# $\sqrt{\text { All Ecology }}$ 

Upton Gardens, Whitminster, GL2 7LP

## Walkover Survey



February 2021

All Ecology Ltd

Tel: 01453393001
Email: info@allecology.co.uk
Web: www.allecology.co.uk

## Document Control

Site: Upton Gardens, Whitminster, GL2 7LP

Title: Walkover Survey

For: Newland Homes

Project Number: 20215
Document Version: 1.0

Survey Date(s): 22 ${ }^{\text {nd }}$ October 2020

Document Date: 11 ${ }^{\text {th }}$ February 2021

| Version | Date | Version Details | Prepared by | Reviewed by | Approved by |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.0 | $11 / 02 / 21$ | - | JG | VP | JG |
|  |  |  |  |  |  |

England and Wales Office
All Ecology Ltd, Haw Street,

Coaley,
Dursley,
Gloucestershire, GL11 5AY.

## Scotland Office

All Ecology Ltd, Bowfield Road,
Howwood,
Renfrewshire, PA9 1BZ.

Tel: 01453393001
Email: info@allecology.co.uk
Web: www.allecology.co.uk
All Ecology is the trading name of All Ecology Ltd. Registered in England and Wales, Company
Number 8306310

## Notice to Readers:

The results of the survey and assessment work undertaken by All Ecology are representative at the time of surveying.

Every endeavour has been made to identify the presence of protected species on site, where this falls within the agreed scope of works.

The flora and fauna detailed within this report are those noted during the field survey and from anecdotal evidence. It should not be viewed as a complete list of flora and fauna species that may frequent or exist on site at other times of the year

Up to date standard methodologies have been used, which are accepted by Natural England and other statutory conservation bodies. No responsibility will be accepted where these methodologies fail to identify all species on-site.

All Ecology cannot take responsibility where Government, national bodies or industry subsequently modify standards.

All Ecology cannot accept responsibility for data collected from third parties.

Reference to sections or particular paragraphs of this document taken out of context may lead to misrepresentation.

## Contents

Contents ..... 1
1.0 Introduction ..... 2
Background ..... 2
Objectives and Aim ..... 2
Site Location ..... 3
2.0 Methodology ..... 4
Personnel ..... 4
Habitat Survey ..... 4
Fauna ..... 4
Valuation of Ecological Features ..... 4
Nomenclature ..... 5
Limitations ..... 5
3.0 Results ..... 6
Habitats ..... 6
Fauna ..... 10
4.0 Impacts and Recommendations ..... 13
Impacts ..... 13
Habitats ..... 13
Protected and Notable Species ..... 13
5.0 References ..... 17

### 1.0 Introduction

## Background

1.1 In October 2020, All Ecology was commissioned to undertake a Walkover Survey of site known as Upton Gardens, Whitminster, GL2 7LP. The site is an area of grassland with fringes of scrub and a narrow strip of woodland along the northwest edge of the site beyond which is a cricket pitch. The southwest boundary is formed by a hedge, the southeast and northeast boundaries are formed by fences shared with adjacent gardens.
1.2 The site is the subject of a planning application for a new housing development of 12 dwellings. The woodland would be retained and the existing access used. Open space and an attenuation pond would be created in the southwest portion of the site.
1.3 Previous ecological studies have been undertaken on site. The following surveys were carried out by Five Valleys Ecology in 2016:

- Ecological Appraisal - This identified woodland and trees as being the habitats of most value on site and the potential for protected and notable species of fauna.
- Bat Activity Survey - No roosts or obvious commuting routes across the site were noted during the surveys, although the highest activity levels were generally recorded along the southern boundary of the woodland and the western boundary of the site. Some rarer bat species, specifically Lesser Horseshoe, which are particularly sensitive to light, were active on site, however, overall activity levels for this species were low. The site would not be expected to be a particularly significant foraging resource for bats given the type and extent of the habitats present.
- Great Crested Newt - Four ponds in the surrounding area all returned negative eDNA results and it was concluded that Great Crested Newts are absent from these and therefore the site.
- Reptile Survey - No reptiles were recorded and it was concluded that reptiles are absent from the site.


## Objectives and Aim

1.4 The main objectives and aim of the survey were to carry out an update and identify features of ecological interest, undertake a basic search of habitats present for evidence of use, or potential use, by protected species, and to identify any other possible ecological constraints to the latest proposed development.

## Site Location



Figure 1: Site location plan.


Figure 2: Aerial photograph.

### 2.0 Methodology

## Personnel

2.1 The survey was carried out by James Godbeer BSc Hons MCIEEM, an ecologist with over 13 years' experience working as a consultant. James has extensive experience of managing environmental contracts, and particular experience in surveying, assessment and mitigation for rare and protected species. He has considerable knowledge of the development and planning process including Ecological Impact Assessments, sustainable ecological design and he has completed ecology chapters of Environmental Statements. James holds a number of protected species licences including bats (all species, all counties, Class Licence Registration No. 2015-12313-CLS-CLS), and Great Crested Newts (Class Licence Registration No. 2016-20363-CLS-CLS). He has successfully obtained European Protected Species mitigation licences for a number of bat species including Lesser Horseshoe, Greater Horseshoe, Serotine, Brown Long-eared, Common Pipistrelle and Natterer's bats, for a number of roost types including maternity and hibernation sites

## Habitat Survey

2.2 The site was visited on the $22^{\text {nd }}$ October 2020 and surveyed in accordance with the Joint Nature Conservation Committee (JNCC) Phase I Habitat Survey methodology (JNCC, 2010). This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential that might warrant further study.

## Fauna

2.3 Trees on site were assessed for their potential to support bat roosts by visually inspecting them from the ground using binoculars and high-powered torches where appropriate. Potential roosting features such as gaps, holes, enclosed roof voids, holes, cavities or splits were recorded and then inspected where possible for signs of bats, which including grease/urine stains, scratch marks, droppings or the bats themselves.
2.4 The site and surroundings, for a minimum distance of 30 m where access was available, were searched for signs of Badgers. These include setts, latrines, dung pits, snuffle marks or hairs caught in hedges or on fencing.
2.5 Incidental observations of invertebrates and birds were recorded and a search made for any signs of previous nesting.
2.6 Any refuges on site such as logs or other debris were lifted and inspected for reptiles and amphibians.

## Valuation of Ecological Features

2.7 The valuation process used in this report follows the Guidelines for Ecological Impact Assessment in the UK and Ireland from the Chartered Institute of Ecology and Environmental Management (CIEEM, 2018).
2.8 The value of areas of habitat and plant communities has been measured against published criteria where available. Biodiversity Action Plans (BAPs) have been searched to identify whether action has been taken to protect all areas of a particular habitat and to identify current factors causing loss and decline of particular habitats. The presence of injurious and legally controlled weeds has also been taken into account.
2.9 When assigning a level of value to a species, its distribution and status (including a consideration of trends based on available historic records) has been taken into account. Other factors influencing the value of a species are: legal protection, rarity and Species Action Plans (SAPs). Guidance, where it is available, for the identification of populations of sufficient size for them to be considered of national or international importance has also been taken into account.

## Nomenclature

2.10 The English name only of flora and fauna species is given in the main text of this report; however, scientific names are used for invertebrates where no English name is available. Vascular plants and charophytes follow the nomenclature of The Botanical Society for the British Isles (BSBI) 2007 database (BSBI, 2007) with all other flora and fauna following the Nameserver facility of the National Biodiversity Network Species Dictionary (http://www.nhm.ac.uk/nbn/), which is managed by the Natural History Museum.

## Limitations

2.11 The site was fully accessible with no limitations to undertaking the survey in accordance to the stated methodology.

### 3.0 Results

## Habitats

3.1 The following habitats or vegetation types were identified during the course of the habitat survey:

- Poor semi-improved grassland
- Dense/scattered scrub/tall ruderal
- Scattered trees
- Semi-natural broadleaved woodland
- Arable
- Defunct species-poor hedge and trees
- Fence

Poor semi-improved grassland
3.2 The grassland was classified as poor semi-improved grassland. This was in its winter condition and had been mown relatively recently. It appeared to be co-dominated by False Oat-grass and Yorkshire-fog with abundant Fescue sp., and frequent Creeping Buttercup, Ground-ivy, Cleavers, Sorrel and Cock's-foot. There was also occasional Cow Parsley, Creeping Thistle, Creeping Cinquefoil, Yarrow and Red Clover.

Dense/scattered scrub/tall ruderal
3.3 Fringes of dense and scattered scrub were present around the peripheries of the grassland and this included recently cleared stands of Bramble and Cherry Laurel with some remnant areas and rare Butterfly-bush. Areas of Common Nettle were mixed with the scrub and Pendulous Sedge, Creeping Buttercup and Lesser Trefoil were also recorded here.

Scattered trees
3.4 Standard trees of Ash, Sycamore, Poplar sp., Prunus sp., Weeping Willow, and Goat Willow were present along the southeast and northeast boundaries. A small Ash and two Hawthorn shrubs were present in the southwest portion of the grassland.

Semi-natural broadleaved woodland
3.5 Woodland was present in a narrow band along the northwest boundary of the site. The canopy was formed by a mix of Horse-chestnut, Ash, English Elm, Wych Elm, Poplar sp., and Sycamore. The understorey was patchy and mainly present along the southeast edge of the woodland and extending out into the grassland forming a woodland fringe. This was formed by a mix of English Elm, Bramble, Dog-rose, Hedge Bindweed, Holly, Ash and Hawthorn. Detectable ground flora present at the time of the survey was mainly lvy with Cow Parsley and Common Nettle also recorded.

## Arable

3.6 Vegetable plots were present along the part of the southwest boundary, created by one or of the neighbouring properties.

Defunct species-poor hedge and trees
3.7 The southwest boundary of the site was formed by a defunct species-poor hedge and trees. This was formed by mainly Blackthorn and Hawthorn with Bramble growing through the hedge and trees of Ash and English Elm. Cow Parsley and Hedge Bindweed were also present.

## Fence

3.8 A post and rail fence was present along the northwest boundary of the site. Timber featherboard fencing formed the northeast and part of the southeast boundary with the remainder of this boundary marked with an iron rail fence.


Photograph 1: View of the grassland looking northeast.


Photograph 2: Southwest boundary hedge and cleared Bramble.


Photograph 3: More open southwest portion of the woodland.


Photograph 4: Northeast part of the woodland with dense understorey.


Photograph 5: Woodland edge with cleared Bramble.


Photograph 6: Northeast boundary.


Photograph 7: Vegetable plots along the southeast boundary fence.


Photograph 8: View of the grassland looking west.


Photograph 9: Scrub along the southeast boundary.


Photograph 10: Southeast boundary iron railings.

## Fauna

## Bats

3.9 There were no buildings on site. With regard to the trees, minor holes and crevices were noted in trees within the woodland but these appeared offer little shelter and no further investigation was made as these are to be retained. None of the remaining trees appeared to offer any potential roosting features for bats.
3.10 The general area is known to support a range of bat species and optimal habitats such as woodland, waterbodies are present the surrounding area. The woodland, woodland edge, scrub and hedge all provide good foraging and commuting habitats and bats are expected to utilise these as well as the associated grassland for foraging. The previous activity survey recorded low levels of activity but by a range of species; this is discussed in further detail below.

## Badgers

3.11 The site provides good foraging habitat in the short grassland. Hedge, scrub, and the woodland provide good opportunities for the construction of setts; however, no evidence of Badgers was recorded and they are likely to be generally absent, although they may pass through the site or forage on occasion.

## Otters and Water Voles

3.12 There are no watercourses on or near to the site and therefore, Otters and Water Voles are considered to be absent.

## Dormice

3.13 The hedge, scrub and woodland provide the main potential for Dormice and while these do connect to hedges in the wider area, these appear to be a loose network of hedges that are poorly connected to the wider area. This species is likely to be absent.

Other mammals
3.14 The site is expected to support a number of common small mammals and hedgehogs may pass through the site on occasion. The site is unlikely to support any other rare or notable mammal species.

Birds
3.15 Species recorded on site or overhead during the surveys were Robin, Jackdaw, Carrion Crow, Starling and Pheasant. The site provides foraging habitat for garden and woodland birds and the trees, scrub and woodland all provide nesting habitat. No nests were recorded but nests could easily have been missed in the denser vegetation.

## Reptiles

3.16 The main part of the site is now short grassland although the hedges, scrub and woodland edge provide cover and good habitat for reptiles. The previous reptile survey did not record any reptiles when the habitat was optimal across the site. The site has since been managed to cut the grassland short and clear much of the Bramble scrub. The site is relatively isolated in the landscape and it is unlikely that reptiles would have colonised the site since the previous survey. Reptiles are therefore still likely to be absent from the site.

## Amphibians

3.17 With the exception of the short grassland, which is currently poor habitat, the habitats on site provide optimal terrestrial habitat for amphibians. There are no ponds on site but the nearest shown on OS maps is 160 m to the southwest. This pond, along with three others in the surrounding landscape within 500 m were subject eDNA analysis in 2016, all of which returned negative results. These survey results are now considered to be out of date and although it is unlikely that Great Crested Newts have colonised these ponds further consideration is required.


Figure 3: Pond location plan.

- Pond 1-360m NW
- Pond 2-290m SW
- Pond 3-160m SW
- Pond 4-260m SE


## Invertebrates

3.18 The habitats on site are common habitat types that do not provide much potential for rare invertebrate species. It is mostly common assemblages of invertebrates that are expected to be present on site.

### 4.0 Impacts and Recommendations

## Impacts

4.1 The site is the subject of a planning application for a new housing development of 12 dwellings. The woodland would be retained and the existing access used. Open space and an attenuation pond would be created in the southwest portion of the site.

## Habitats

4.2 The NERC Priority Habitats include all hedgerows with at least $80 \%$ cover of at least one woody UK native species (JNCC, 2017). The hedge along the southwest boundary had at least $80 \%$ cover of native species and as such qualifies as NERC Priority Habitat. This would be retained and therefore no further assessment is required. There is significant scope to enhance this hedge through better management and by augmenting with additional species to increase diversity.
4.3 Lowland Mixed Deciduous Woodland is a NERC Priority Habitat but the woodland on site is unlikely to qualify as such. Woodland is nevertheless a valuable habitat in the local context and this will be retained. Opportunities for enhancing this woodland could include selective thinning to remove weaker trees and allow larger mature trees to develop. Mature trees are more likely to develop cracks and rot holes that can be used by a variety of animals, as well as being home to invertebrate species and fungi.
4.4 The poor semi-improved grassland does not fit the criteria to qualify as a NERC Priority Habitat (JNCC, 2015). In order to qualify as NERC Priority Habitat, grassland typically has to be unimproved (good semi-improved grassland can also qualify) and would have to be examples of lowland calcareous grassland or lowland dry acid grassland, habitats not found on site.
4.5 A new attenuation pond is to be created on site and ideally this should be designed so that part of this permanently holds some water. There are opportunities for significant biodiversity gains from the creation of a pond. Depending on the final character of the pond, it may be beneficial to plant native local plants to increase its value; non-native plants, many of which are invasive, should be avoided. Given the likely limited depth and area of water, planting should concentrate on marginal plants such as Brooklime, Water Mint, Marsh Marigold, Water Plantain, Yellow Iris, and rushes.
4.6 Where other new areas of habitat are to be created, consideration should be given to the seeding of these areas using appropriate seed mixes. Where possible these seeds should be locally sourced to support the genetic integrity of local wild plant populations. Where new trees or shrubs are to be planted, native tree and shrub species should be used as these are most beneficial to invertebrates, and many also produce seeds, nuts and berries that are food for native mammals and birds. Planting of non-native plant species should be limited to those that are not invasive and should prioritise those that provide a good source of nectar for invertebrates.

## Protected and Notable Species

Bats
4.7 There are no buildings on site and none of the trees appeared to have any features with any reasonable likelihood of being used by roosting bats; in any case the majority of these are within the woodland and would be retained.
4.8 The woodland, woodland edge, scrub and hedge all provide good foraging and commuting habitats and bats are expected to utilise these as well as the associated grassland for foraging. The previous activity survey recorded at least seven bat species: Brown Long-eared, Common Pipistrelle, Soprano Pipistrelle, Lesser Horseshoe, Myotis sp., Noctule and Serotine. No roosts or obvious commuting routes across the site were noted during the surveys, although the highest activity levels were generally recorded along the southern boundary of the woodland and the western boundary. Some rarer bat species, specifically Lesser Horseshoe, which are particularly sensitive to light, were active on site during the automated activity survey; however, overall activity levels for this species were low with two registrations being recorded throughout the surveys. The site was not be expected to be a particularly significant foraging resource for bats given the type and extent of the habitats present.
4.9 It is a given that bats will still forage on site but the key habitats, the woodland and the boundary hedge would be retained. The loss of the grassland and small areas of scrub is unlikely to be significant and provided a suitable lighting strategy is implemented bats will continue to be able to utilise the main woodland and hedge habitats. The creation of the pond would also provide additional habitat. Measures include the use of lighting only where absolutely necessary utilising highly directional warm white LED lighting, an example being down spots at 2.5 m high using warm white ( 2700 K) 8W LED lamps, 550 lumens, 35 degree beam angle. These could be individually activated by PIR sensors on a 5 minute cut off to further reduce their impacts. These will assist in lighting only the areas where lighting is required and minimising light spill either directly or through reflected light.
4.10 The proposed development provides an opportunity to enhance the site for roosting bats and the local planning authority will usually expect enhancements included regardless of any roosting on site. The provision of large open roof spaces for species such as long-eared bats is unlikely to be desirable or feasible, but there are many ways in which the buildings could be enhanced for crevice-dwelling species without inconveniencing prospective occupants. Bat tubes can be integrated into the walls or panels can be attached to the building exteriors. Boxes such as the Schwegler Bat Box 1FF can be installed on nearby trees.

Badgers and Other mammals
4.11 The potential for other species of protected or notable mammal species to use the site is deemed to be low. No constraints are predicted as a result of the potential presence of small mammals and passing Badgers. As a precaution it is recommended that during the construction phase of the project any trenches and other excavations are back-filled before nightfall or a ramp left to allow animals to easily exit, and any open pipes larger than 150 mm should be capped off overnight.

Birds
4.12 The site provides foraging habitat for birds and an abundance of nesting habitat, most of which would be retained.
4.13 All nesting birds are protected under The Wildlife and Countryside Act 1981 (and amendments). No further surveys are required at this time but as a precaution it is recommended that any clearance of small trees or scrub be carried out outside of the bird-nesting season of March to August. Where this is not possible, the vegetation would need to be surveyed for nesting birds by a suitably qualified ecologist prior to works commencing. If they are found, then the nest and surrounding habitat must remain intact until the young have fledged.
4.14 In order to compensate for the minimal loss of nesting sites and enhance the site for birds, the following options could be explored for inclusion on the buildings:

- Nest boxes for swifts could be incorporated into the eaves. These not only provide nesting sites for Swifts but can also be used by other species such as House Sparrows and Starlings.
- House Martin nests could be provided under the eaves.
- Individual boxes, such as the Schwegler Bird Home 1MR, could also be installed at a height of at least 2 m , on the east to north sides of the buildings.
- Groups of multiple small bird boxes could also be installed at a height of least 2 m on east to north sides of the building to provide nesting sites for birds such as House Sparrow.

Amphibians
4.15 There are no ponds on site but there is an abundance terrestrial habitat for amphibians. Great Crested Newts were considered to be absent in 2016 following eDNA analysis of water samples taken from four ponds in the surrounding area. The likelihood of Great Crested Newts colonising these ponds since this time is low but it cannot be entirely ruled out.
4.16 Great Crested Newts and their places of breeding or rest are protected under the Wildlife and Countryside Act 1981 (and amendments) and The Conservation of Habitats and Species Regulations 2010 making it illegal to kill, injure, capture or disturb a Great Crested Newt and to damage or destroy a breeding or resting site of this species. All activities that would otherwise constitute an offence under The Conservation of Habitats and Species Regulations 2010 must be licensed by Natural England. Great Crested Newts are also a NERC Priority Species.
4.17 The whole site is approximately 0.88 ha in size, 0.6 ha of which will be developed or subject to some form of works. There are no ponds on site and in terms of terrestrial habitat, all of the 0.6 ha falls within 250 m of the nearest potential breeding pond. Using Natural England's rapid risk assessment, where any land (not just newt habitat) falls within 250 m of any breeding pond where greater than 0.5 ha is to be lost or damaged, the risk of an offence being committed it classified as 'amber: offence likely'.
4.18 Using Natural England's survey guidance table, where no ponds are to be lost or damaged, the development is 100-250 m from the nearest pond, and the loss or damage to terrestrial habitat is greater that 0.5 ha, the maximum age of survey data is three years. The previous surveys are therefore out of date and it is likely that the local planning authority will request that these be updated OR a district licence application be made to NatureSpace. This would negate the need for further surveys and instead a payment towards this licence would mitigate for potential impacts to this species and allow works to proceed without delay. However, the most cost
effective solution is likely to be updating the previous eDNA surveys of the ponds in the surrounding area, which in all likelihood would return negative results and avoid the costs associated with the district licence.
4.19 The new pond could be enhanced to provide suitable aquatic habitat for this species and other amphibians and wildlife. Hibernacula could be positioned near the pond. The pond edges should not be straight and there should be a sloping aspect at one side of the pond to allow wildlife to get in and out. Shallow shelved areas should also be created to provide a diversity of conditions for flora and fauna. If implemented, these measures would result in a significant gain for biodiversity

Invertebrates
4.20 The site provides a variety of habitats for invertebrates and only limited areas will be lost, most of which will be temporary. The creation of new garden habitats is likely to provide opportunities for invertebrates. Further enhancement for invertebrates could be achieved by creating deadwood piles in the woodland and/or providing invertebrate homes for pollinators.

### 5.0 References

The Conservation of Habitats and Species Regulations 2010, SI 2010/490

The Conservation (Natural Habitats, \&c.) (Amendment) Regulations 2007, SI 2007/1843, London: HMSO.

Countryside and Rights of Way Act 2000, (c.37), London: HMSO.

Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services. Defra.

JNCC (2007). UK BAP Priority Species. [Online]. Available at: http://jncc.defra.gov.uk/page-5717 [accessed on 11 th February 2021]

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

Wildlife and Countryside Act 1981 (and amendments), (c.69), London: HMSO.

