

**Updating Bat Survey Report for  
Tallet Yard,  
Duntisbourne Leer,  
Cirencester, GL7 7AS**



*NKM Associates*

**14<sup>th</sup> August 2023**

## QUALITY CONTROL

Date	Version	Name
14.8.23	Daytime inspection	Neil Musgrave – BEng (Hons)
18.12.23	Report prepared	Neil Musgrave – BEng (Hons)
18.12.23	Checked	Clare Charlton – BA (Hons), PG Cert
19.12.23	Reviewed and issued	Neil Musgrave – BEng (Hons)

## CONTENTS

	Page No.
<b>SUMMARY .....</b>	<b>4</b>
<b>1. INTRODUCTION .....</b>	<b>6</b>
<b>2. METHODOLOGY .....</b>	<b>7</b>
<b>3. RESULTS.....</b>	<b>9</b>
<b>3.1 DESK STUDY.....</b>	<b>9</b>
<b>3.2 LOCATION.....</b>	<b>9</b>
<b>3.3 SITE DESCRIPTION .....</b>	<b>9</b>
<b>3.4 BUILDING SURVEY .....</b>	<b>10</b>
3.4.1 Bats .....	10
<b>4. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>13</b>
<b>5. REFERENCES .....</b>	<b>14</b>
<b>APPENDICES.....</b>	<b>14</b>
<b>APPENDIX 1: LOCATION PLAN .....</b>	<b>15</b>
<b>APPENDIX 2: SITE LAYOUT.....</b>	<b>16</b>

## SUMMARY

At Tallet Yard in Duntisbourne Leer planning permission is being sought to demolish the existing building and replace with a new dwelling.

A Phase 1 (bat roost inspection) and protected species survey of the building and development plot was undertaken by AD Ecology on 9<sup>th</sup> September 2019.

*They concluded "The building is not used by bats for roosting or as a place of rest (Category 1). Therefore, the demolition/replacement of this building does not require a Natural England licence under the provisions of the Conservation of Habitats and Species Regulations 2017, and furthermore no mitigation for the protection of bats is necessary for this proposed development.*

*There is no evidence of bird nesting within or on the building, but there is potential for birds to nest within larger/denser trees/shrubs that may need to be removed to facilitate works.*

The report also proposed habitat enhancements:

*To provide an enhancement for bats, at least one of the following features should be included in the design of the new building:*

*One bat roosting brick, which is integrated into the fabric of an external wall, installed to provide isolated roosting habitat for crevice-dwelling bat species such as pipistrelle bats. The bat brick should be installed as high above the ground as possible, preferably at the apex of a south, east- or west-facing gable end wall.*

Or

*Two raised ridge tiles to provide isolated roosting opportunities for crevice-dwelling bats, such as pipistrelle. The ridge tiles should be installed leaving a 20mm high slot beneath the south-facing leading edge leading into an enclosed void under the ridge tile.*

*No external lighting must be used adjacent to or shine directly at the bat roost entrance slots. Clear lines of flight to the entrance slot must be maintained at all times.*

\*

In early August 2023 NKM Associates was instructed to undertake an updating Bat survey of the building. On 14<sup>th</sup> August 2023 the updating bat survey was undertaken.

The building was found to be in a similar condition as that found during the initial survey in 2019. No evidence of bat activity was found either in or around the building.

Again, no evidence of bird nesting within or on the building was found, but there is potential for birds to nest within larger/denser trees/shrubs around the building.

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree or shrub removal, or works which affect buildings, should ideally be undertaken outside the period March to August inclusive. If this time frame cannot be avoided, a close inspection of the trees or shrubs to be removed, or buildings affected, will be undertaken prior to clearance.

Work will not be carried out in close proximity to any in-use nest, and a minimum buffer of 5.0 metres will be established, although this could be more depending on the sensitivity of the species.

Any in-use nest will be allowed to fledge before it is disturbed.

## 1. INTRODUCTION

A Phase 1 (bat roost inspection) and protected species survey of the building and development plot was undertaken by AD Ecology on 9<sup>th</sup> September 2019.

No evidence of bat activity was found.

In early August 2023 NKM Associates was instructed to undertake an updating bat survey. On 14<sup>th</sup> August 2023 the updating bat survey was undertaken.

The result of the updating survey is contained in this report.

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW) and the Natural Environment and Rural Communities Act 2006 (NERC), which add an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations (the Habitats Regulations), which defines 'European protected species of animals'. In England this is the Conservation of Habitats and Species Regulations 2010, in Scotland the Habitat Regulations 1994 (as amended), and in Northern Ireland the Conservation Regulations 1995.

All bats are also protected under the Bern Convention Appendix II, the Bonn Convention Appendix II, and the Wild Mammals (Protection) Act 1996.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

*Intentionally or deliberately kill, injure or capture (or take) bats*  
*Deliberately disturb bats (whether in a roost or not)*  
*Recklessly disturb roosting bats or obstruct access to their roosts*  
*Damage or destroy roosts*  
*Possess or transport a bat or any part of a part of a bat, unless acquired legally*  
*Sell (or offer for sale) or exchange bats, or parts of bats*

The word 'roost' is not used in the legislation but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations).

As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

## 2. METHODOLOGY

To fully assess bat occupation of a particular site, the Bat Conservation Trust (2016) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal surveys.

The diurnal walkover provides an opportunity to check for signs of occupancy, such as droppings, scratch marks, feeding remains, carcasses, or even animals in residence, whilst nocturnal surveys (if required) allow numbers and species of bats to be confirmed. The latter are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent, but suitability of roosting is considered to be medium to high.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats *Plecotus auritus*, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus*/*M. brandtii*), and Lesser Horseshoe Bats *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where they butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Diurnal walkovers can be carried out at any time of the year, but nocturnal surveys should only be undertaken when bats are out of hibernation and in their summer roosts. The recommended period is from May to September inclusive, with May to August optimum and September sub-optimum. The season can be extended into October, although particularly cold weather will render this inadvisable. Indeed, the air temperature at the start of each survey must be at least 10°C or above.

Visits will be a minimum of two weeks apart, and the number of surveys is dependent on the evidence found or the suitability of the site to bats.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, the number and timing of visits will be decided by the ecologist and will be appropriate for the type of roost. In general, at least two nocturnal surveys will be carried out, both of which can be emergence surveys, or one emergence and one dawn re-entry.

Where there is no evidence of bat presence, and no suitability for roosting, no nocturnal surveys will be needed.

For a site with no evidence but low suitability, just one nocturnal emergence survey is required, this to be in the optimum period.

For medium suitability a minimum of two visits are needed, of which one must be in the optimum period, and one must be a dawn re-entry survey. With high suitability, three visits will be necessary, of which two must be in the optimum period. At least one of these must be a dawn re-entry survey, with the third visit either an emergence or a dawn re-entry.

For sites < 5 ha in size, and/or regularly shaped structures, at least two surveyors must be present, with more surveyors at larger sites and more complex buildings, e.g. those with multiple elevations and/or roof structures.

On 14<sup>th</sup> August 2023 a thorough inspection of the building was made by Neil Musgrave (Natural England bat licence No. 2020-44602-CLS-CLS), including the exterior and interior walls, roof coverings, eaves, gables, window casements and door frames.

10x42 Opticron binoculars and a Fenix TK75 torch were used for the inaccessible/unreachable areas. On this occasion an endoscope was not used, as there were no crevices and cavities that could not be inspected with a torch or by use of binoculars from a ladder.

The result of the inspection is detailed in Section 3.



### 3. RESULTS

#### 3.1 Desk Study

In view of the proposed works, the likely low impact on bats, and in line with current guidance on accessing and using biodiversity data (CIEEM, 2016), a detailed background data search was not carried out in this case.

However, within 2.0 km of Tallet Yard the following development licences for bats were issued by Natural England:

2011 2.00 km northwest Brown Long-eared bat, Common Pipistrelle *Pipistrellus pipistrellus* and Lesser Horseshoe

#### 3.2 Location

Duntisbourne Leer is village located approximately 15.5 kilometres northwest of Cirencester. Tallet Yard lies to the west of the village, 150 m southwest of the ford to the north of the village. The Ordnance Survey Grid Reference for the site is SO 97399 07553 (Appendix 1).

#### 3.3 Site Description

The survey site comprised a detached pitch roof building (Figs. 1 and 2).



**Figs. 1 & 2 Aspects to the northeast and south**

The building was surrounded by mixed vegetation and mature trees (Figs. 3 and 4).



**Figs. 3 & 4 Views to the west (L) and northeast (R)**

A spring feed stream ran 40 m to the north of the site and a small wood lay directly to the north and northwest of the site.

The layout of the site is shown in the aerial photograph in Appendix 2.

### 3.4 Building Survey

The daytime inspection was carried out on 14<sup>th</sup> August 2023, commencing at 13:00. The weather conditions during the time of the survey were recorded and are presented in Table 1 below.

Parameter	Value
Temperature (°C)	17.0
Cloud cover (%)	100
Precipitation	None
Wind speed (Beaufort scale)	0

**Table 1 Weather conditions during the diurnal survey**

#### 3.4.1 Bats

The ridge was fully intact and sealed, whilst the corrugated roof panels were all tightly fitting with no broken, dislodged or missing (Fig. 5).



**Fig. 5 Ridge and roof panels**

The gables were finished with the roof ends secured to the gable wall plates (Figs. 6 and 7).



**Figs. 6 & 7 Sealed gables**

The eaves were finished with the corrugated panels secured to the wall plates all round (Figs. 8).



**Fig. 8 Secured roof panels to wall plates**

The walls were sound throughout, whilst all the windows casements and door frames were tightly fitting with no crevices or gaps.

No signs of bat activity were found around the outside of the building.

Internally little had changed since the original survey. The building was open to the unlined roof which was cobwebbed on its ridge and at the gable ends (Figs. 9 – 12).



**Figs. 9 & 10 Cobwebbed ridge**



**Figs. 11 & 12 Cobwebbed gables**

A small amount of light penetrated the building through the Perspex roof panels, and no evidence of bat occupation was discovered inside the building.

\*

No birds' nests were found in or on the building or any of the surrounding trees or vegetation.



## 4. CONCLUSIONS AND RECOMMENDATIONS

Bats tend to be seasonal visitors to properties and are not usually in occupation all year round. The females normally form maternity colonies during May or June and then leave for adjacent trees and/or woodland during July or August once the young bats are able to fly and become independent. Here they will spend the winter months in hibernation before returning to the house or barn the following spring.

Male bats generally live alone and have a number of favoured roosts. During the summer they visit each of these for a few days at a time, before moving to their chosen hibernation site in mid-late October.

Different species have different habits, but this seasonal movement is common to all.

Bats choose their roosts carefully. During the summer they look for sites which are warmed by the sun, and as a result are most often found on the south and western side of buildings.

Pipistrelles, our smallest and commonest bats, prefer to roost in very confined spaces around the outside of buildings, typical places being behind hanging tiles, weather boarding, soffit, barge and eave boarding, between roof felt and roof tiles or in cavity walls.

As such they can be difficult to find, so likelihood for roosting was also assessed.

This was considered negligible as there were no suitable external crevices or cavities which were considered suitable for roosting bats.

Another bat frequently encountered in buildings is the Brown Long-eared bat. This is also a common species, but unlike pipistrelles, they prefer the dry, warm space of the loft or roof void, and can often be found hanging from roof timbers, especially rafters and the ridge board next to chimney breasts.

No signs of Brown Long-eared bat activity were found, nor indeed signs of any of the other bat species which regularly use buildings.

\*

Again, no evidence of bird nesting within or on the building was found, but there is potential for birds to nest within larger/denser trees/shrubs around the building.

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree or shrub removal, or works which affect buildings, should ideally be undertaken outside the period March to August inclusive. If this time frame cannot be avoided, a close inspection of the trees or shrubs to be removed, or buildings affected, will be undertaken prior to clearance.

Work will not be carried out in close proximity to any in-use nest, and a minimum buffer of 5.0 metres will be established, although this could be more depending on the sensitivity of the species.

Any in-use nest will be allowed to fledge before it is disturbed.

## 5. REFERENCES

**AD Ecology September 2019.** *Protected Species Survey Final Report.* Tallet Yard, Duntisbourne Leer, Gloucestershire.

**Collins, J. (ed.) (2023).** *Bat Surveys for Professional Ecologists: Good Practice Guidelines.* (4<sup>th</sup> edn). Bat Conservation Trust, London.

**Mitchell-Jones A. J. & McLeish, 2004.** *Bat Workers' Manual.* Joint Nature Conservation Committee, Peterborough.

**Reason, P.F. and Wray, S. (2023).** *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats.* Chartered Institute of Ecology and Environmental Management, Ampfield.

**Stebbing R.E., 1986.** *Which bat is it?* The Mammal Society and The Vincent Wildlife Trust, London.

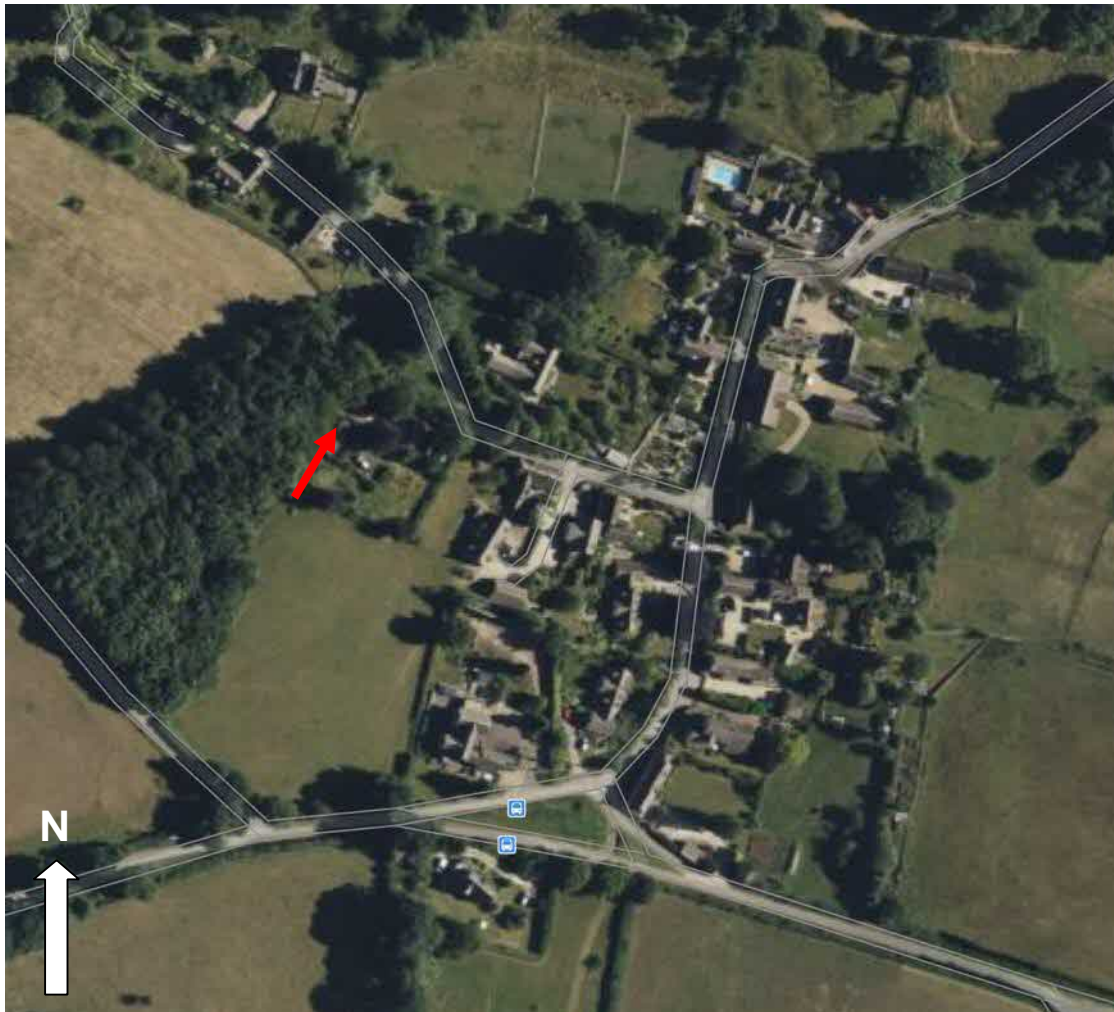
**The Vincent Wildlife Trust, 2003.** *The Bats of Britain and Ireland.* The Vincent Wildlife Trust, Ledbury.

## APPENDICES

Appendix 1: Location plan

Appendix 2: Site layout

### Appendix 1: Location plan



**Tallet Yard, Duntisbourne Leer**

## Appendix 2: Site layout



**Tallet Yard**



*NKM Associates*

Neil K Musgrave B. Eng. (Hons)  
Woodley House, 4 Orchard Close, Mickleton,  
Gloucestershire, GL55 6NU

Tel: [REDACTED]

Tallet Yard, Duntisbourne Leer – Updating Bat Survey Report

Report Number: 40323-01 NKM Assoc

Version: 01

Date: 19<sup>th</sup> December 2023