 onwards, with night time observations and thermal imagery. Although none of these trees are scheduled for removal, the external lighting design to the rear of the affordable house could be informed by an additional search.



The trees along the western boundary from south to north, below.



The large *Fraxinus excelsior*, the northernmost tree of those directly behind the Village Hall, has a Potential Roost Feature on the northern part of the southernmost of the three stems.



See image above. Binoculars show this to be a small hollow perhaps not deep enough.



Above, trees along the western boundary.



Above trees along the northern boundary

Below, the trees scheduled for removal.

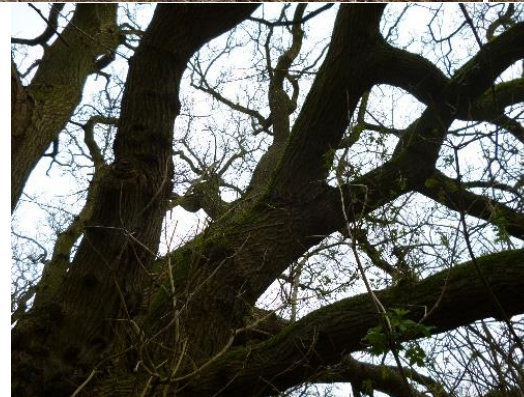




The three trees in the extreme northeast corner do have a limited amount of crevices that could provide an opportunity Potential Roost Site, if not in 2024 then within two years if rot progresses further.

Below the eastern boundary trees.







The veteran *Quercus robur* along the eastern boundary are in good condition. Although a prime site for numerous species to roost, there was no obvious hollows or crevices. The walkway in Linnet's Wood allowed binocular observations on all sides. See below.



The lone *Acer pseudoplatanus* in southeast quarter





Overall the vast majority of the perimeter trees are in good order. Potential Roost Features are present but rare. Clearly the trees with a confluent growth of *Hedera helix* should be categorised as Potential Suitability : Moderate.

There are no Potential Roost Features on any of the trees scheduled for removal. Potential Suitability Negligible to Nil

A further survey during the volant season 2024 to inform on the external lighting design and locations.

A. R. Arbon MBE,
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29th March 2024