

Ecological Appraisal and Impact Assessment at  
Bunker's Hill Cottages, Berse Lane,  
Bersham, Wrexham,  
LL14 4HT  
Grid Ref. SJ31154922

On 27<sup>th</sup> January 2021

Report completed 17<sup>th</sup> February 2021  
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Survey by:  
Susan Worsfold BSc (Hons) ACIEEM  
Lyngarth,  
Ellesmere Road,  
St. Martins,  
Oswestry,  
Shropshire  
SY11 3HT

01691 772310  
or 07752 105600  
s.worsfold@hotmail.co.uk

Requested by:  
Blueprint Architectural Services  
Office 3K4,  
Redwither Business Tower,  
Wrexham.  
LL13 9XT  
  
Tel: 01978 356500  
Admin@blueprintarchitectural.com  
www.blueprintarchitectural.com

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## 1. Summary

The purpose of the report is to assess the potential ecological impacts of a proposed development at Berse Lane, Bersham and advise on any mitigation measures to comply with local planning policy and government legislation.

The proposed scheme entails the removal of the remaining sections of walls of the pigsty and cottages and construction of a single replacement dwelling..

The site and adjacent land were examined to establish the presence of or evidence of use by protected species of animals. A visual inspection was carried out to assess the potential or actual use by bats, of the building remains and trees present.

Impacts during the development should be low provided that no bird nests are constructed or occupied while work is taking place. If birds are building nests or any are occupied at any stage of the development work in that area must stop until the young have left the nest. Trees should not be felled between the beginning of March and the end of September to avoid destruction of active nests.

There is not considered to be any threat to the conservation status of bats, however the old willow tree may be suitable for temporary shelter by transient bats. Supervision of ivy removal and felling by a licensed bat worker is necessary in case any bats are discovered, they can then be removed to a safe place or taken into care if injured.

If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.

Since the site may be used by foraging and commuting bats a lighting plan should be designed in accordance with Bat Conservation Trust guidelines:<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

There should not be any significant impact on any protected species or habitat as long as the recommended mitigation and compensation measures are followed.

## **2. Introduction**

Susan Worsfold BSc (Hons) ACIEEM is an experienced wildlife surveyor, licensed bat worker and voluntary bat roost visitor. Registration number CLS0895 2015-12555-CLS-CLS (CL15 Bat Roost Visitor Level 1) and registration number CLS 0895 2015-12556-CLS-CLS (CL18 Bat Survey Level 2 ) (Natural England) and S086005/1 (Natural Resources Wales);

Licensed great crested newt worker, registration number 2016-19947-CLS-CLS (NE) and S086057/1 (NRW)

This report was commissioned by Blueprint Architectural Services for the client.

The site, at Berse Lane, Bersham, Wrexham, is a 0.1 ha area of land including the remains of a row of former cottages and pigsty.

The proposed scheme involves renovation of the former building and conversion to dwellings.

The purpose of the report is to identify and address any significant ecological effects which are likely to occur as a result of the proposed development. This is necessary to comply with local planning policy and government legislation and avoid any offence being committed. Also, to describe any compensation, mitigation and enhancement measures which should be taken.

## **3. Methodology**

### **3.1. Scope of the Assessment**

The report incorporates a preliminary bat roost and nesting bird assessment, while also searching for use or potential use by any rare, threatened, endemic and non-native invasive species which might be associated with such a site in accordance with:

The Conservation of Habitats and Species Regulations 2017 and listed in:

Schedule 2. European protected species of animals

Schedule 5. European protected species of plants

The protection of Badgers Act 1992

Protected species which might be associated with such a site include bats, owls and other breeding birds.

The area around the site might be used by badgers, dormice, amphibians and reptiles, and might contain protected plant species.

### **3.2. Desk Study**

Wrexham Planning Portal was consulted for a review of previous ecological surveys carried out in the area. No protected species were identified nearby. Magic Maps was consulted for the presence of designated sites and protected habitats. A data search for protected species within 1 km was commissioned from Cofnod and the results are summarised in the appendices. Several species of bat and also hedgehogs have been recorded within a few hundred metres of the site.

### **3.3. Field Survey**

The site was examined to establish the presence of any protected species or habitats, and for evidence of use by protected species of animals. Trees were assessed for suitability for use by bats. The site and surrounding habitat was examined for signs of use by other protected species. Maps of the site and surrounding environment were examined to identify any nearby waterbodies suitable for use by great crested newts within an influencing distance of the site. The variety of plant species was mapped according to the convention of Phase 1 habitat surveys as described by the JNCC (2010). Photographs were taken of all relevant areas.

The visual assessment of the site was carried out in accordance with CIEEM guidelines (CIEEM 2017) on 27<sup>th</sup> January 2021 by Susan Worsfold BSc (Hons) ACIEEM.

## **4. Baseline Ecological Conditions/Results**

### **4.1 Designated Sites**

The nearest designated site is Johnstown Newt Sites (SSSI and SAC) 1.9 km south.

### **4.2 Habitats**

Site: Semi rural, on the outskirts of the nearest town of Wrexham. The approximate area of the site is 0.1 ha. There were no hedgerows, the boundaries comprising wood fence apart from the south boundary which was formed by semi mature hawthorn and hazel. There were some young oak at the southern end and also a mature sycamore at the south east corner. These are to remain, as well as the strip of coppice adjacent to the road at the southern boundary, dominated by hawthorn, hazel, ash and sycamore.

Adjacent land: There is a road adjacent, to the south. There is one pond within 500 m, this is 150 m south west. It was not accessible at the time of the survey. The river Clywedog is 100 m south. There are several small areas of woodland within 500 m. There is a good network of hedgerows surrounding the site.

### **4.3 Species and Species Groups**

#### *Plants*

The only ground flora vegetation to be affected is sparse, short, ruderal vegetation, mainly in the northern section. The ground was mostly bare soil and rubble, with some ivy (*Hedera helix*), snowdrops (*Galanthus* sp.), mosses, bramble (*Rubus fruticosus*), nettle (*Urtica dioica*) and garlic mustard (*Alliaria petiolata*)

#### *Amphibians and Reptiles*

None seen during the survey. There was one pond apparent on maps within 500 m, which was 150 m from the site.

#### *Birds*

There were trees on site which were suitable for use by nesting birds. A house sparrow (*Passer domesticus*) and blackbird (*Turdus merulus*) were seen foraging at the edges of the site.

#### *Bats*

There was considered to be no potential for use of the building remains by bats. The site is suitable for use by foraging and commuting bats. No evidence of use of the trees as roosts or resting place by bats was found but this would be almost impossible to tell without the use of an endoscope. The old willow tree shown in the survey diagram may have had potential roost features obscured by ivy, which could itself be used by bats.

#### *Badgers*

There were no badger setts, tracks or latrines found on the site or within 30 m of the site.

#### *Dormice*

No hazelnuts were found which indicated gnawing by dormice and the site was not favourable for use by them.

## 5. Description of the Development

The proposed scheme involves removal of the remaining sections of walls of the pigsty and cottages and construction of a single replacement dwelling. Access will be to the north west and will involve removal of the old willow tree, another small tree and vegetation in that area.

## 6. Assessment of Effects and Mitigation Measures

### Designated Sites:

It is not considered that the development will have any significant impact on the Johnstown Newt Sites due to the small scale of the development and distance from the site. No great crested newt records have been identified within 1 km of the site.

### Habitats:

No priority habitat is affected by the proposal and no net loss of potential roosting or nesting sites should occur if compensation and enhancements are provided.

### Species:

#### *Birds*

The impacts which the proposed work might have on birds should be small, providing that no nests are occupied or being built at the time the work is done. If birds should gain access to the building and begin building nests during the work, then the work in that area must stop until the young have left the nests. Trees should not be felled between the beginning of March and the end of September to avoid destruction of active nests.

#### *Bats*

There is not considered to be any threat to the conservation status of bats, however the old willow tree may be suitable for temporary shelter by transient bats. Supervision of ivy removal and felling by a licensed bat worker is necessary in case any bats are discovered, they can then be removed to a safe place or taken into care if injured.

If bats are found at any stage of the development then work in that area must stop and a licensed bat worker contacted for advice.

Since the site may be used by foraging and commuting bats a lighting plan should be designed in accordance with the Bat Conservation Trust guidelines: <https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

#### *Reptiles and amphibians*

It is considered highly unlikely that the development would harm any individual GCN, or affect their conservation status.

#### *Residual Effects*

No significant residual effects anticipated.

## **7. Compensation**

Two trees should be planted to replace those to be felled to allow for access. The following trees are not too big and would be attractive to birds and insects and also to humans: bird cherry (*Prunus padus*), wild cherry (*Prunus avium*), crab apple (*Malus sylvestris*), rowan (*Sorbus aucuparia*), hazel (*Corylus avellana*) and hawthorn (*Crataegus monogyna*).

A bat box e.g. Schwegler 1FF to be fitted externally to the building. Further information is given in the bat box information pack available at <http://www.bats.org.uk/index.php>.

Bat boxes should be placed in a south east to south west facing position if possible.

One woodcrete nest suitable for small birds such as robin, blackbird, tit species and sparrow to be incorporated into the building. To be placed in a north to north east position if possible.

House Sparrow Terrace - Wooden (or woodcrete) nest box with 3 sub-divisions to support 3 nesting pairs. To be placed under the eaves of buildings or incorporated into walls. Entrance holes: 32mm diameter. Dimensions: H310 x W370 x D185mm. Also suitable for tits, redstarts and spotted flycatchers. Place at least 2 m from the ground.

## **8. Enhancement Recommendations**

A small wildflower area is recommended, to be planted with a variety of native flowering species.

## **9. Ecological Constraints**

Surveys of this type should ideally be carried out during the spring, summer or autumn to give the best chance of identifying all species present on site. However, it appeared clear that no significant vegetation, places of shelter or habitat would be affected and no animals should be harmed if all mitigation measures are taken.

## **10. Monitoring**

None considered appropriate.

## **11. Conclusions**

If the recommended mitigation, compensation and enhancement measures are taken the overall ecological impacts of the proposed development will be low due to its small scale and lack of evidence of any rare or threatened species or priority habitat.

## 12. Bibliography

Bat Conservation Trust available at: <http://www.bats.org.uk>

BCT and ILP Guidance Note 8 Bats and Artificial Lighting available at:  
<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/>

Collins J. (Ed) (2016) *Bat surveys for professional ecologists: Good Practice Guidelines (3rd Edn)*. The Bat Conservation Trust, London

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora available at: [jncc.defra.gov.uk](http://jncc.defra.gov.uk)

Google Maps available at: <https://maps.google.com/maps>

Magic Maps available at: <http://magic.defra.gov.uk>

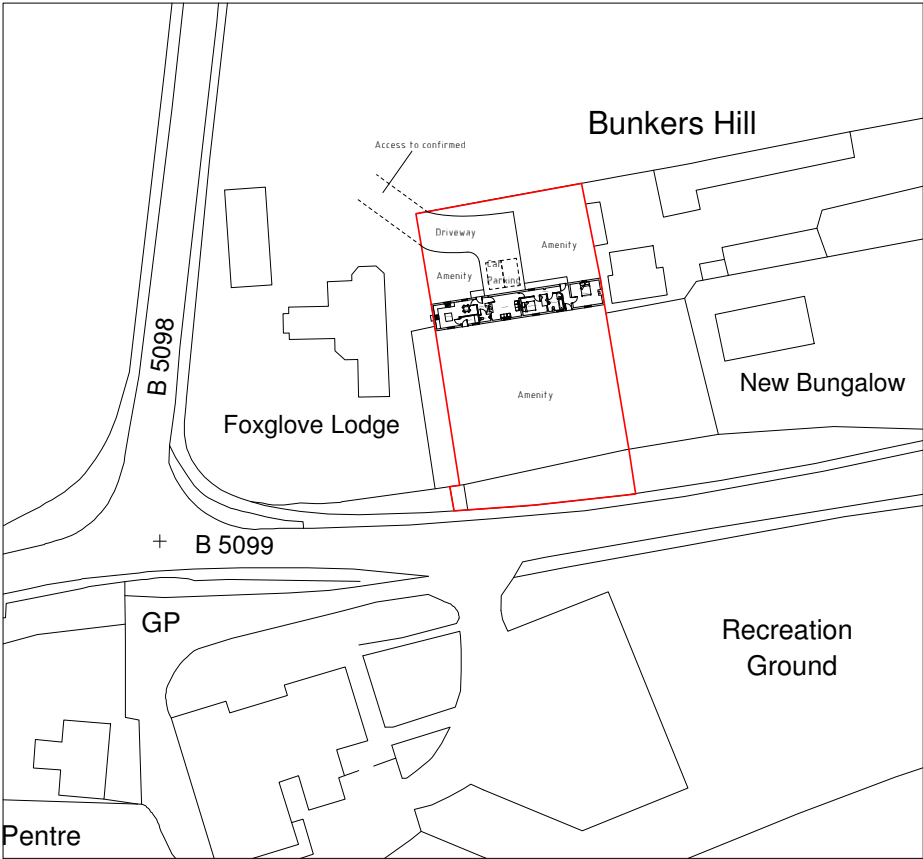
Natural Resources Wales available at: <https://naturalresources.wales/?lang=en>

UK BAP Priority Habitats available at: [jncc.defra.gov.uk](http://jncc.defra.gov.uk)

Wildlife and Habitat Conservation available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

Wrexham Council Planning Portal available at:  
<http://planning.wrexham.gov.uk/Planning/lg/GFPlanningSearch.page>

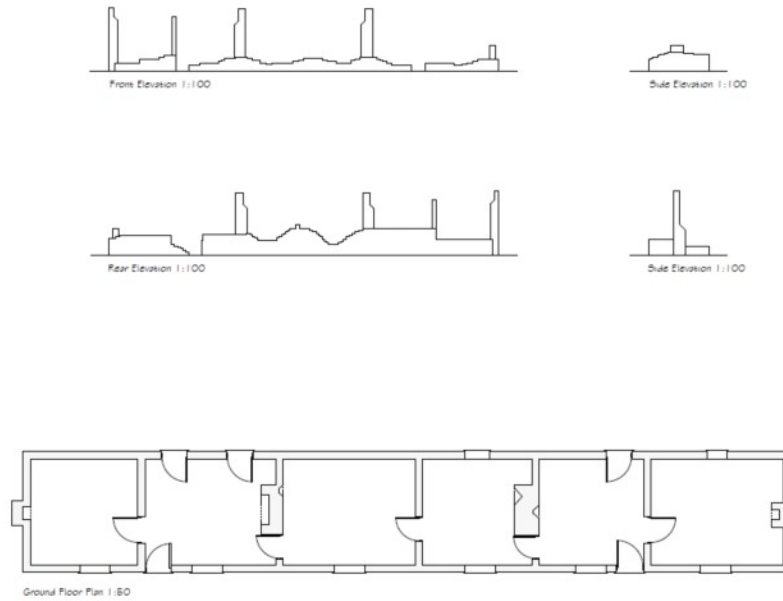
Appendix 13.1: Proposed Site Plan



Site Plan 1:500

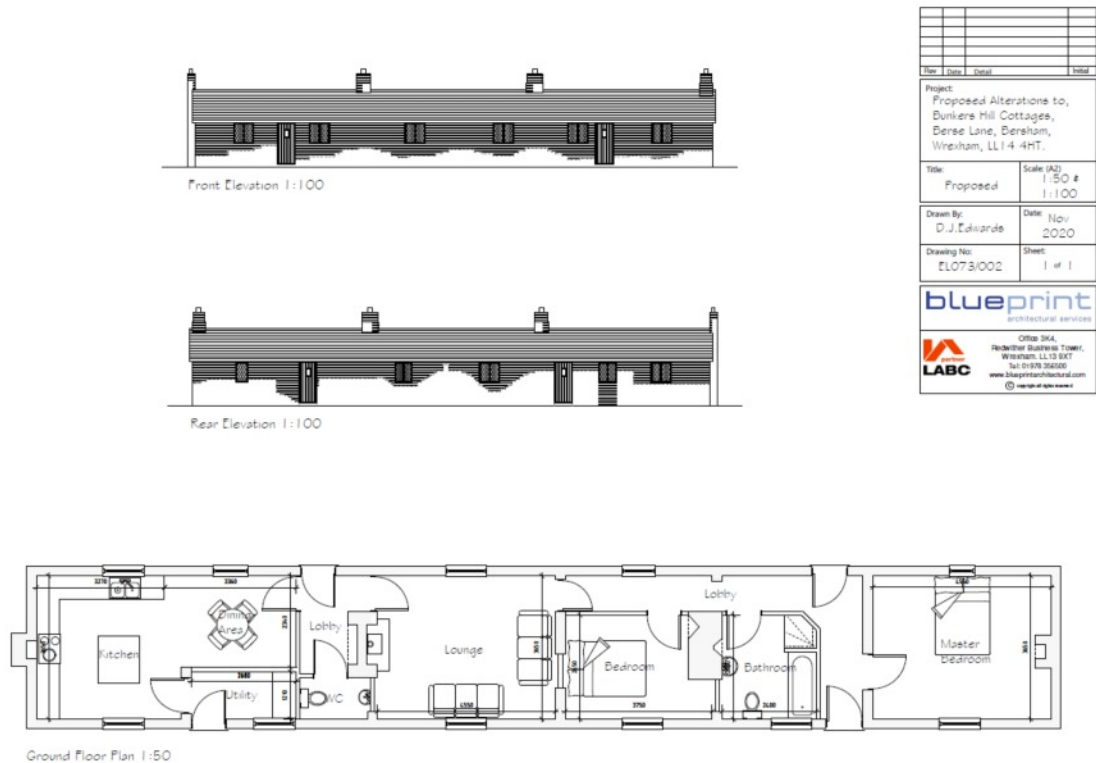
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| Rev                                                                                                                                                                                                                                                                                                                                      | Date | Detail               | Initial |
| Project:<br>Proposed Alterations to,<br>Bunkers Hill Cottages,<br>Berse Lane, Bersham,<br>Wrexham, LL14 4HT.                                                                                                                                                                                                                             |      |                      |         |
| Title:<br>Site Plan                                                                                                                                                                                                                                                                                                                      |      | Scale: (A3)<br>1:500 |         |
| Drawn By:<br>D.J.Edwards                                                                                                                                                                                                                                                                                                                 |      | Date: Nov<br>2020    |         |
| Drawing No:<br>ELO73/003                                                                                                                                                                                                                                                                                                                 |      | Sheet:<br>  of       |         |
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## Appendix 13.1: Plans as Existing



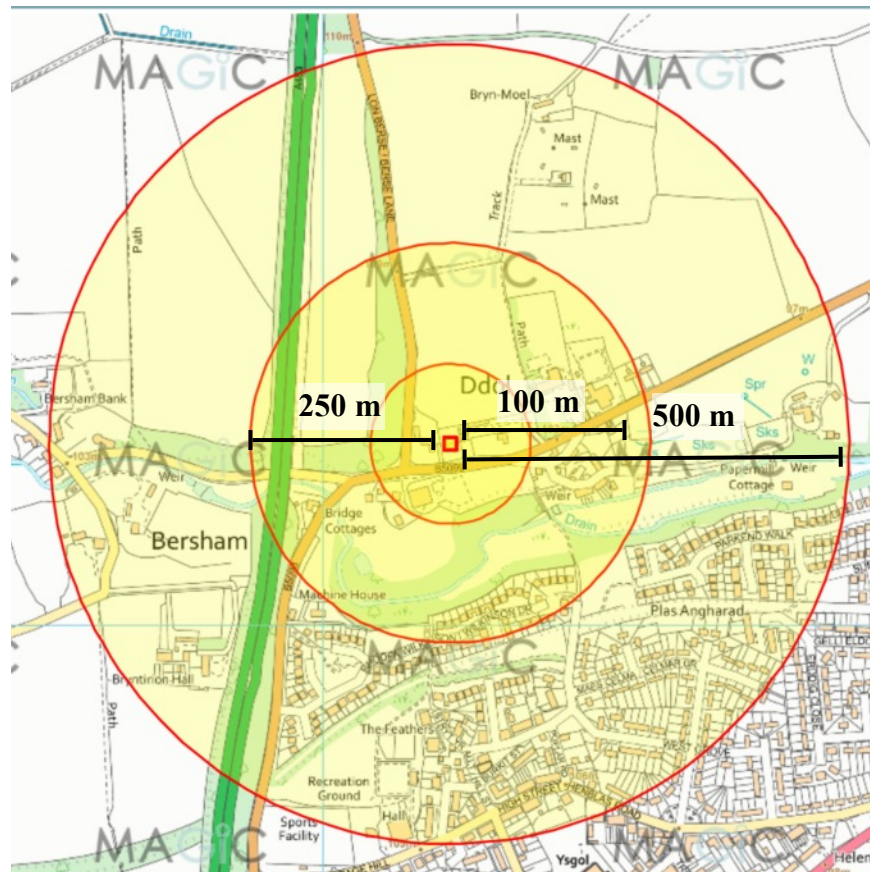
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| No.                                                                                                                                                                                                                                        | Date | Issue                          | By |  |
| Project:<br>Proposed Alterations to,<br>Fongine Lodge,<br>Berse Lane, Bersham,<br>Wrexham, LL14 4HT.                                                                                                                                       |      |                                |    |  |
| Title:<br>Existing                                                                                                                                                                                                                         |      | Scale (A3):<br>1:50 &<br>1:100 |    |  |
| Drawn By:<br>E.M. Jackson                                                                                                                                                                                                                  |      | Date:<br>Nov<br>2020           |    |  |
| Drawing No:<br>EL078/001                                                                                                                                                                                                                   |      | Sheet:<br>1 of 1               |    |  |
|                                                                                                                                                         |      |                                |    |  |
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## Appendix 13.1: Plans as Proposed



| No.                                                                                                                                                                                                                                                        | Date                           | Issue | By  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------|-----|
| 1                                                                                                                                                                                                                                                          | 10/11/20                       | Issue | LMC |
| Project:<br>Proposed Alterations to,<br>Dunkine Hill Cottages,<br>Berse Lane, Bersham,<br>Wrexham, LL14 4HT.                                                                                                                                               |                                |       |     |
| Title:<br>Proposed                                                                                                                                                                                                                                         | Scale (A3):<br>1:50 &<br>1:100 |       |     |
| Drawn By:<br>D.J. Edwards                                                                                                                                                                                                                                  | Date:<br>Nov<br>2020           |       |     |
| Drawing No:<br>EL078/002                                                                                                                                                                                                                                   | Sheet:<br>1 of 1               |       |     |
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## Appendix 13.2: Location Map, Designated Sites and Zones of Influence



### Appendix 13.3: Aerial Photograph



## Appendix 13.4: Photographs of the Site



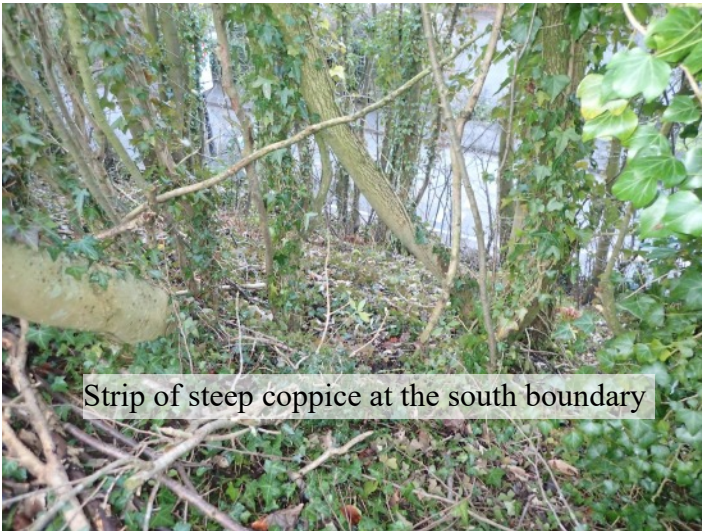
## Appendix 13.4: Photographs of the Site



South section from the north east



North section from the south east

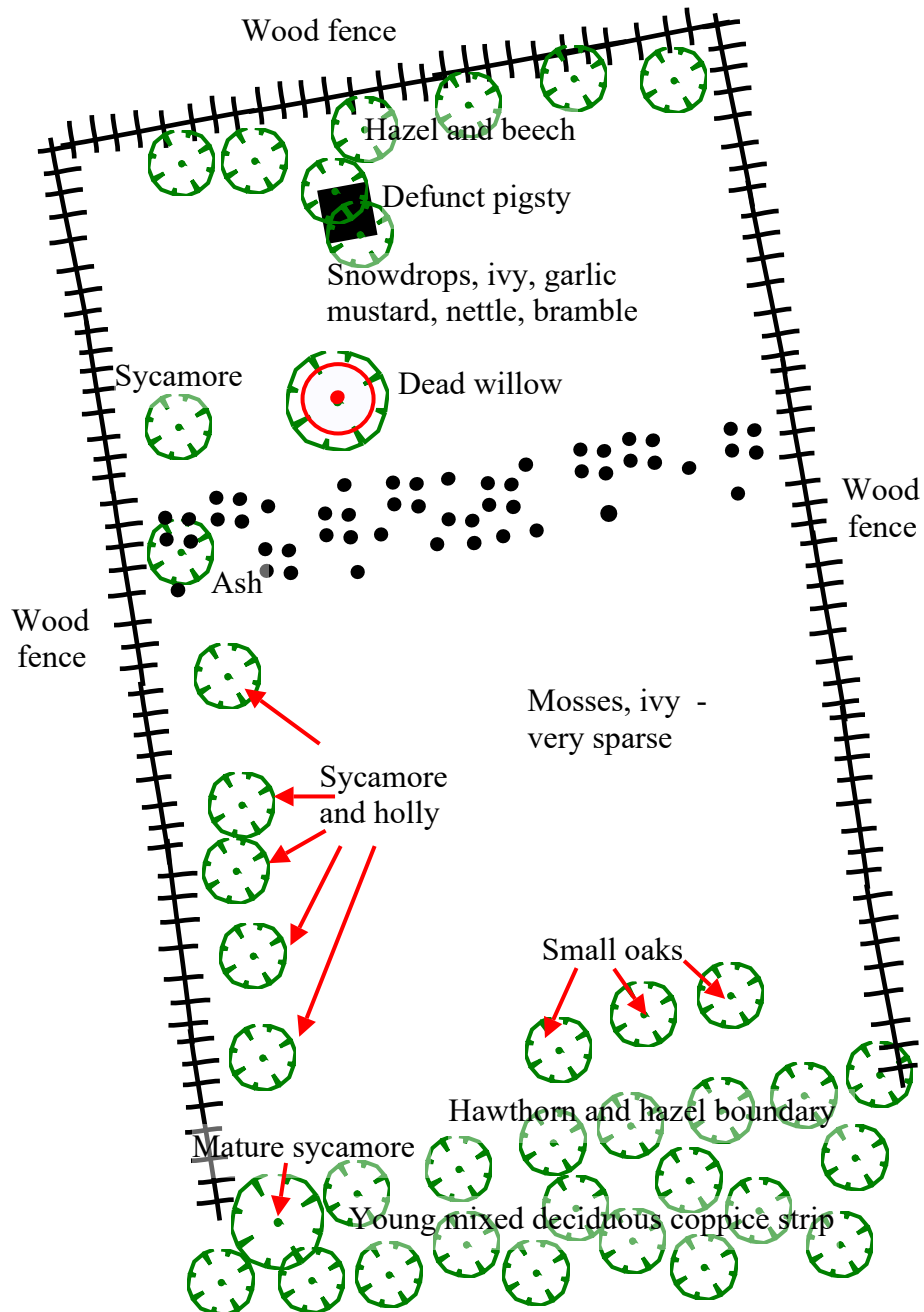


Strip of steep coppice at the south boundary



South boundary

## Appendix 13.5: Survey Diagram





## **Appendix 13.7: Legislation Relating to Birds**

All wild birds, their nests and eggs are protected. It is an offence to intentionally:

kill, injure or take any wild bird,  
take, damage or destroy the nest of a Golden Eagle, White-tailed Eagle or Osprey (even if disused),  
take, damage or destroy the nest of any wild bird whilst it is in use or being built,  
take, damage or destroy an egg or any wild bird,  
possess any live or dead wild bird or the egg of any wild bird, or any derivative  
Many rare birds are listed on Schedule 1, which makes it an offence to intentionally or recklessly:

disturb a Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; or  
disturb dependent young of such a bird

Natural Resources Wales (NRW) issues licences for specific purposes, so that you can undertake legitimate work without breaking the law. See 'Bird licensing' for more information.

## **Appendix 13.8: Legislation Relating to Bats**

All species of bats in the UK are European Protected Species (EPS). It is against the law to damage or destroy a bat's breeding site or resting place (known as a roost), or deliberately to capture, kill, injure or disturb a bat

Bats are the only mammals which can fly. They are warm blooded, they suckle their babies and are intelligent, social animals. British bats feed only on insects, of which they consume vast numbers to sustain their energetic lifestyles. A pipistrelle bat can eat up to 3000 midges in a single night!

We have 12 species of bat breeding in Wales. Many of these have suffered severe declines, not just in Britain but throughout Europe.

All British bat species are protected under the Conservation of Habitats and Species Regulations 2017, known as the 'Habitats Regulations'. Bats have a unique relationship with humans, sometimes sharing our homes for part of the year. For this reason, Natural Resources Wales (NRW) deals with many hundreds of bat enquiries each year from householders.

Under the Habitats Regulations, it is an offence if you:

deliberately capture, injure or kill any wild animal of an EPS  
deliberately disturb wild animals of any such species  
damage or destroy a breeding site or resting place of such an animal  
Disturbance includes, but is not limited to, any disturbance which is likely:

1. to impair their ability –  
to survive, to breed or reproduce, or to rear or nurture their young, or  
in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
2. to affect significantly the local distribution or abundance of the species to which they belong.

Defra and the Welsh Government will publish a joint guidance document on the interpretation of the offences relating to disturbance, and to damage and destruction of breeding sites and resting places.

There are other offences relating to possession, transport and sale.

NRW issues licences under Regulation 55 of the Habitats Regulations to allow you to work within the law.

If you are a householder and have concerns about bats at your property (other than queries related to planning applications or a development), contact the NRW Enquiry Line for advice, telephone 0300 065 3000