



Former Mepal
Outdoor Centre,
A142 Ireton's
Way,
Ely,
Cambridgeshire

Dusk Activity Survey Report

July 2021

Ref: 19-6364



QUALITY STANDARDS CONTROL

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Revision	-	2	3
Date	17/08/2020	14/07/2021	16/08/2021
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Note

The advice which we have prepared and provided within this report is in accordance with the CIEEM Code of Professional Conduct. We confirm that the opinions expressed are our true and professional opinions. Opinions and information provided in the report are based on Syntegra Group Ltd using reasonable skill, care, and diligence in the preparation of the same in compliance with the CIEEM Code of Professional Conduct.

Validity of Data

The findings of the site survey are valid for a period of 12 months from the date of the survey. If approved works have not commenced by this date, then an updated site survey could be required to inform any changes to the habitats present on site in order to inform any updated mitigation and or precautionary measures required on site.

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Forecast cost estimates do not include such costs associated with any negotiations, appeals or other non-technical actions associated with the agreement on measures to meet the requirements of the authorities, nor are potential business loss and interruption costs considered that may be incurred as part of any technical measures.

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1 Introduction

1.1 Syntegra Group was commissioned by the applicant, The CDS Group, to conduct further echolocation surveys at Land at the Former Mepal Outdoor Centre, A142 Ireton's Way, Ely, CB6 2AY (Grid Ref: TL 42274 82982). The dusk survey was carried out on the 9th of August 2020.

1.2. The proposed development, as of July 2021, is for the 'Construction of a crematorium and associated service and administration building, function building, memorial garden, natural burial areas, pet cemetery, car parking, new vehicular access from the A142 and landscaping'. To accommodate the proposals, the existing site will undergo demolition of the existing buildings on site along with selective clearance and ground works.

1.3. The preliminary roost assessment was carried out in November 2019 by Syntegra Group. The external surveys of the buildings identified potential access points and crevice roosting areas. The internal inspections noted potential access points and roosting opportunities, no signs of bats in the form of marks, stains, dropping and/or debris were found. Of the buildings onsite, two were identified as moderate potential (building 3 and 5) and three were deemed as low potential (buildings 6,7 and 11).

1.4. CPERC provided 12 records of at least four bat species from within the search area: Nathusius's Pipistrelle (*Pipistrellus nathusii*), Noctule Bat (*Nyctalus noctule*), Daubenton's Bat (*Myotis daubentonii*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*) the closest of which was 900m to the South-west of site.

1.5. Additional echolocation activities were advised to inform likely absence or confirmed presence of a bat roost. In line with BCT Guidelines (2016), buildings with low potential require one dusk survey or one dawn survey carried out during the active season (May to August inclusive). Moderate potential requires one dusk and one dawn carried out during the active survey season. Further studies are required to determine likely absence and or confirmed presence. The further surveys will inform the mitigation strategy required for the site proposals.

2 Limitations

2.1. This report only applies to plans drawn up at the time of survey. Any alterations to plans may render the report void and/or require further surveys and should be communicated to the ecologist at the earliest opportunity.

2.2. The surveyors attempted a dusk survey on the 12th of July 2020. Upon arrival to the site, emergency services were in attendance due to the main residential building on fire. The extent of the fire and water damage impacted upon Building 5, 6 and 7. As a result of the damage these buildings were downgraded to negligible potential.

2.3. Building 11 has had significant damage from vandalism and has been scoped out for the potential to support roosting bats.

2.4 The August dusk survey for building 3 noted significant internal and external damage. The roof has had ridge tiles pulled off, timber feather boards pulled off, roof tiles taken off and internal ceiling and wall damage. During the August dusk survey at 22:00 a group of 10 older teenagers were observed onsite despite the security stating the cameras were in place and they would attend if any trespassers were present. Given the regular illegal anti-social activities onsite it is considered that due to health and safety grounds that the required dawn survey for building 3 can be undertaken safely.



Site closed off on the 12th July due to arson

2.5 The dusk echolocation survey was undertaken during August, which is within the optimal survey period stated in published guidance from the Bat Conservation Trust (Collins, 2016). The echolocation survey was undertaken when temperatures were 10°C or above, no strong winds and no rain, which are the recommended survey parameters stated within guidance from the Bat Conservation Trust (Collins, 2016). As such there are no limitations associated with the timing and weather conditions of the surveys.

2.6 Bat surveys are subject to numerous variables and it is to be acknowledged that survey results represent a sample of bat activity at the time of survey and that it is possible bats may use the building at other times.

2.7 Species such as brown long-eared bats emit echolocation calls of low amplitude which may not always be picked up on bat detectors. Bat calls, in general, cannot always be identified to species level. This can be due to distance or environmental conditions (such as bats flying in cluttered environments) or similarity in calls between some species of bats. Where this occurs, it is recorded as the bat species it is most likely to be based on the call characteristics (e.g. Pipistrelle sp. / Myotis sp.) or will be recorded as 'unidentified species'.

2.8 Bats are known to use a variety of roosts at different times of the year and for different purposes (ranging from maternity, swarming and hibernation roosts with large numbers of individuals, to night-time feeding roosts or day roosts with a few individuals). It is also known for bats to be nomadic and can spend varying lengths of time in a variety of roosts. As such, it is possible that small, transient roosts may not be picked up on a single survey visit.

2.9. The client is responsible for reading and understanding the advice given in this report. The client must ensure that, where recommended, mitigation is followed through.

3 Methodology

3.1. On the 9th of August 2020, the dusk echolocation study was carried out on building 3. The survey was led by Johnnie Johnson and two assistants, all experienced ecologists who have undertaken numerous bat surveys and have undergone professional training in bat surveying techniques. The surveys were overseen by Patricia Holden MSc MCIEEM (bat licence: 2016-20440-CLS-CLS). The dusk studies followed survey guidelines set by the Bat Conservation Trust Bat Surveys Good Practice Guidelines (Collins 2016).

3.2. The dusk activity survey was undertaken in suitable weather conditions by three experienced bat ecologists positioned around the building from fifteen minutes before sunset and remained on-site for one and a half hours post-sunset. The ecologists had views of the potential features noted and the building had adequate cover during the activity survey. The surveyors used heterodyne bat detectors to listen for echolocation calls and any bat passes were also recorded in frequency division and later analysed. Any bat sightings were noted including the time, location, behaviour, and call.

3.4. Surveyors used a combination of visual observation and echolocation detection to identify any bats emerging from the building. Batbox Duet detectors in combination with Echometer Touch Pro detectors were used. The detectors record in both heterodyne and frequency division formats. Kaleidoscope software was used to analyse sonograms of any calls which could not be identified in the field.

4 Results

4.1. Dusk Echolocation

4.1.1. The dusk activity survey was carried out on the 9th of August 2020, with sunset at 20:35. Conditions were suitable with light winds (2 mph), 10% cloud cover and 22°C. End survey conditions were 20% cloud cover, light winds (3mph) and 19°C. The survey times followed BCT guidelines (Collins 2016) with the survey commencing at 20:20 and ending at 22:20.

4.1.2. The location of the surveyors for the dusk survey are noted within Figure 1 below.



Figure 1: Position of Surveyors (Noted by Blue Triangles) for Dusk Survey

4.1.3. The surveyors had no individual bats to emerge or re-enter the building. Traversing and foraging noctule, common pipistrelle, myotis, and soprano pipistrelle were recorded and observed during the dusk activity survey. Social calls for pipistrelle bats were also recorded during the survey. Foraging and traversing bats were observed along the northern, eastern and southern tree line boundaries.

5 Discussion

5.1. The preliminary roost assessment of buildings onsite noted Building 3 and 5 as moderate potential, and buildings 6,7, and 11, as low potential for roosting bats. The features of the buildings noted one or more potential roosting space that was likely to host individuals but unlikely to support a roost of high conservation value (i.e. maternity roosting site). The site itself is situated within a former outdoor centre with mature trees, hedgerow boundaries, areas of scrub/ruderals, lake and poor semi-improved grassland, all areas of high foraging and transect value for local bats.

5.2. The dusk echolocation survey was carried out in August 2020 in line with BCT survey guidelines. The survey conditions were suitable in line with the guidelines.

5.3. From the initial November 2019 PEA survey, changes due to anti-social behaviour have occurred onsite. Building 1 which hosted evidence of barn owl had been stripped to just the supports and missing all outer metal cladding. Building 11, has had similar stripping of the outer panels, and internal damage. During the COVID lockdown the site has unfortunately attracted further anti-social behaviour with the initial attempt for the dusk survey in July noted emergency services onsite attending an arson attack on site. The fire was set to building 5, with damage from heat and water to the adjacent buildings 6 and 7. Building 3 has also had damage both internally and externally, exposing potential roosting areas to the elements. As a result of the disturbance to these buildings, they have been downgraded in overall potential to support roosting bats.

5.4. The dusk survey recorded and observed populations of common pipistrelle, soprano pipistrelle, myotis, and noctule bats foraging and traversing onsite. The majority of the calls recorded were distant, with a small number of individuals directly observed by surveyors during the survey. Social calls were also recorded during the survey. The individuals observed during the survey were within the northern, eastern, and southern tree lines.

5.5. Due to the anti-social behaviour onsite and the lack of security for the surveyors, it is not considered safe for surveyors to attend a dawn survey, and although not in line with BCT guidelines, alternative measures are recommended for the proposed works. The damages to the buildings over the last 8 months have downgraded the overall potential for roosting bats, that coupled with the initial dusk survey results, and majority of the buildings now exposed to elements, it is not considered likely that roosts are present within the buildings. Given the number of suitable trees on site for roosting, it is considered highly likely that the buildings are not used but rather the trees onsite for roosting individuals.

5.6. Building 3 is noted as having negligible potential for use as a hibernating roost given the majority of the building's external fabric is exposed to the elements and is likely to be subject to sub-zero conditions in winter.

5.7. It is not considered that the identified potential roosting spaces host a significant roosting space, suitable for a maternity roost. This is given the lack of droppings observed or found during the building inspections and the low number of individuals recorded during the dusk survey and within close proximity to the building.

5.8. The further echolocation survey has identified local populations of common pipistrelle, noctule, myotis, and soprano pipistrelle bats to use the habitats on and directly adjacent to the site for traversing and foraging. Social behaviours associated with the breeding season has also been identified during the dusk survey. The site has been identified from the dusk survey to hold **local** importance for the range of bat species, as it provides linkages across the wider landscape and hosts foraging and social individuals. To ensure that these traversing routes are not disturbed and to offset any future impacts from lighting, it is recommended that a lighting plan is in place along the and ensure dark corridors remain in place within the southern and eastern boundaries of the site. It is also recommended that any proposed lighting on site is not directed up and outward but rather pointed down, direct, back hooded fixtures, low lux, and if possible, motion sensor.

5.9. If the disturbance to the roosts are considered to fall below the threshold for the Habitat Regulations, no licence is necessary. Precautionary measures may result in limiting the impact of the disturbance such that it is not significant enough to come within the offence in regulation 39. The demolition of the buildings will not result in the destruction of known roosts.

5.10. Given the sites regular anti-social activities it is considered that a supervised demolition to the buildings is the best approach. It is recommended that buildings 5,6, and 7 are demolished as soon as possible under a watching brief by a licenced ecologist (ECoW). Building 11 given the extent of the panel removal, this building can be demolished outside of the nesting bird season (March to

August inclusive) with standard precautionary measures in place. For building 3, it is recommended that this building is demolished under ECoW.

5.11 Prior to works, three bat boxes, 1 Vincent Pro Bat Box, 1 Schwegler 2FN Bat Box and 1 Schwegler 2F will be erected on site. It is proposed that the boxes will be hung under the ecologists direction. Normally a plan would detail the best location for the boxes but due to the level of anti-social behaviour onsite, to ensure the safety of these boxes, these should not be hung until the site is secured.



2F Schwegler Bat Box with Double Front Panel



Vincent Pro Bat Box



2FN Schwegler Bat Box

References:

Bat Conservation Trust. 2018. Bats and Artificial Lighting in the UK, Guidance Note 08/18 – Bats and the Built Environment Series. London. Bat Conservation Trust.

Collins (2016) Bat Surveys: Good Practice Guidelines, 3rd edition, Bat Conservation Trust.

Department for Communities and Local Government (2019). National Planning Policy Framework. www.communities.gov.uk

MAGIC. Multi-Agency Geographic Information for the Countryside. <https://magic.defra.gov.uk/>

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

Stebbing, R.E, Yalden, D.W., Herman, J.S. Which Bat Is It? The Mammal Society. 2007.

Appendix I: Dusk Echolocation Study Results

Surveyor 1

Time	Species	Behaviour	Observation	Other notes
21:17	Noctule	Foraging	Heard Not Seen	
21:20	Noctule	Foraging	Heard and Seen	High above site and tree line
21:29	Common pipistrelle	Traversing	HNS	
21:31	CP	Foraging and Social Calls	HNS	
21:36	CP	Social Calls	HNS	
21:49	CP	Social Calls	HNS	

Surveyor 2

Time	Species	Behaviour	Observation	Other notes
21:17	Noctule	F	HNS	
21:20	Noctule	F	HNS	
21:21	Noctule	F	H/S	Above site
21:29	CP	Social Calls	HNS	
21:30	CP	F	HNS	
21:36	Myotis	T	HNS	
21:48	CP	Social Calls	HNS	
21:53	CP	F	HNS	

Surveyor 3

Time	Species	Behaviour	Observation	Other notes
21:09	CP	T	H/S	Flying NW
21:17	Noctule	T	HNS	
21:19	CP	F	H/S	Within tree lines
21:21	Noctule	F	HNS	
21:25	Soprano pipistrelle	T	HNS	Distant call
21:28	Noctule	F	HNS	
21:29-21:32	CP	Foraging and Social Calls	H/S	Within tree line

21:36	Noctule	F	HNS	
21:38	CP	F	HNS	
21:41	CP	T	HNS	
21:47	CP	F	HNS	
21:48	CP	T	HNS	
21:51	Noctule	T	HNS	
21:53-21:56	CP	F	HNS	

Appendix II: Photos of the Buildings



Internal vandalism in loo block (building 3)



External tiles pulled off and smashed up on former loo block



Panel boards pulled off, missing sections of walls



Example of tiles removed from roof