214 Catherington Lane, Waterlooville, PO8 0TA

Phase 1 Bat survey

8th July 2023

Dr.Jonty Denton (Chartered Ecologist) FRES FLS MCIEEM CECol

Prepared by

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EXECUTIVE SUMMARY

Consultant Chartered Ecologist Dr.Jonty Denton FRES FLS MCIEEM CEcol was commissioned to undertake a Daytime Bat Assessment (Phase 1) of 214 Catherington Lane, Waterlooville, PO8 0TA (GR: SU755292)

The Daytime Bat Assessment / Phase 1 Bat Survey was undertaken in accordance with the Bat Conservation Trust Guidelines (Collins, 2016) on 21st July 2023.

The complex of farm buildings at 214 Catherington Lane all have potential for roosting bats, with a few bat droppings present in the Middle building.

Therefore, the structures have high potential to support roosting bats and a phase 2 emergence survey is recommended.

INTRODUCTION

This report presents the results of a Provisional Ecological appraisal including a phase 1 bat survey of 214 Catherington Lane, Waterlooville, PO8 0TA (GR: SU755292)

This report presents the findings of the survey undertaken on the 8th July 2023 which is aimed at assessing the suitability of the property to support bat species.

Site Setting and Description

The farm complex is situated to the east of Catherington Lane in a rural situation on the outskirts of Waterlooville. It is backed by open pasture to the north-east and south house. With a row of detached properties to the west backed by a large caravan park. There is a woodland included in the priority habitats register 638m to the north. The area provides ideal foraging and commuting habitat for the majority of bats species.

METHODS

Phase 1 Bat Survey Methods

The Daytime Bat Assessment / Phase 1 Bat Survey was undertaken in accordance with the Bat Conservation Trust Guidelines (Collins, 2016).

Bats are fully protected under the Wildlife and Countryside Act 1981, as amended, and also receive additional protection via The Conservation of Species and Habitats Regulations (2010) from intentional killing and injury and from intentional damage, destruction or obstruction of access to a place of shelter. It is an offence to kill or injure a bat or interfere with any roosting or resting site. A bat roost is interpreted as "any structure or place used for shelter or protection" whether or not bats are present at the time or not. Barbastelle Bats, Bechstein's Bat, Noctule, Soprano Pipistrelle, Brown Long-eared Bat, Greater Horseshoe Bat and Lesser Horseshoe Bat are also UK BAP Priority Species and SPI.

According to the DEFRAs MagicMap, the nearest bat license was issued in 2016 for a property 638m to the southwest in Waterloovile. This covered common pipistrelles.

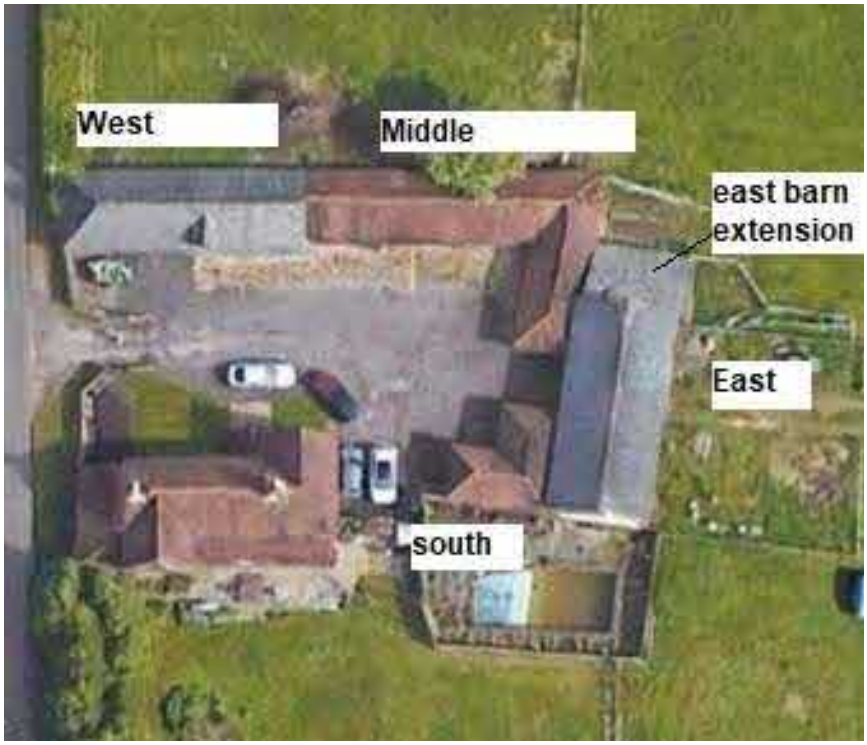

Figure 1. Building layout. (Courtesy of Google images)

Building assessment

The farm buildings date to the 19th Century

WEST BARN

An elongate single storey part open fronted structure with brick and flint walls and a slate roof. (see figure 2). It is orientated west-east with a hip roof at the west end adjacent to Catherington Lane and a shred wall with the middle barn at the east.

Figure 2. Western and southern elevations of West Barn looking northwest. Red arrow indicates potential access point for bats.

Figure 3. Northern elevations of West Barn looking southwest. Red arrow indicates potential access point for bats.

Figure 4. Interior of West Barn looking west.

MIDDLE BUILDING

The middle section connects to the eastern end of the west barn and the east barn to the east. It is a long L-shaped store building used as a workshop for woodworking. There are part enclosed lofts spaces over the eastern third of the workshop. There were a few bat droppings on the steps near the middle entrance doors.

The roof is lined with felting and the walls partly lined with panelling.

Therefore, the Middle building has been used by bats in the recent past and has HIGH potential to support roosting bats

Figure 5. Southern elevations of western third of Middle buildings looking northeast.

Figure 6. Middle Building Western and southern elevations (eastern two-thirds) looking northeast. Red arrow indicates potential access point for bats.

Figure 7. Northern elevation of Middle building looking southeast.

Figure 8. Middle Building Eastern and northern elevations looking west.

Figure 9. Detail of northern face of Middle building showing numerous potential access point for bats.

EAST BARN and northern extension

The easternmost building is the a barn dating to late 19th Century. It is the largest of the connected buildings orientated north-south. It is open framed with a slate roof and open windows on the north and south gables and ventilation vents into the wall cavity throughout.

The barn has LOW potential for roosting bats.

There is a wooden framed extension of the north end faced with slates. The walls are of corrugated tin sheeting on a softwood frame. There are no internal voids and the roof and walls are unlined and in poor condition. This structure has NEGLIGIBLE potential for bats.

Figure 8. Southern and eastern elevations of east barn looking north.

Figure 9. Northern elevation of east barn and extension looking south.

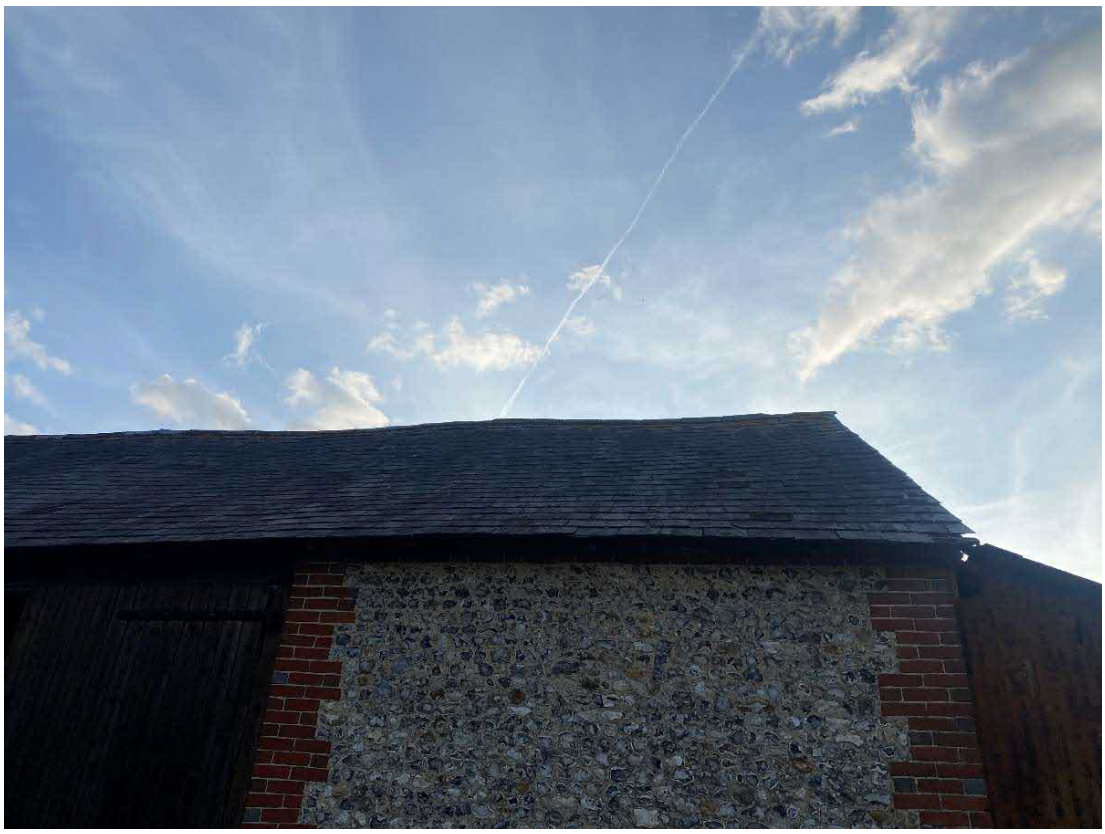

Figure 10. Eastern elevations of barn looking west.

Figure 11. Interior of Barn looking north.

SOUTH BUILDING

A small L-shaped store building with a hipped roof of clay tiles on a softwood frame. The walls are of brick with a wooden frame. It is open on the south side

The roof is lined with felting and the walls partly lined with panelling.

The South building has MEDIUM potential to support roosting bats

Figure 12. Northern and western elevations of south building looking east. extension looking south. All faces of the roof have numerous potential access point for bats.

Figure 13. Interior of open (south) section of south building looking west.

EVALUATION, IMPACTS AND RECOMMENDATIONS

The entire complex has at least low potential for bats with the middle and southern buildings having high potential. The east barn could also harbour bats in the wall cavities and timber framework.

Therefore, the structures have overall high potential to support roosting bats and a phase 2 emergence survey is recommended.

A phase 2 is required on the complex (four viewers will be required in this instance) should be carried out in suitable weather between 1st May and the end of September.

The structure is then watched from either 15 minutes before sunset to 2 hours after or 2 hours before dawn to sunrise.

All emerging or re-entering bats are recorded along with their flight path, their species and the time of flight.

An emergence survey would identify:

- Whether bats are present in a structure, the species and number involved
- Entrance and exit points for the roost.
- The type of roost

- Actions needed to be taken to ensure legal compliance

REFERENCES

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition)*. The Bat Conservation Trust, London.

Mitchell-Jones, A.J. (2004) *Bat Mitigation Guidelines.* English Nature, Peterborough.

INTERNET RESOURCES

Google Maps: www.maps.google.co.uk

Magic Interactive Map: www.magic.gov.uk

214 Catherington Lane, Waterlooville, PO8 0TA

PHASE 2 BAT SURVEY

Level 1 bat license holder no. 2020-46400-CLS-CLS

SEPTEMBER 2023

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TIMING AND METHODOLOGY

The surveys were conducted at dusk on the 29th July 2023.

Surveyors were stationed to the west inside the yard viewing the southern and western internal elevations an to the southeast viewing the southern elevations of south building and east barn and northeast viewing the northern and eastern external elevations. Canon XA40 HD digital camcorders with IR illumination were also employed at each station (see figure 1). Survey commenced 30 minutes before sunset and continued until 90 minutes after sundown*. EchotouchPro, Echotouch,* and *Batbox Duet* detectors were employed to monitor and record bat activity. Walkie-talkie communications were maintained between surveyors to avoid multiple counting and help triangulate emergence and flight lines.

Survey Team

Dr.Jonty Denton is a licensed bat ecologist with over 25-years experience monitoring bats across England & Wales.

Ruby Denton Bsc (Hons) has over 6-years' experience, clocking up over 500 hours on Phase 2 emergence/re-entry and transect work, and has experience of 10 species across South-East England.

Laura Denton Bsc (Hons) has over 5-years' experience, clocking up over 200 hours on Phase 2 emergence/re-entry and transect work, and has experience of 10 species across South-East England.

Nick Cooper Bsc (Hons) has 2-years' experience, clocking up over 50 hours on Phase 2 emergence surveys, and has experience of 7 species across South-East England.

RESULTS

The night of the 29th July was clear and calm with a starting temperature of 18°C dropping to 17°C.

Figure 1. Locations of viewers, cameras (Blue stars) Red arrows indicate emergence points
(courtesy of Googlemaps)

CONCLUSIONS

Two common pipistrelles emerged from the east barn south gable on the 29th July and two from the middle building south roof on the 5th Spetember

Therefore, lighting must also be considered as part of the proposal. Lighting can be detrimental to roosting, foraging and commuting bats. Any new lighting around the buildings must be focused away from the tree lines and hooded or baffled to ensure minimal light spillage. Lamps of greater than 2000 lumens (150 W) must not be installed.

APPENDIX 1. FIELD DATA

Project		**Start time**	20.15	**Finish**	22.32	**Temperature**	18 C at start 17 C at finish
	JD RD	29.7.23		**sunset**	20.52	**Weather** 0% cloud beaufort 0	
	Bat passes heard						
Station no.	**Start time**		No.	**passes**	comments		
SE	21.13	Common pipistrelle	1	1	Emerged from south gable of east barn		
SE	21.15	Common pipistrelle	1	1			
W	21.17	Common pipistrelle	1	1	Emerged from north gable of house flew off north		
W, NE	21.18	Common pipistrelle	1	1	Emerged from north gable of house flew off north		
SE	21.21-22.00	Common pipistrelle	1-2	50	Circling swimming pool		
SE	21.30	Serotine	1	5	Flew west south of house to forage over pasture to east		
NE	21.33	Common pipistrelle	1	1	Flew east along ridge of middle building		

Project		**Start time**	20.15	**Finish**	22.32	**Temperature**	18 C at start 17 C at finish
	JD RD LD NC	29.7.23		**sunset**	20.52	**Weather** 0% cloud beaufort 0	
	Bat passes heard						
Station no.	**Start time**		No.	**passes**	comments		
SE	21.13	Common pipistrelle	1	1	Emerged from south gable of east barn		
SE	21.15	Common pipistrelle	1	1			
W	21.17	Common pipistrelle	1	1	Emerged from north gable of house flew off north		
W, NE	21.18	Common	1	1	Emerged from north gable of house		

		pipistrelle			flew off north
SE	21.21-22.00	Common pipistrelle	1	50	Circling swimming pool
SE	21.30	Serotine	1	5	Flew west south of house to forage over pasture to east
NE	21.33	Common pipistrelle	1	1	Flew east along ridge of middle building
SE	21.33	Common pipistrelle	1	1	

Project		**Start time**	19.15	**Finish**	21.16	**Temperature**	18 C at start 17 C at finish
	JD RD NC	5.8.23		**sunset**	19.41	**Weather** 0% cloud beaufort 0	
	Bat passes heard						
Station no.	**Start time**		No.	**passes**	comments		
SE	19.50	Common pipistrelle	1	1	Emerged from roof of middlebuilding flew off		
SE	21.15	Common pipistrelle	1	1			
W	21.17	Common pipistrelle	1	1	Emerged from north gable of house flew off north		
W, NE	21.18	Common pipistrelle	1	1	Emerged from north gable of house flew off north		
SE	21.21-22.00	Common pipistrelle	1	50	Circling swimming pool		
SE	21.30	Serotine	1	5	Flew west south of house to forage over pasture to east		
NE	21.33	Common pipistrelle	1	1	Flew east along ridge of middle building		
SE	21.33	Common pipistrelle	1	1			