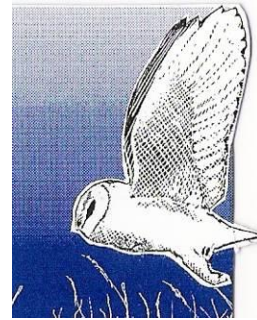


# **Preliminary Bat Roost Assessment**

St Mary the Virgin, Church Green,  
Great Wymondley, SG4 7HA

April 2021



**WILDLIFE  
CONSERVATION  
PARTNERSHIP**

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## **Disclaimer**

This survey was carried out and an assessment was made of the site on 26<sup>th</sup> March 2021. The evidence in this report can be used to draw conclusions as to the likely presence or absence of bats and their resting and breeding status, the impacts of any future repair works and recommends mitigation, when appropriate. The survey should not be regarded as a complete study, rather a snapshot in time. Every effort has been taken to provide an accurate assessment of the situation pertaining to this site at the time of the survey but no liability can be assumed for omissions or changes after the survey has taken place.

## Summary

- 1 A preliminary bat roost assessment at St Mary the Virgin, Church Green, Great Wymondley, Hitchin, was required in advance of proposed renovation works to the floor of the chancel and nave, including work that will cause disturbance in the vicinity of the grating, sub-floor area and underground pipes and cavities associated with the church boiler and heating system.
- 2 The survey was conducted on 26<sup>th</sup> March 2021 by Philip Cannings, an experienced bat surveyor licensed by Natural England.
- 3 The current survey involved a visual and physical survey of features within the church building which offered opportunities to bats for shelter or rest. This survey also sought physical evidence of the presence of bats, typically revealed by droppings, urine stains, and rub-marks at entry and potential entry and exit points.
- 4 The proposed work relates to renovation works to the flooring and sub-floor area in the nave and chancel.
- 5 Advice was requested in relation to future work that is planned to provide a conversion of the north vestry to a small kitchen with attached toilet facility.
- 6 The current survey found evidence for bats (brown long-eared bats *Plecotus auritus*) occasionally foraging and feeding within the open spaces of the nave and chancel, but no concentrations of activity were found and no other evidence was found to indicate the presence of an occupied or regular roost within those areas.
- 7 The evidence consisted of a very small number of bat droppings (2-3 in each case) together with a pair of clipped-off moth or butterfly wings in three locations. This level of evidence does not suggest regular usage.
- 8 No evidence was found for any bat activity in the vestry area.

- 9 No evidence was found in the sub-floor areas to indicate potential use by bats or suitability for hibernating bats.
- 10 Renovation and upgrade work on the church floor, sub-floor area and heating system will have no impact on any bats and will have no impact on those features of the church that are occasionally used by bats for foraging.
- 11 Renovation work to the church floor and sub-floor area will not cause disturbance to any bats and will not reduce or change roosting or hibernating features within that area.
- 12 Conversion of the vestry to a kitchen and toilet facility will have no impact on features of the building being used by bats.
- 13 On the basis of the surveys undertaken the possibility that bats are using the roof tile layer above the vestry cannot be fully ruled out.
- 14 Should the proposed conversion of the vestry involve changes to the stone dividing wall and the arch across the vestry, or to the vestry roof itself then further survey work in the form of an emergence survey is recommended to exclude the possibility that this area is used externally by bats.
- 15 Provided the conversion will leave the existing roof and stone walls undisturbed, for example, by the use of an internally fixed hanging ceiling and simple internal modifications, then no impact will be caused to any bats or bat roosts and no additional surveys will be required.
- 16 The church tower and bell stage were not entered or surveyed during this survey as these areas are isolated from the work site locations and will remain undisturbed and unchanged by the proposed activity.

# **I Introduction**

## **I.1 Background**

I.1.1 A preliminary bat roost assessment at St Mary the Virgin Church was required in advance of renovation works to the nave and floor of the main church.

*Bats are protected under the Wildlife and Countryside Act, 1981 (amended by the Environmental Protection Act, 1990), the Conservation of Habitats and Species Regulations 2010 (through EC Habitats Directive) and the Countryside and Rights of Way Act 2000. The presence of any protected species such as bats is a material consideration when local authorities are considering development proposals. Government policy guidance for biodiversity and nature conservation is provided in National Planning Policy Guidance (NPPF) 2012.*

I.1.2 The survey was conducted on the 26<sup>th</sup> March 2021 by Philip Cannings who holds a Natural England bat roost visitor licence and is a trainer for new licence applicants under the Natural England bat roost monitoring and survey scheme. He has 20 years' experience of roost and hibernacula visits and surveys and of the National Bat Monitoring Programme.

## **I.2 Objectives**

I.2.1 To conduct a survey of those features and areas of St Mary the Virgin Church, that will be impacted on by the proposed work, in order to determine the suitability of these features for use by bats *microchiroptera* and to identify whether any evidence for their presence or absence exists.

- I.2.2 To consider how the proposed works may change the nature of any existing bat roosts and consider the opportunities for future use of the church by bats.
- I.2.3 To evaluate the level of potential disturbance to bats that may result from the works.

### **I.3 Site description**

- I.3.1 St Mary the Virgin Church is an apsed early C12 Norman church with the nave and chancel dating to the Norman period and the church tower being a later 15<sup>th</sup> century addition.
- I.3.1 The Church is Heritage listed, as a Grade I listed building. The listing is dated 27<sup>th</sup> May 1968, and is recorded as being located at OSGB 521475 East, 228530 North.
- I.3.2 The Church was originally recorded as the “Church of St Mary” with the Historic England ID 1102497 (Legacy ID 162757).
- I.3.3 The church is principally built of a mix of stone, flint and rubble, coursed flints and some Roman tiles. Renovation and extension work was undertaken in 1883-4, adding the north vestry and rebuilding the porch with subsequent substantial renovation work in 1977.
- I.3.4 The church layout comprises a plain nave without aisles, an apsidal chancel with a small lean-to vestry on the northern elevation, and a 15<sup>th</sup> century tower. On the southern elevation there is a gabled porch.
- I.3.5 Internally the walls are plaster rendered, without exposed brickwork, and have been limewashed.

- I.3.6 The nave roof comprises sand cast lead sheeting, over wooden beams and sarking, with the tower having a pyramidal tile roof over timber framing. The nave roof consists of a plain ridge beam, a single purlin to each slope, and moulded wall plates and wall posts mounted on stone corbels. There are short king-posts and moulded tie beams. The semi-circular chancel has a tiled roof over a wooden boarded waggon ceiling. There are no loft spaces to either nave or chancel. The nave and tower roofs are crenelated. The chancel roof is plain at the eaves.
- I.3.7 Flooring within the church consists of an encaustic tiled floor, mainly in a chequered pattern in the nave and mosaiced in a carpet pattern around the altar.
- I.3.8 A large, vented opening, covered with a large, perforated, cast iron metal grid, is recessed into the nave floor, covering a large, circa 1m deep, channel containing the heater and pipework associated with the redundant church boiler and heating system.
- I.3.9 The vestry presently consists of two rooms, (the vestry room and a store with an external door) both with plastered walls and a vaulted ceiling with exposed sarking. The roof is tiled, over the sarking, offering little in the way of voids and no loft space.

#### **I.4 Planned work**

The proposed work at the church principally covers the floor areas to the chancel and nave, and work to the heating system and underground pipes.

##### **I.4.1 Chancel and Nave**

Renovation and re-instatement work to the encaustic tiles, flooring and seating areas.

Renovation and repair work to the sub-floor area below the central metal grating and heating system.

#### 1.4.2 **Vestry**

The vestry presently consists of two small rooms divided by a stone wall with an arched door, and proposals are for conversion of these rooms internally to form a small kitchenette area, with a toilet and washroom beyond.

At the time of the survey it was unclear whether this work will involve removal or alteration of the internal stone wall, or modification or changes to the roof itself.

## **2 Methods**

- 2.1 The survey was conducted on Friday 26<sup>th</sup> March. Its purpose was to identify the presence or absence of bats and establish the potential impacts of the proposed building works on any bats which may be occupying those parts of the church where these works were to be undertaken.
- 2.2 The survey involved a visual and physical survey of those features within the church building which were likely to provide opportunities to bats for shelter or rest. This was undertaken using high resolution binoculars and a high-powered hand lamp, thermal camera and endoscope. The survey also sought evidence of the presence of bats, typically revealed by droppings, urine stains, and rub-marks at entry and potential entry and exit points.
- 2.3 Where cavities could not be examined visually, these were inspected with the use of an illuminated endoscope attached to an LCD screen, with photographs taken to allow the nature, extent and contents of any cavity to be examined in detail later where required.



- 2.4 The sub-floor area was examined by lifting the metal grating, entering the void and examining the floor, walls, pipes and metal work and ventilation channels visually and with the torch.

### **3 Results**

#### **3.1 Chancel and Nave**

- 3.1.1 Evidence was found in three locations for use of the open areas of the church by foraging bats.
- 3.1.2 A small number of bat droppings were noted (2 or 3 droppings at each location) in three locations around the nave. These droppings had the characteristic size and shape of droppings from a brown long-eared bat, *Plecotus auritus*, a bat which is a regular forager and feeder of internal areas of suitable buildings.
- 3.1.3 Each area was below a suitable beam for use as a temporary feeding perch, and also contained the clipped-off wings of a butterfly or moth, another characteristic sign of a feeding perch of this species.
- 3.1.4 None of the areas showed any concentration of remains or signs, so indicate occasional foraging as opposed to a regular feeding roost, and none were associated with adjacent roof cavities or voids that might indicate a longer term resting place.
- 3.1.5 The walls within the church are plastered and painted white, which provides an ideal medium to allow detection of bat droppings adhered to walls that have fallen through from roost areas above, and no such areas were located within the chancel, nave or vestry.
- 3.1.6 There was no evidence for the usage of the chancel and nave by any other species of bat, and no indication for any current or historic roost sites in the ceiling or roof layer above the chancel or nave.

3.1.7 The sub-floor area and heating system vents and pipes were accessible and fully inspected. No evidence for the use of this area by bats was found. The area does not provide features that would be suitable for hibernation use by bats.

## **3.2 Vicar's vestry**

3.4.1 The internal areas of the vicar's vestry were fully accessible and fully examined.

3.4.2 The sarking is intact and in good condition with closely fitted joints, and exposed beams in good condition with no joint cavities.

3.4.3 The vestry walls are plastered and painted white and no signs of droppings, urine stains or other signs of bat presence were present.

3.4.4 No evidence for the use of these areas by bats were found.

# **4 Conclusions**

## **4.1 Chapel and Nave**

4.1.1 There is no evidence for the presence of any bats roosts in the areas impacted by the works.

4.1.2 The current low level of foraging activity noted in the church by brown long-eared bats will be unaffected by the works, either in terms of disturbance or long term lost foraging and feeding opportunities.

## **4.2 Vestry**

4.2.1 There is no evidence for the presence of bats or any bat roost in the vestry.

## **5 Recommendations**

- 5.1 The proposed works, once completed will have no impact on any bat roost within the church and will not alter or reduce the available features and opportunities for bats to use the church for roosting, feeding or breeding, nor will there be an impact on the population of bats in the wider area.
- 5.2 The physical works to the nave, chancel and sub-floor areas will not cause disturbance to any bat, or bat roost
- 5.3 There is no ecological constraint to the works proposed to the nave and chancel.
- 5.4 Internal work to the vestry once completed will have no impact on any bat roost within the church and will not alter or reduce the available features and opportunities for bats to use the church for roosting, feeding or breeding, nor will there be an impact on the population of bats in the wider area.
- 5.5 Internal work to the vestry will not cause any disturbance to bats or bat roosts and there is no ecological constraint to this work.
- 5.6 However should work to the vestry involve changes to the stonework or roof structure itself a further ultrasound survey, conducted at a suitable time of year and in suitable weather conditions, would be recommended to be certain bats are not using the tile layer, or closely associated external features that will be affected by the work.

## APPENDIX I

### St Mary the Virgin, Great Wymondley



Figure 1

General external view

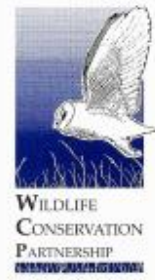


Figure 2

Internal view looking east along nave, showing location of works on nave floor.



Figure 3

Detail of metal grid in centre of nave covering the sub-floor level and features containing the heating system heat exchanger, pipework and vents.



Figure 4

Detail view of waggon style wooden chancel roof ceiling



Figure 5

Detail view of structure and condition of underside of nave roof ceiling.

## St Mary the Virgin, Great Wymondley



Figure 6

External view of south side showing gabled porch.

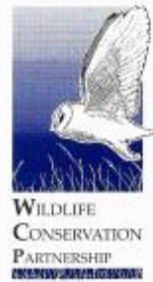


Figure 7

Heat exchanger and pipe work in sub-floor level below grid in nave floor.



Figure 8

Detail of ceiling and ceiling support in sub-floor cavity, showing smooth, rendered surface with no crevices or cavities.



Figure 9

Detail of nave ceiling at chancel arch end showing condition of wood work and 'clean' plaster finish.



Figure 10

External view showing lean to style vestry roof and tile layer.

## APPENDIX II

### Bat Legislation and Planning Guidance

#### **Legislation**

All British bats are protected under Section 9 Schedule 5 of the Wildlife and Countryside Act 1981 and amendments. In addition they are protected under the Berne Convention, they are given migratory species protection within the Bonn Convention Agreement, and are protected under Schedule 2 of the EC Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora (Habitats Directive).

Regulation 39 of the Conservation (Natural Habitats, & C) Regulations 1994 makes it an offence to deliberately capture or kill bats, to deliberately disturb a bat, damage or destroy a breeding site or resting site of any bat. It is also an offence to disturb any bat roosting site.

The presence of bats does not necessarily mean that development cannot go ahead, but that with suitable, approved mitigation, exemptions can be granted from the protection afforded to bats under regulation 39 by means of a licence. The Department for Environment, Food and Rural Affairs (DEFRA) is the appropriate authority for determining licence applications for works associated with developments affecting bats, including demolition of their roost sites. In cases where licences are required, certain conditions have to be met to satisfy DEFRA and Natural England. Before DEFRA can issue a licence to permit otherwise prohibited acts three tests have to be satisfied. These are:

- (i) Regulation 44(2)(e) states that licences may be granted by DEFRA to *'preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.*

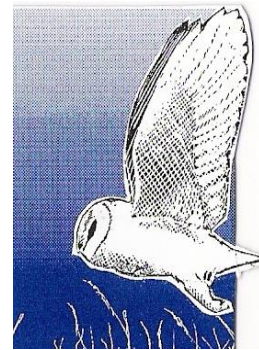
- (ii) Regulation 43(2)(a) states that a licence may not be granted unless DEFRA is satisfied *'that there is no satisfactory alternative'*.
- (iii) Regulation 44(3)(b) states that a licence cannot be issued unless DEFRA is satisfied that the action proposed *'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'*.

### **Planning Guidance**

In order to meet the tests, DEFRA usually expects the planning position to be fully resolved as this is necessary to satisfy tests (i) and (ii). Full planning permission, if applicable, will need to have been granted and any conditions relating to bats fully discharged. For test (iii), DEFRA seek advice from Natural England. As well as consulting with Natural England, DEFRA also seek information from the local authority before they will determine any licence application.

If further advice is required prior to or during development please contact:

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