#### **Devon Wildlife Checklist** (to be filled in by the ecological consultant and included in the front of the Wildlife Report)

#### A.1 Protected and priority species (relates to question 13a in the planning application form).

A tick or cross must be placed in all boxes in column two (shaded) and then, where there is a tick, all other boxes in that row. Where species are present please email this form to Devon Biodiversity Records Centre - <a href="mailto:DBRC@dbrc.org.uk">DBRC@dbrc.org.uk</a>.

Location: 2 and 3 Leigh Cross Grid reference for centre of site (6 digit): SS699047 Planning Application reference: Unknown

Name of surveyor and consultancy: Tamsin Lee (Lee Ecology)

Date that surveys carried out: 09/11/2021

Sent to DBRC: Further info required.

Species - terrestrial, intertidal, marine	Walkover shows that suitable habitat present and reasonably likely that the species will be found?  Tick or cross	Detailed survey needed to clarify impacts and mitigation requirements?	Detailed survey carried out and included ?	Species Present or Assumed to be present on site Indicate with P or A and name the species	Impact on species?	Detailed Conservation Action Statement included?  Sets out actions needed in relation to avoidance / mitigation / compensation / enhancement	EPS offence committed? Three tests met?	Grid reference for specific location of species (if required for large sites)
Bats (roost)	Y (on 3 Leigh Cross only)	Y	N	A	Dependent on results of additional survey.	N/A yet	N/A yet	
Bats (flight line / foraging habitat)	Х							
Dormice	Х							
Otters	Х							
Great crested newts (*check consultation zone)	x							
Cirl buntings (*check consultation zone)	Х							
Barn owls	Х							
Other Schedule 1 birds	X							
Breeding birds	Χ							
Reptiles	Χ							
Native crayfish	Х							
Water voles	Χ							
Badgers	Х							
Other protected species	Х							
UK BAP priority species	Х							
Devon BAP key species	Х							
Invasive species	Х							

- Devon consultation zones for cirl buntings and great crested newts http://www.devon.gov.uk/index/wildlife.htm
- UK BAP priority species <a href="http://jncc.defra.gov.uk/page-5717">http://jncc.defra.gov.uk/page-5717</a>
- Devon BAP key species <a href="http://www.devon.gov.uk/dbap-section\_e.pdf">http://www.devon.gov.uk/dbap-section\_e.pdf</a> (note that this list is currently being updated)

### A.2 Designations / important habitats / sites of geological importance (relates to questions 13 b & c in the planning application form) A tick or cross must be placed in all boxes in column two and then, where there is a tick, all other boxes in that row.

Designation	Within site or	Name of site / habitat	Detailed Conservation Action Statement	Habitat balance sheet included (showing	Relevant organisation consulted & response
Terrestrial, intertidal, marine	potential impact. Tick or cross		included in report ?	area of habitats lost, gained and overall net gain)	included in the application?
Statutory designations	Х				
European designations - Special Area of Conservation (SAC), Special Protection Area (SPA) and RAMSAR site or within Greater Horseshoe consultation zone	х		Sufficient information included in order for the LPA to undertake an HRA?		
Site of Special Scientific Interest (SSSIs)	х				
Marine Conservation Zone (MCZ)	Х				
Local Nature Reserve (LNR)	Х				
Non statutory wildlife					
designations					
County Wildlife Site (CWS)	Х				
Ancient woodland	Х				
Special Verge	Х				
UK BAP Priority habitat	Х				
Local Biodiversity Network (mapped by Devon Wildlife Trust / through Green Infrastructure work)	X				
Non statutory geological designation					
County Geological Site (CGS or RIGS)	х				

• List of UK BAP priority habitats - <a href="http://jncc.defra.gov.uk/page-5718">http://jncc.defra.gov.uk/page-5718</a>

Table headings last updated: 22nd September 2014



## DAYTIME PRELIMINARY BAT SURVEY REPORT

2 & 3 LEIGH CROSS, NR ZEAL MONACHORUM

for

MR T MENDUS-EDWARDS

November 2021

**Lee Ecology** 

Leigh Cottage East Leigh, Crediton Devon, EX17 6LJ

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#### **CONTRACT SHEET**

# Mr T Mendus-Edwards 2 & 3 Leigh Cross, nr Zeal Monachorum Daytime Preliminary Bat Survey Report

Contract No.	Project Contact/Author	Issue No.	Date of Issue
00LE597	Tamsin Lee Ecological Consultant	01	07 December 2021

#### Disclaimer

Please Note that all reasonable care and attention is made by Lee Ecology to produce reports and advice to a high, professional standard. However, no responsibility is accepted for any consequences howsoever caused, by the release of this report to third parties.



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#### 1. SUMMARY OF RESULTS & RECOMMENDATIONS

#### 1.1 Results

- The proposal includes extending both properties (2 and 3 Leigh Cross) by constructing a two-storey extension on the northern elevation of each property. A preliminary daytime bat survey was commissioned to accompany the planning application for this proposal. The survey site is centred on Ordnance Survey National Grid Reference SS 699 047.
- 2. A daytime preliminary bat survey was undertaken by an experienced and appropriately licensed ecologist from Lee Ecology on 09 November 2021. Weather conditions at the time of survey were dry, calm and overcast with an average ambient temperature of 12°C.
- 3. The subject buildings are part of a small terrace of cottages. One of the buildings (2 Leigh Cross) is occupied and the other (3 Leigh Cross) has been vacant for approximately twelve years. The survey site is situated on the outskirts of the hamlet of East Leigh and is surrounded in the wider landscape by agricultural land, native hedgerows, water courses, other buildings and patches of semi-natural broadleaved woodland.
- 4. Both internal and external examinations of the subject buildings were made. No evidence of bat occupation was recorded within 2 Leigh Cross and roosting potential was deemed to be very low. Bat droppings (in small piles and scattered) were noted within the loft void of 3 Leigh Cross.
- 5. No impact on bat foraging/commuting behaviour, on the local scale, is anticipated as a result of the proposed development. No mature vegetation (e.g. lengths of mature hedgerow, large trees) is proposed for removal, based on current knowledge, and no formal external lighting scheme is to be implemented.



6. No evidence of bird nesting activity was recorded on the day.

#### 1.2 Recommendations

The following recommendations are made to ensure compliance with wildlife legislation (e.g. the Wildlife and Countryside Act 1981 as amended, the Conservation of Habitats & Species Regulations 2010), biodiversity legislation (e.g. the Natural Environment and Rural Communities Act 2006), government guidance and best practice (e.g. UK Biodiversity Action Plan).

- 1. Due to the strict legal protection afforded to bats and their roosts further survey work should be undertaken, in accordance with current survey guidelines, to provide further information as to the nature of bat use within 3 Leigh Cross (no further survey work is recommended for 2 Leigh Cross). It is therefore recommended that at least two activity surveys (either dusk emergence and/or pre-dawn return) are undertaken on 3 Leigh Cross. The surveys should be carried out during the recognised bat activity season for potential summer roosts; May September (at least one of these surveys should be undertaken between May August) and should be spaced out by at least two weeks but preferably more. A remote detector should also be placed within the roof void of 3 Leigh Cross between surveys. Please note that bat activity surveys are weather dependent.
- 2. Once the extent, species and nature of the bats roosting within the site has been determined (if applicable), an assessment can be made on whether the development will require the prior acquisition of a bat mitigation (development) licence from Natural England. This licence will need to include an appropriate scheme of mitigation and compensation to ensure that the 'favourable conservation status' of bats at the site is assured (if required).
- 3. No development work should take place in proximity to an <u>active</u> bird's nest (if applicable at time of works). Nests are deemed inactive once the young have



fully fledged and there is no sign of adults bringing nesting material/food to the nest or sitting on eggs.

4. The results of this survey are deemed to be valid for 12 months from date of issue. If development works are to be carried out after this time has elapsed an update check will be required to ascertain the site's current status (i.e. change in habitats, condition of buildings, species present etc.). Please be aware that, because the natural environment is dynamic, ecological reports generally have a limited period of validity. Many statutory authorities now regard one year as the maximum time that should elapse before a report will need to be updated (this time period may vary depending on the Local Planning Authority in question).



#### 2. INTRODUCTION

#### 2.1 Scheme Background

The proposal includes extending 2 and 3 Leigh Cross. This bat survey has been commissioned to provide supporting information on the possible presence of protected species at the site and direct appropriate further works including additional surveys, mitigation, compensation and licensing if required.

#### 2.2 Survey Objectives & Limitations

The objectives of the survey were:

- 1. to carry out a bat survey of the site in order to determine the possible presence of these species in relation to planning requirements;
- 2. to provide a concise written report of the results, making any appropriate recommendations to ensure compliance with wildlife law and recognised best practice.

The daytime survey was undertaken in the month of November; it is recognised that field signs of bats can be identified by an experienced ecologist at any time of year (see Mitchell-Jones, 2004).

Bat activity surveys are often required to supplement daytime survey findings and are normally undertaken in the summer months (May – August/September inclusive). These surveys are beyond the scope of this current commission.



#### 3. METHODS

#### 3.1 Daytime Bat Survey

One licensed ecologist (bat licence registration number 2015-13745-CLS-CLS) undertook this survey on 09 November 2021 following the methods recommended by the Bat Conservation Trust and Natural England (BCT, 2016; Mitchell-Jones, 2004).

Equipment included a head torch, ladder, collecting pots, camera, binoculars and bat detector.

A diurnal inspection was made for any bat field signs or evidence of bat roosting. Signs of bat activity may include droppings, feeding remains, absence of cobwebs, vocalisations, staining, scratch marks, odour and live/dead bats.



#### 4. RESULTS

#### 4.1 Bat Survey

#### 4.1.1 General Site Description

The survey site comprises two [attached] properties located on the outskirts of East Leigh, near Zeal Monachorum. The site is surrounded in the wider landscape by agricultural land, native hedgerows, water courses, other buildings and patches of semi-natural broadleaved woodland.

#### 4.1.2 2 Leigh Cross

The roof void is accessed through a single hatch [intact, kept closed]. Height to apex is approximately 2 metres, or just below. The void floor has been boarded out and the underside of the roof has been plaster-boarded. Electric lighting is present and is in working order. The void is currently used as a store and is subject to some disturbance. Two 'eyebrow windows' [intact] allow a degree of natural light penetration into the roof void. No evidence of bat occupation was recorded within the loft void.

The rooms of the property are living areas and are considered unsuitable for roosting bats.

The property is predominantly built of cob with external render and whitewash. The pitched roof is constructed of traditional thatch, with a single-storey flat-roofed extension at the rear (northern elevation). No hanging slates, cladding or other features, which may present notable roosting potential for bats, are present.





Plate 1: View of roof void (facing west)



Plate 2: Underside of roof



Plate 3: Front of 2 Leigh Cross (facing northwest)



Plate 4: Rear of 2 Leigh Cross (facing southeast)

#### 4.1.3 3 Leigh Cross

The loft void is accessed via a single hatch [intact, kept closed] located on the landing. The property has been vacant for some time and therefore the void has not been subject to regular disturbance. The void space is not heavily trussed and is free of any notable natural light penetration. The underside of the roof is lined with felt (the roof was replaced in the 1980s, client communication) and fibreglass insulation has been laid throughout. No electric lighting is present within the void.

A pile of bat droppings was noted on the eastern gable end wall and, to a lesser extent, on the western gable wall. Bat droppings were also noted lightly scattered



around the void. The droppings were predominantly dark in colour, possibly indicating that they are relatively fresh.

No obvious evidence of bats was noted within the rooms of the [vacant] property.



Plate 5: View of loft void of 3 Leigh Cross



Plate 6: View of loft void of 3 Leigh Cross



Plate 7: Bat droppings amongst debris



Plate 8: Bat droppings caught in cobweb





Plate 9: Internal view (facing south-west)



Plate 10: Ground floor lean-to (facing northwest)

The property is externally rendered with a pitched, slate roof and brick chimney at each gable (one adjoining the roof of 2 Leigh Cross). A ridge tile was noted missing on the main roof. A small, single-storey lean to is present at the rear of the property; this will be demolished to facilitate the new extension. A lean-to store (accessed externally) is attached to the eastern elevation.



Plate 11: Front of 3 Leigh Cross (facing north)



Plate 12: Rear of 3 Leigh Cross (facing southwest)



Plate 13: Missing ridge tile Lee Ecology



Plate 14: View of 3 Leigh Cross (facing northwest)

November 2021

2 & 3 Leigh Cross, nr Zeal Monachorum





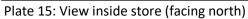




Plate 16: View inside store (facing south)

No evidence of active bird nesting was recorded on the day.



#### 4.1.4 Location Plan



Site



Client: Mr T Mendus-

**Edwards** 

Site: 2 & 3 Leigh Cross

**Title:** Location Plan **Contract:** 00LE597

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#### **5. DISCUSSION OF IMPACTS**

<u>Site scale:</u> In its current context, 2 Leigh Cross is considered to have limited potential for roosting bats and no further survey work is recommended, for this property.

Due to the presence of bat droppings within the roof void of 3 Leigh Cross, further survey work is recommended in accordance with current survey guidelines. This will help to determine the potential impact the proposed works may have on bats, and direct mitigation as required.

<u>Landscape scale:</u> the site is well connected to the wider landscape through a network of hedgerows and patches of woodland. It is likely that bats roost and forage in the surrounding environment however no negative impact on the surrounding habitats, as a result of the proposal, is anticipated. No formal lighting scheme is proposed.



#### 6. REFERENCES & BIBLIOGRAPHY

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#### 7. QUALIFICATIONS & EXPERIENCE

#### Tamsin Lee BSc (Hons) MSc MCIEEM

Tamsin holds a BSc (Hons) in Zoology from the University of Bristol and an MSc in Environmental Conservation Management and has experience of a wide variety of ecology surveys. Her fieldwork skills include protected species surveys (reptiles, great crested newts, bats, dormice etc.), reptile translocations, butterfly surveys, phase 1 habitat surveys as well as various studies of terrestrial and marine life outside of the UK. Tamsin is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM), has held a Construction Skills Certification Scheme (CSCS) card and holds survey licenses for bats, barn owls and dormice for work within England. She has been registered with the Bat Conservation Trust (BCT) as a bat carer and is a member of various local wildlife groups.



#### 8. APPENDIX

#### 8.1 Ecology & Legal Protection

#### 8.1.1 Bats

There are seventeen species of bats recorded as resident in the UK (one of these, Alcathoe's bat (*Myotis alcathoe*) has only been discovered as resident in 2010); these species are split into two families, the Rhinolophidae or "horseshoe bats" and the Vespertilionidae or "vesper bats". The greater mouse-eared bat (*Myotis myotis*) was previously thought to be extinct as a UK mammal species until a single individual was discovered in 2002 at a known hibernation site in Sussex, this species is currently regarded by the Bat Conservation Trust as a vagrant/occasional winter visitor. All British bats are insectivorous, feeding on a wide range of invertebrates including gnats, beetles, spiders and moths. Bats have declined in range and numbers in the UK, due primarily to loss of roosts and suitable habitats (JNCC, 2004) as a result of agricultural intensification and development. All British bats use high frequency sound (range 20 - 130 kHz approx.) as a form of echolocation. This allows bats to orientate themselves within their environment, detect and catch prey and communicate with other bats. Healthy bats are solely nocturnal with 'peaks' of activity particularly noted around dusk and dawn during the late spring and summer months.

Bats will utilise a wide variety of structures for the purposes of roosting, including mature trees, caves, mines, buildings (both modern and ancient), bridges and tunnels. They are also commonly known to use purpose-built bat boxes and even empty bird nest boxes. Different types of roost are used by bats at different times of year; the most significant roosts sites are typically maternity and hibernation sites. Maternity roosts, where large numbers of female bats congregate to give birth and rear their young, are typically associated with warm, sheltered conditions. Hibernation sites are characterised by stable temperatures and high humidity. The use of roosts is rather unpredictable (although some species appear to be more 'loyal' to roosts than others), particularly amongst tree-roosting species, but female bats are typically loyal to maternity roosts.



The Conservation of Habitats and Species Regulations 2017 transpose the stipulations of Council Directive 92/43/EEC ("The Habitats Directive") into UK Law. European Protected Species (EPS), which include bats, are listed in Annex IV of the Habitats Directive, and are thus afforded strict protection. Some bat species are regarded as being of higher conservation concern in a European context, and these are listed under Annex II of the Habitats Directive. The habitats of species listed on Annex II may be candidates for the designation of Special Areas of Conservation (SACs). Annex II bat species include the barbastelle, Bechstein's and the two horseshoe bats. It should be noted that there is no longer a defence of harmful actions being "the incidental result of an otherwise lawful operation" for EPS. Specifically, the following actions are prohibited under this legislation:

- deliberate capture, injury or killing;
- deliberate disturbance likely significantly to affect population survival,
   breeding, rearing young, local distribution or abundance;
- damage or destruction of a breeding site or resting place;
- possessing, controlling transporting, selling or exchanging, or offering for sale or exchange, any bat or any part of a bat or anything derived from one.

The Wildlife and Countryside Act 1981 (WCA) provides protection to all British bat species. The WCA has been amended several times but was most recently strengthened by the Countryside and Rights of Way (CRoW) Act 2000, the Natural Environment and Rural Communities (NERC) Act 2006 and by the Conservation of Habitats and Species Regulations 2017 (above). The WCA specifically prohibits intentional or reckless damage of roosts. Sites known to be used by roosting bats are regarded as roosts regardless of whether they contain bats at the time of survey. This is based on the fact that bats will use several different roost sites throughout the year.

The NERC Act consolidates the requirements of the CRoW Act in placing duties upon government agencies, including local authorities, to ensure the conservation of Biodiversity.



#### 8.1.2 Barn Owls

The barn owl is listed under Schedule 1 of the Wildlife and Countryside Act 1981 (WCA), as amended by the Countryside and Rights of Way Act 2000 (CROW). It is therefore a fully and specially protected species of bird, which in addition to the general protection afforded to the majority of British wild birds, is also protected from deliberate or reckless disturbance. Offences relating to Schedule 1 birds like the barn owl are the subject of a special penalty. The barn owl is also afforded protection by the EC Birds Directive and Appendix II of the Bern Convention. They are 'Amber List' species of conservation concern (BoCC Partners, 1996) and are described as 'globally threatened' within the UK Biodiversity Steering Group Report (1995).

Barn owls (*Tyto alba*) are a resident breeding bird in the UK. They preferentially hunt over open habitats, preferably rough grassland, and prey items include a variety of small mammal species such as the field vole. The barn owl has a large home range and is a notably sedentary species. It is common for the home ranges of neighbouring owls to overlap. Barn owls typically use a number of roosting sites within their home range. However, there is normally only a single nesting site for every three - five roost sites. Tall agricultural barns are the most commonly encountered roost site. However rock ledges and hollow trees may also be used for roosting purposes. Nesting sites require a level platform of at least 3 square metres and only rarely less than 2 square metres. The nesting period for barn owls is typically March to August however nesting barn owls have been recorded at every month of the year.

Barn owls have undergone significant population declines due to agricultural intensification, reduction in prey availability and loss of suitable nesting sites due to development. The foraging behaviour and flight pattern of barn owls means that they can be frequent road kill victims, particularly on major infrastructure routes.

#### 8.1.3 Nesting Birds

All wild birds are protected under part 1 of the Wildlife and Countryside Act, 1981. Therefore, in the UK it is an offence to:



- Take, damage or destroy the nest of any wild bird whilst it is being built or in use.
- Kill, injure or take any wild bird
- · Take or destroy the eggs of any wild bird

To avoid committing an offence no works should be carried out on a structure/ feature that is being used by nesting birds. Nesting is deemed to be over when the young have fully fledged.

Certain species, which are listed in Schedule 1 of the Wildlife and Countryside Act, receive special protection. In these cases any form of intentional or reckless disturbance when they are nesting or rearing dependant young, constitutes an offence.



#### 8.2 General Examples of Bat Mitigation Features

#### Bat Box



Schwegler 1FD



Schwegler 1FF



Schwegler 1FS Large Colony Box



Schwegler 1FW Hibernation Box



#### **Bat Access Slate**





#### Suppliers include:

- Summit Slate Supplies
- JD Products

#### **Bat Tube**





2FR Schwegler Bat Tube – designed to be built into walls

#### Suppliers include:

- NHBS
- Ark Wildlife