

**kite ecology**

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## Bat Survey

Land to rear of the Tabernacle Church,  
Pembroke, Pembrokeshire

Pembroke Town Walls Trust

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Final Report

October 2013

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## Appendices

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This report, and the information contained in it, is intended to be valid for a maximum of 12 months from the date of the survey, providing no significant baseline changes have occurred.

Project number	Report number	Revision number	Date of issue
1287	001	Final	231013

## 1 Executive Summary

- 1.1 A bat survey of land to the rear of the Tabernacle Church, Pembroke, Pembrokeshire was commissioned in relation to proposed works to clear vegetation from walls to restore and protect the medieval town walls that surround Pembroke.
- 1.2 A visual inspection of the site was undertaken on the evening 12<sup>th</sup> September 2013 when the walls were assessed for their potential use by roosting bats.
- 1.3 A lesser horseshoe bat was roosting in a cave to the north east of the garden. The dense 'curtain' of ivy at the mouth of the cave is a fundamental part of the roost and as such is protected as part of the bat roost. There are several active badger sett entrances at the entrance to the cave.
- 1.4 **Note to client**  
Bats are roosting in the cave. As such this is classed as a bat roost and no work can be undertaken which will impact on it (including the ivy across the mouth of the cave).
- 1.5 In order to protect the roost (the cave and overhanging ivy), it is recommended that a simple fence be installed in front of the cave. Given the very close proximity of the active badger sett at the cave entrance, it is recommended that the fence be installed and extended to encompass the badger sett. The vegetation between the eastern wall and the new fence should be unmanaged as this will act as a natural screen for between both the bat roost in the cave and the badger sett.

## 2 Introduction and site description

- 2.1 A bat survey of land to the rear of the Tabernacle Church, Pembroke, Pembrokeshire was commissioned in relation to proposed works to clear vegetation from walls to restore and protect the medieval town walls that surround Pembroke. The centre of the site is located at OSGR SM986012.
- 2.2 The survey relates to a patch of land located to the south of the Tabernacle Church. The land included is walled on its southern and western boundary, with natural rock faces forming the northern and eastern boundary. There is a natural cave in the northern corner of the eastern walls, which is almost completely covered by a curtain of ivy (Figure 1). The garden is very overgrown with dense scrubby vegetation including ash *Fraxinus excelsior*, sycamore *Acer pseudoplatanus*, elm *Ulmus* sp., bramble *Rubus fruticosus* and ivy *Hedra helix*.



**Figure 1. 'Curtain' of ivy screening the cave opening.**

- 2.3 This report contains sensitive wildlife information (particularly in relation to badger setts and bat roosts) and should not be placed in the public domain.
- 2.4 Unless the client indicates otherwise, all species records will be submitted to the relevant biological records centre.

### **3 Desk study and survey methodology**

#### **3.1 General**

A walkover survey of the site was undertaken on 12<sup>th</sup> September 2013 when the walls were assessed for their potential use by bats. During this inspection, a cave was discovered in the north eastern corner of the garden. This was also surveyed for its potential use by bats. Badgers were also known to be present within the garden as it had already been surveyed by the local badger group. Any other protected species encountered were also recorded. The weather at the time of the survey was cloudy (100%), with light westerly winds of Force 1/2 and an average temperature of 14°C. All surveys were undertaken by a suitably licensed ecologist who is a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Environmentalist.

### 3.2 Desk study

#### Designated sites

The Natural Resources Wales interactive map website was consulted for any relevant designations within a 5km radius of the site.

### 3.3 On site surveys

#### 3.3.1 Bats

A visual inspection of the walls and cave in the north eastern corner of the site was surveyed for evidence of bats and also assessed for its potential use by roosting bats.

#### 3.3.2 Other species

Incidental records of any other species seen or heard on site during the survey were also recorded.

## 4 Results

### 4.1 General

The area included in the survey is a patch of land to the south of the Tabernacle Church. The rear 'walled garden' is c.15m lower than the church itself on an area known as 'The Commons'. In the past, the land appears to have been tiered for accessibility. There are further, similar gardens immediately to the east and west, with an access road along the southern boundary (Figure 2).



Figure 2. Aerial photograph of the survey area and surrounding habitat.

### 4.2 Desk study

#### 4.2.1 Designated sites

The site is 1km to the south east of the Pembrokeshire Marine Special Area of Conservation and the Milford Haven Waterway Site of Special Scientific Interest. It is also 2.9km to the north west of the Pembrokeshire Coast National Park.

While 5km away from the boundaries of the Pembrokeshire Bat Sites and Bosherton Lakes SAC, lesser horseshoe bats are a mobile feature of this designation and so are included, even when away from the roosts themselves.

#### 4.3 On site surveys

##### 4.3.1 Bats

A single lesser horseshoe bat was observed within the cave in the north eastern corner on the evening of the 12<sup>th</sup> September 2013. The bat was awake, and so no further exploration of the cave was undertaken at this time to minimise disturbance to the bat. During a site meeting on the 4<sup>th</sup> October 2013, a further inspection of the cave was undertaken and a single lesser horseshoe bat was again present within the cave. Given that a bat was present in the cave, no further surveys were considered necessary as they would not have provided any further information on the use of the cave.

In relation to the walls, these were inspected and assessed for their potential use by bats. The bulk of the walls surrounding the Tabernacle Church garden are in relatively good condition. There are no substantial cracks or crevices to be used by bats. There is a covering of ivy over the internal side of the western wall, but this is not considered dense enough to be used by roosting bats. Overall, the walls appear to be of low potential use by bats.

##### 4.3.2 Other species

###### *Badgers*

There is an active outlier badger sett at the entrance to the cave, against the eastern wall. A detailed survey of this sett has been undertaken by a representative of the local badger group.

###### *Birds*

The dense vegetation within the garden is likely to be used by breeding birds at appropriate times of year.

## 5 Limitations to surveys

- 5.1 The results and recommendations of the report are based on findings as they were at the time of the survey. Kite Ecology cannot be held responsible for any base line changes to the site that have occurred since the survey was carried out that may have any effect on the results and recommendations.

## 6 Legislation and planning policy

### 6.1 Designated sites

Special Areas of Conservation and Sites of Special Scientific Interest are strictly protected through both European Directives and UK legislation including the conservation and Habitats and Species Regulations 2010.

## 6.2 **Badgers**

The Protection of Badgers Act 1992 fully protects badgers and their setts and makes it an offence to either intentionally or recklessly kill, injure or take a badger, to cruelly ill-treat a badger or to interfere with a badger sett. Under section 10(1)(d) of the Protection of Badgers Act 1992, Natural Resources Wales has the authority to issue licences to interfere with a badger sett for the purpose of development, as defined by Section 55(1) of the Town and Country Planning Act 1990.

## 6.3 **Bats**

All species of bat and their breeding sites or resting places (roosts) are protected under the Conservation and Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981 (as amended). It is an offence for anyone intentionally to kill, injure or handle a bat, to possess a bat (whether live or dead), disturb a roosting bat, or sell or offer a bat for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not. Licences are available from Natural Resources Wales to allow actions that would otherwise be unlawful.

6.4 **Birds** – all birds, their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act 1981 (as amended).

## 6.5 **Natural Environment and Rural Communities Act 2006**

Section 40 of the NERC Act places a 'Biodiversity Duty' on local planning authorities as far as is consistent with the proper exercise of their functions. This replaces Section 74 of the Countryside and Rights of Way Act.

## 6.3 **Technical Advice Notes 5**

TAN 5 gives advice to local authorities on development control issues for Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and Sites of Special Scientific Interest (SSSIs). It also covers the selection and designation of non-statutory nature conservation sites, such as local nature reserves, and the protection of species, commons and greens.

## 6.4 **Local Development Plan**

Policy GN.37 (Protection and Enhancement of Biodiversity) from the Pembrokeshire Local Development Plan states:

*'All development should demonstrate a positive approach to maintaining and, where ever possible, enhancing biodiversity. Development that would disturb or otherwise harm protected species or their habitats, or the integrity of other habitats, sites or features of*

*importance to wildlife and individual species, will only be permitted in exceptional circumstances where the effects are minimised or mitigated through careful design, work scheduling or other appropriate measures.'*

## **7 Discussion and key recommendations**

### **7.1 Designated sites**

Lesser horseshoe bats are a feature of the Pembrokeshire Bat Sites and Bosherton Lakes SAC. As a mobile feature of this designation, the bats are protected even if not at the roost. In this instance, as the roost is to be protected and incorporated into the scheme, the works is unlikely to have any impact on the designated sites.

### **7.2 Bats**

#### **7.2.1 Note to client**

Bats are roosting in the cave on the north eastern side of the garden. The cave is therefore classed as a bat roost and no work can be undertaken which may impact on it without the relevant licenses from Natural Resources Wales.

#### **7.2.2 Note to client**

In this case, the dense 'curtain' of ivy across the entrance to the cave is a fundamental part of the cave as it is acting as a natural screen, ensuring that the cave remains dark enough for the bats to day roost within in. The ivy is a feature of the roost and as such is protected as part of the roost. It is vital that this vegetation remain in place and be protected both during works and after works are completed.

**7.2.3** An individual lesser horseshoe bat was seen within the cave on two separate occasions suggesting that it is being used as a mating roost by the bats. While only individual bats may be present at one time, mating roosts are vital in the life cycle of bats and are often used by individual males during the autumn breeding season when they will defend the roost against other individual bats. This type of roost would be classed of being medium importance at a local level.

**7.2.4** In order to protect the roost (the cave and overhanging ivy), it is recommended that a simple fence be installed in front of the cave. Given the very close proximity of the active badger sett at the cave entrance, it is recommended that the fence be installed and extended to encompass the badger sett. The vegetation between the eastern wall and the new fence should be unmanaged as this will act as a natural screen for between both the bat roost in the cave and the badger sett.

#### 7.2.5 **Note to client**

There is an amount of debris and rubbish scattered around the cave. To allow its careful removal, the cave must first be checked by a suitably licensed ecologist to ensure that no bats are present within the cave. The debris can then be removed. Given that the bats appear to be using the roost during the active season (particularly autumn), it is recommended that the works to remove the debris inside the cave be undertaken between November and March as this is a time when bats are in hibernation. Given the relatively open nature of the cave (the vegetation across the mouth darkens the cave but does not provide thermal stability) it is unlikely to be used by hibernating bats.

#### 7.2.6 Enhancement

While the walls around the Tabernacle Church garden appear to be of low bat potential, where possible, the renovation works should be used as an opportunity to enhance the site for bats. In this case, small cavities could be created in any newly constructed walls, with small gaps leading into them to allow them to be utilised by bats.

### 7.3 **Badgers**

#### 7.3.1 **Note to client**

Badger advice is being provided by the local badger group. However, the installation of the fence in front of the cave mouth and around the badger sett is likely to require a badger disturbance licence from Natural Resources Wales. Other works which will need consideration is the removal of the vegetation itself. Only hand tools can be used within 10m of a badger sett (much of the garden falls within this boundary) and work is also only permitted between 1<sup>st</sup> May and 30<sup>th</sup> November in any year to avoid the badger breeding season.

#### 7.4 **Birds**

Vegetation clearance should avoid the bird nesting season between March and late August in any year. If this is not possible, then the vegetation should be removed carefully by hand. Should an active nest be discovered during these works, then that patch of vegetation should remain until the young have fledged and the nest is no longer in use.

#### 7.5 **Note to client**

It is understood that the works to re-instate the walls around the garden of the Tabernacle Church is a small part of a wider project to renovate and re-instate the walls around the town of Pembroke. Prior to any works commencing on other walls, it is recommended that full ecological surveys of the walls are commissioned. Ecology is a complex issue and in a project of this type, it is easier to schedule and work around any constraints if ecology is treated as a whole rather than for individual sections.

## 8 Conclusions

Lesser horseshoe bats are roosting in the cave on the north eastern side of the garden. The ivy draped over the entrance to this cave is a fundamental part of the cave as it ensures that the cave remains dark to allow the bats to utilise it. The cave and the ivy covering the entrance are a bat roost so any work which affects the roost or ivy must initially be discussed with Natural Resources Wales to ensure that it will not impact on the roost or its features.

## 9 References

Bat Conservation Trust (2012). Bat Surveys – Good Practise Guidelines. 2<sup>nd</sup> Edition. Bat Conservation Trust, London.

Pembrokeshire County Council (2013) Local Development Plan.

JNCC (1993) Handbook for Phase 1 habitat survey: A technique for environmental audit. Joint Nature Conservancy Committee, Peterborough.

Harris, S and Yalden, D.W. eds (2008). Mammals of the British Isles (4<sup>th</sup> Edition). The Mammal Society.

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

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

Schofield, H.W. (2008). The Lesser Horseshoe Bat Conservation Handbook. The Vincent Wildlife Trust.

Welsh Assembly Government (2009) Technical Advice Note 5, Nature Conservation and Planning.

## APPENDIX 1

### Further information on European Protected Species licences from Natural Resources Wales

The Welsh Ministers, in exercise of the powers conferred under regulation 44(2)(e-g) & 44(3)(a-b) of the Conservation (Natural Habitats &c.) Regulations (as amended), has authority to issue licences for the following purposes:

- Preserving 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;
- Preventing the spread of disease;
- Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other forms of property or to fisheries; to allow people to carry out activities which would otherwise be illegal;

*Provided that:*

- that there is no satisfactory alternative; *and*
- that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

Although the licence is applied for and, if successful, issued in the name of the developer, a suitably experienced and licensed ecologist must assist with the completion of the forms and the design of the accompanying method statement.

It should be noted that Natural Resources Wales licenses are legally binding documents, and the method statement will be attached to any licence issued. It is the responsibility of the licence holder to ensure that the method statement is adhered to.