

PHASE 1 BAT REPORT

10 PEMBERTON ROAD, LYNDHURST HAMPSHIRE SO43 7AN

**AUGUST 2019** 

ON BEHALF OF DRAYCOTTS CHARTERED SURVEYORS LTD.



The Old Squash Court,
Rempstone Hall,
Rempstone,
Corfe Castle,
Wareham,
Dorset,
BH20 5JQ
www.ecological-services.co.uk

Telephone: 01929 477115 E-mail: aimee@ecological-services.co.uk

#### Authorisation

	Name	Date	Signature
Report prepared by:	Aimee Cokayne	15/08/2019	
Report checked and authorised by:	Alex Hannam	15/08/2019	

The contents of this report were correct at the time of the last survey visit. The report is provided for the sole use of the named client and is confidential.

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of the addressee in dealing with this. It may not be sold, lent, hired out or divulged to any third party not directly involved in this situation without our written consent.

It is company policy to share species records collected during our surveys with local biological records centres unless instructed otherwise by the client.

# **CONTENTS**

SUMN	MARY	2
1.0	INTRODUCTION	3
2.0	METHODOLOGY	4
2.1	Desk Study	4
2.2	Phase 1 bat survey	4
3.0	RESULTS	
3.1	Desk Study	5
3.2	Phase 1 bat surveys	
4.0	CONCLUSIONS AND RECOMMENDATIONS	8
4.1	Bats	8
4.2	Ecological enhancements	9
5.0	REFERENCES	10
APPE	NDIX I: Site plan	11
APPE	NDIX II: Plans for extensions to the current house	12
APPE	NDIX III: Photographs	14

## **SUMMARY**

- Lindsay Carrington Ecological Services Limited were commissioned by Draycotts Chartered Surveyors Ltd. to conduct a phase 1 bat survey at 10 Pemberton Road, Lyndhurst, Hampshire, SO43 7AN (OS grid reference: SU 30087 08555). The survey was required to support planning for extending the existing house. Plans are available in Appendix II.
- 2. The phase 1 bat survey conducted on the 13<sup>th</sup> August 2019 entailed a detailed internal and external inspection of the building, directly searching for signs of bats or bats themselves. An assessment of the potential of the building to support roosting bats was also made.
- 3. The house was assessed as holding *negligible potential* to support roosting bats due to no evidence of bats being recorded, and minimal access/egress points and potential bat roosting areas. Additionally, current planned extension works do not directly impact upon the existing roof void.
- 4. There are numerous records of bat species recorded foraging and commuting in the surrounding area due to the site being located within the good quality habitat of the New Forest National Park. To prevent disturbance and negative impacts on bats foraging and commuting in the area, a sensitive lighting scheme has been recommended in section 4.1.
- 5. Ecological enhancements to create a net gain in biodiversity for the site by providing roosting opportunities for bats and nesting opportunities for birds have been recommended in section 4.2.

## 1.0 INTRODUCTION

Lindsay Carrington Ecological Services Limited were commissioned by Draycotts Chartered Surveyors Ltd. to conduct a phase 1 bat survey at 10 Pemberton Road, Lyndhurst, Hampshire SO43 7AN (OS grid reference: SU 30087 08555). The survey was required to support planning for the extending the existing house. Plans for the extension are available in appendix II.

All bat species are legally protected under *Annex IV* of the *EC Habitats and Species Directive* which is transposed into UK law via the *Conservation of Habitats and Species Regulations* 2017. All species of bat are also protected under the *Wildlife and Countryside Act 1981 (as amended)*. This legislation makes it an offence to:

- Deliberately kill, injure or capture bats;
- Deliberately disturb bats in such a way as to be likely to significantly affect: (i) the ability of any significant group of bats to survive, breed or rear or nurture their young; or (ii) the local distribution or abundance of bats<sup>1</sup>;
- Intentionally or recklessly disturb any bat whilst it is occupying a roost<sup>1</sup>;
- Damage or destroy bat roosts; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation means that where activities have potential to impact on bats, mitigation must be implemented to ensure that the favourable conservation status of bats is retained and that no bats are harmed or injured as a result of the proposals.

In addition, a number of bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*) are UK Biodiversity Action Plan (BAP) species. BAPs provide policy for protecting and restoring priority species and habitats as part of the UK's response to the *Convention on Biological Diversity*. BAPs operate at both a national and local level with priority species and habitats identified at a national level and a series of Local BAPs that identify ecological features of particular importance to a particular area of the country. The requirement to consider and contribute towards BAP targets was strengthened through the *Countryside and Rights of Way Act 2000*.

The National Planning Policy Framework (NPPF) sets out the Government's vision for biodiversity in England with the broad aim that planning, construction, development and regeneration should maintain and enhance, restore or add to biodiversity and geological conservation interests. NPPF includes sections on legally protected species and sites.

Section 2 of this report details the methodologies, section 3 provides the survey results and section 4 provides information on the relevance of the results to the proposals and a mitigation strategy.

<sup>&</sup>lt;sup>1</sup> Note that the amendments to the Habitats Regulations in August 2007 and January 2009 have resulted in an increase in the threshold of illegal levels of disturbance to bats. An offence is only committed if the deliberate disturbance would result in significant impacts to the bat population. However, it should be noted that activities that cause low levels of disturbance to bats continue to constitute an offence under Section 9 of the Wildlife and Countryside Act.

## 2.0 METHODOLOGY

# 2.1 Desk Study

The LCES Protected Species Database was checked for bat records within the same 10-kilometre grid square as the site (SU30).

# 2.2 Phase 1 bat survey

The buildings on site were assessed internally and externally by Aimee Cokayne (CL17-2019-40055-CLS-CLS) on the 13<sup>th</sup> August 2019.

Bats roost in a wide variety of sites within buildings, with many species roosting in cracks and crevices, within brick work, under slates and tiles, and within timber beam joints where they are difficult to see.

Bats often access roosts at key areas such as the gable end, soffits, barge boards, ridge tiles, between double lintels, around window frames, through open joints in the brickwork or broken tiles through open doors / entrances to the buildings.

The presence of roosting bats can be identified through signs such as accumulations of moth or butterfly wings, staining, bat droppings or bats themselves. The absence of these signs does not, however, conclusively indicate that bats are not using a building. An assessment was therefore made for the potential of the house to support bats based on the following scale:

Table 1 – Criteria for assessing bat roosting potential in buildings

<b>Confirmed Roost</b>	Evidence of bat occupation found	
<b>High Roosting</b>	With significant roosting potential, either because they contain a	
Potential	large number of suitable features or those features present appear	
	optimal	
Moderate	Features with moderate roosting potential, with roosting features	
<b>Roosting Potential</b>	appearing less suitable	
Low or Negligible	Buildings with few, if any, features suitable for roosting	
<b>Roosting Potential</b>		

# 3.0 RESULTS

# 3.1 Desk Study

Table 2 below lists but records within the same 10-kilometre grid square (SU30) as the site (LCES, 2019) and Table 2(a) lists Magic Maps records within a 2 kilometre radius.

Table 2 – Bat species within the 10-kilometre grid square SU30.

Common Name	Scientific Name	Status	Location
Serotine	Eptesicus serotinus	Schedule 2, Habs	2 records dated 2009
		Regs <sup>2</sup> , Schedule 5,	and 2011.
		WCA <sup>3</sup>	
Common pipistrelle	Pipistrellus	Schedule 2, Habs Regs,	1 record dated 2011.
	pipistrellus	Schedule 5, WCA	
Soprano pipistrelle	Pipistrellus pygmaeus	Schedule 2, Habs Regs,	2 records dated 2009
		Schedule 5, WCA, UK	and 2011.
		BAP <sup>4</sup>	
Pipistrelle species.	Pipistrellus sp.	Schedule 2, Habs	1 record dated 2009.
		Regs, Schedule 5,	
		WCA	
Brown long-eared	Plecotus auritus	Schedule 2, Habs Regs,	2 records dated 2014.
		Schedule 5, WCA, UK	
		BAP	

Table 2 (a) – Bat species within 2 kilometres of the site.

Common Name	Scientific Name	Status	Location
Serotine	Eptesicus serotinus	Schedule 2, Habs	1 record dated 2014.
		Regs <sup>5</sup> , Schedule 5,	
		WCA <sup>6</sup>	
Common pipistrelle	Pipistrellus	Schedule 2, Habs Regs,	3 records dated between
	pipistrellus	Schedule 5, WCA	2012 and 2014.
Soprano pipistrelle	Pipistrellus pygmaeus	Schedule 2, Habs Regs,	1 record dated 2014.
		Schedule 5, WCA, UK	
		BAP <sup>7</sup>	
Whiskered bat	Myotis mystacinus	Schedule 2, Habs Regs,	2 records dated 2012
		Schedule 5, WCA	and 2014.
Brown long-eared	Plecotus auritus	Schedule 2, Habs Regs,	1 record dated 2014.
		Schedule 5, WCA, UK	
		BAP	

Records of bat species in the vicinity of the site increase the likelihood of them being present at the site.

<sup>&</sup>lt;sup>2</sup> Habs Regs: The Conservation of Habitats and Species Regulations 2017

<sup>&</sup>lt;sup>3</sup> WCA: The Wildlife and Countryside Act 1981 (as amended)

<sup>&</sup>lt;sup>4</sup> UK BAP: UK Biodiversity Action Plan Species

<sup>&</sup>lt;sup>5</sup> Habs Regs: The Conservation of Habitats and Species Regulations 2017

<sup>&</sup>lt;sup>6</sup> WCA: The Wildlife and Countryside Act 1981 (as amended)

<sup>&</sup>lt;sup>7</sup> UK BAP: UK Biodiversity Action Plan Species

# 3.2 Phase 1 bat surveys

A phase 1 bat survey was undertaken on the 13<sup>th</sup> August 2019. Weather conditions were sunny and bright with a temperature of 16°C, 2/12 wind and 3/8 cloud cover.

#### Surrounding area

The site is in a residential area situated on the edge of Lyndhurst within The New Forest National Park, Hampshire. It is surrounded by open heath and broad-leaved woodland and backs directly onto a football field. There is a good a network of hedgerows and mature treelines nearby providing good connectivity between the site and the surrounding habitat. There are copses of broad-leaved woodland located 100-metres north of the site and the surrounding area provides good habitat for commuting, foraging and roosting bats.

### **Building description**

A description of the building has been provided below while photographs have been provided in appendix II.

#### External

- The building is a semi-detached, two-storey house of brick construction.
- The roof is single-pitched slate tiled roof with a concrete roof ridge
- The roof is in a good state of repair with no slipped tiles or obvious gaps under the tiles.
- Windows and doors are uPVC-framed and in good condition.
- There are two internal chimneys both with lead-flashing that is in good condition.
- The soffits are wooden and well-sealed.

#### Internal

- Loft void is approximately 8 metres long x 6 metres wide x 1.5 metres high at the apex.
- The loft is separated from the neighbouring house's roof void by a well-sealed breeze block wall.
- The roof does not have any lining and the temperature in the loft is therefore unstable.
- Structure is typical truss with a wooden ridge beam.
- Fibre glass insulation in a moderate condition.
- Cobwebs present throughout the loft space.

#### Survey results

### Internal survey: evidence of bats

A thorough internal survey was undertaken, no bat droppings or evidence of bats was recorded.

## External survey: evidence of bats

A thorough external survey was undertaken, and no bat droppings or evidence of bats was discovered.

# Potential for bats

The building was well-sealed throughout, with minimal access/egress points for bats. Internal wooden beams provide limited roosting opportunities for bats. The roof not being lined and the extent of cobwebs and lack of evidence upon the internal inspection of the site do not suggest the site is a bat roost. The overall potential of house as a bat roost is outlined in table 3 below:

**Table 3: Potential for bats** 

Location	Potential access points for bats	Potential roosting opportunities for bats	Overall suitability
House	Light gaps between roofing and walls visible from inside the loft void.	Along the wooden ridge beam	• The building has been assessed as holding <i>negligible potential</i> to support roosting bats.

The house was been assessed as holding negligible potential to support roosting bats due to limited access and roosting features. Further recommendations have been made in section 4.2.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

#### **4.1 Bats**

All species of British bats and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). The NPPF also states that mitigating the impacts caused by developments to foraging and commuting routes is a material consideration in the planning process. Recommendations for roosting, foraging and commuting bats are therefore discussed below.

The house was assessed as holding negligible potential to support roosting bats due to limited access/egress points and the potential bat roosting areas and no evidence of bat being recorded during the phase 1 survey. Therefore, no further action is required in terms of the extension work to the house. Additionally, the plans do not indicate any works directly affecting the roof void or roofing as works are only on the first floor, ground level.

However, it must be noted that if a bat or bats are discovered during construction, all works must cease, and a licenced bat ecologist must be contacted immediately.

## Mitigation

As the area surrounding the house is located within a designated area and is well-connected by hedgerows and treelines to areas of broad-leaved woodland nearby, use of a sensitive lighting scheme for the development is recommended in order to prevent disturbance to commuting and foraging bats.

### Lighting

In accordance with *Bats and Artificial Lighting in the UK* (BCT, 2018), any new lighting to be installed as part of the development should incorporate the following measures to minimise negative impacts on nocturnal species such as bats:

- Selection and design of the lighting systems and by using accessories such as cowls or hoods to minimise light spill and direct light only to where it is needed.
- Using light sources that emit minimal ultra-violet light, peak higher than 550nm and be of a warm/neutral colour <4,200 kelvin.
- LED luminaires should be used where possible.
- All security lighting will be on a timer and only triggered at waist height.

# 4.2 Ecological enhancements

A few suggestions for ecological enhancements have been made below:

- Provision of a bird box on the elevation of the second storey extension to increase nesting opportunities. Examples include swift bricks to encourage swifts (*Apus apus*) which are known to nest in Lyndhurst. These bricks must be added at least 5 metres above the ground. If this is not possible, there are other options of external bird boxes that can be added onto the existing second storey for species such as house martin (*Delichon urbica*) and house sparrow (*Passer domesticus*). Either one 1 SP Schwegler Sparrow Terrace or one 9A Schwegler House Martin Nest or equivalent is recommended on one of the walls of the building.
- Provision of one Schwegler 1FR Bat Tube or similar woodcrete bat box to be built into the elevation of the second storey extension to create roosting opportunities for crevice dwelling bats such as pipistrelle (*Pipistrellus* sp.) bats. This is suitable for bat species which inhabit buildings and is designed to be built into the masonry of an external wall. It can either be built flush with the wall or beneath a rendered surface. The tube is constructed from woodcrete and has an integrated wooden panel onto which bats can easily cling.

Bat and bird boxes can be purchased from companies such as:

- https://www.swift-conservation.org/swift bricks.htm,
- <a href="https://www.nhbs.com">https://www.nhbs.com</a> or
- <a href="https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes.html">https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes.html</a>.

## 5.0 REFERENCES

Bat Conservation Trust & Institute of Lighting Professionals (2018). <u>Bats and Artificial Lighting in the UK.</u> <u>https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/</u>

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

LCES (2019), Lindsay Carrington Ecological Services in-house species database.

Magic Maps (2019), <a href="https://magic.defra.gov.uk/MagicMap.aspx">https://magic.defra.gov.uk/MagicMap.aspx</a>.

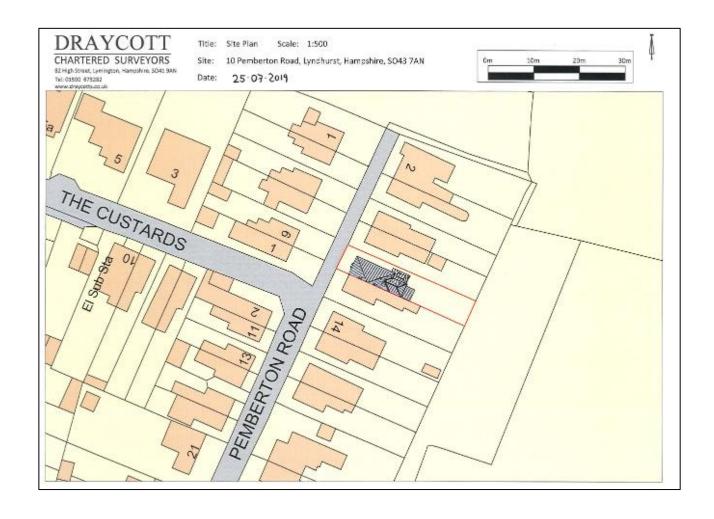
Mitchell-Jones, A. J. (2004), *Bat Mitigation Guidelines*, English Nature.

Mitchell-Jones A.J. & McLeish A.P. (2004) <u>The Bat Workers' Manual (3<sup>rd</sup> Edition)</u> Joint Nature Conservation Committee.

Ministry of Housing, Communities and Local Government (2018). *National Planning Policy Framework*.

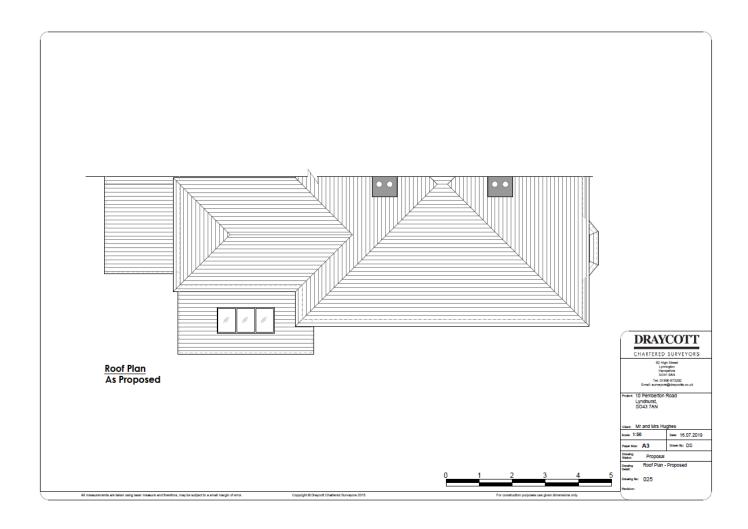
Office of the Deputy Prime Minister (2005). <u>Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.</u>

# **APPENDIX I: Site plan**



# **APPENDIX II: Plans for extensions to the current house**





# **APPENDIX III: Photographs**



Photograph 1: Loft void showing cobwebs and internal roof structure



Photograph 2: Internal chimney – well-sealed

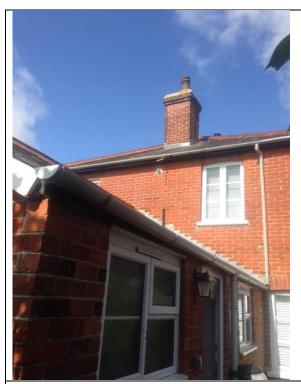


Photograph 3: well-sealed roof tiles, soffits and lead flashing on current first floor extension – new extensions to be added here on ground and in part on second-storey level.



Photograph 4: Front of house.

Services Ltd August 2019



Photograph 5: Extensions are to be added on to the eastern and north eastern elevation of the first storey area. No loft void is present in this section of the house.





Photograph 6: Eastern elevation. Extension to be added here. Soffits are in good condition with no gaps.