

Preliminary Ecological Appraisal

Site: Top End, The Green, Kingham, Oxfordshire, OX7 6YD

Client: Chris Ross



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The information in this report has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct. The conclusions and recommendations expressed are reasoned judgements based on the evidence.

Every reasonable attempt has been made to comply with BS42020:2013 *Biodiversity – Code of practice for planning and development*, *CIEEM Guidelines for Ecological Report Writing* (CIEEM, 2017) and Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edition, Collins, 2023). If there has been deviation from recognised practice, justification/explanation has been given.

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SUMMARY

At Top End on The Green in Kingham, Oxfordshire, householder planning consent is being sought for a first floor garage conversion and extension.

In August 2023, Paxford Ecology was instructed to carry out a Preliminary Ecological Appraisal of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by potential development of the site.

A search of ecological data revealed a number of records of Protected, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species and designated sites within a 1.0 km radius of the land.

The site lies on the boundary of the Cotswolds – an Area of Outstanding Natural Beauty (AONB). There were no statutory sites within a 3.0 km radius of the survey area. However, there were two non-statutory wildlife sites within 1.0 km; Bledington Meadows Local Wildlife Site (LWS) and Heath Lane LWS.

Bat records for the area include Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle *P. pygmaeus*, Nathusius' Pipistrelle *P. nathusii*, pipistrelle species *Pipistrellus sp.*, Noctule *Nyctalus noctula*, Leisler's *N. leisleri*, Serotine *Eptesicus serotinus*, Barbastelle *Barbastella barbastellus*, Natterer's *Myotis nattereri*, Brown Long-eared Bat *Plecotus auritus*, Lesser Horseshoe *Rhinolophus hipposideros* and unidentified species.

Other mammal records within the area included Otter *Lutra lutra*, Badger *Meles meles* and Hedgehog *Erinaceus europaeus*.

Amphibian records included a single Common Toad *Bufo bufo*. No records of Great Crested Newts *Triturus cristatus* were found. Reptiles on record included Grass Snake *Natrix natrix*, Common Lizard *Zootoca vivipara* and Slow Worm *Anguis fragilis*.

The Phase 1 Habitat survey took place on 22nd August 2023, in warm conditions with no wind and partial cloud.

The site comprised a stone cottage with a slate tiled roof and an attached pitched roofed garage. There was a small rear garden which was amenity grass with introduced shrubs. This was enclosed with a drystone wall.

The site was not botanically diverse, no rare or notable vascular plants were recorded, and all species common and widespread. There were no invasive or notifiable species.

A total of 2 species of bird were observed during the visit, both of which were Species of Low Conservation Concern (RSPB Green list).

No old or in use birds' nests were found, although there was potential for nesting in the shrubs.

The proposed development will not lead to the loss of bird nesting sites, as the garden will not be impacted by the proposed works, and there is an abundance of suitable habitat in the surrounding area.

Nevertheless, since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal that is subsequently required, should be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance.

Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

There was negligible suitability for roosting bats in or around the building, as there were no external gaps or crevices, and no signs of any bat activity. As such, no further surveys or mitigation measures were considered necessary.

The site was thought to be of low value to foraging or commuting bats, as there was little cover and the site was small in extent.

There were no signs of Badger *Meles meles* activity within the site, nor were there signs of any other mammals.

Although the site lies within an amber risk zone for Great Crested Newts *Triturus cristatus*, their presence was considered highly unlikely due to a lack of any ponds within 500 metres from the site (according to MagicMap and Ordnance Survey). Furthermore, the proposed works will not cause the loss of any potentially suitable terrestrial habitat. Although there was some refugia within the wall of the garden, the proposed works will not impact on this. As such, no further works for Great Crested Newts were considered necessary.

Reptiles are also unlikely to be encountered as the site was very small in extent, formally maintained, with very limited foraging opportunities and no suitable basking areas.

Despite this, care should be taken at all times during any vegetation removal and topsoil stripping, as small mammals could be present.

Any small mammals disturbed or uncovered should either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

It was also possible to assess the potential importance of the habitats within the application site to invertebrates. Since the majority of the site was buildings, with a small area of formal garden, it was concluded that there was low potential for invertebrate assemblages, in particular

those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. If trenches cannot be infilled immediately then they should either be covered overnight or escape routes should be provided. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

1. INTRODUCTION

1.1 Background and survey objectives

At Top End on The Green in Kingham, Oxfordshire, householder planning consent is being sought for a first floor garage conversion and extension.

In August 2023, Paxford Ecology was instructed to carry out a Preliminary Ecological Appraisal of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by potential development of the site.

A search of ecological data revealed a number of records of Protected, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species and designated sites within a 1.0 km radius of the land.

1.2 Site description

The site comprised a stone cottage with a slate tiled roof and an attached pitched roofed garage.

There was a small rear garden which was amenity grass with introduced shrubs. Grasses present included Creeping Fescue *Festuca rubra*, Cocksfoot *Dactylis glomerata*, Rough Meadow-grass *Poa trivialis* and False Oatgrass *Arrhenatherum elatius*. Wildflowers were represented by Creeping Buttercup *Ranunculus repens*, Red Clover *Trifolium pratense*, Dandelion *Taraxacum* section *vulgaris* and Ribwort Plantain *Plantago lanceolata*.

The garden was enclosed with a drystone wall.

The Ordnance Survey Grid Reference is SP 26160 24103, centred on the middle of the site.

1.3 Proposed works

Planning permission is being sought for the conversion of the adjoining garage.

2. METHODOLOGY

2.1 Desk study

A detailed desk study was undertaken to determine the nature conservation designations and protected species that had been recorded within a 1.0 km radius of the site. This involved contacting statutory and non-statutory organisations, and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- ❑ Multi Agency Geographic Information (MAGIC) website www.magic.gov.uk;
- ❑ West Oxfordshire District Council Planning Website;
- ❑ NBN Gateway.

2.2 Habitat survey

A Preliminary Ecological Appraisal was carried out across the whole of the survey site. It was conducted using standard JNCC (2003) techniques and methodologies.

The Phase 1 visit took place on 22nd August 2023, in warm and sunny conditions, with cloudy periods and no wind.

2.3 Protected species survey

During the surveys the potential for other protected and important species was assessed. This included European Protected Species, legally protected species and Local Biodiversity Action Plan Species (and habitats).

2.3.1 Badgers

Badgers are generally nocturnal and evidence of their presence in an area often comes from field signs rather than sightings of the animals. Useful field signs include:

- ❑ Setts (main, outlying, annex or subsidiary)
- ❑ Tufts of hair caught on barbed wire fences;
- ❑ Conspicuous Badger paths;
- ❑ Footprints;
- ❑ Latrines – small excavated pits in which droppings are deposited;
- ❑ 'Snuffle holes' – small scrapes where Badgers have searched for insects and plant tubers;
- ❑ Day nests – bundles of grass and other vegetation where Badgers may sleep above ground;
- ❑ Scratch marks on trees (usually near the sett).

Daytime surveys looking for field signs can be carried out at any time of the year, and should be non-intrusive, but nocturnal surveys of setts (if required), are only likely to be effective from April to November, when Badgers are most active, and any cubs present will have emerged.

Main setts

These usually have a large number of holes with large spoil heaps, and the sett generally looks well used. They usually have well used paths to and from the sett and between sett entrances. Although normally the breeding sett is in continual use, it is possible to find a main sett that has become disused because of excessive digging or for some other reason, in which case it is recorded as a disused main sett.

Annex setts

These are always close to a main sett, usually less than 150 m away, and are usually connected to the main sett by one or more obvious, well worn paths. They consist of several holes, but are not necessarily in use all the time, even if the main sett is very active.

Subsidiary setts

These often these have only a few holes, are usually at least 50 m from a main sett, and do not have an obvious path connecting them with another sett. They are not continuously active.

Outlying setts

These usually only have one or two holes, often have little spoil outside the hole, have no obvious path connecting them with another sett, and are only used sporadically. When not in use by badgers, they are often taken over by foxes or even rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the entrance hole), which is at least 250 mm in diameter and rounded or flattened oval in shape.

A search for evidence of Badger presence on site was undertaken as part of the Preliminary Ecological Appraisal.

2.3.2 Bats

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2023) 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 emergence surveys.

The preliminary roost assessment (PRA) is usually in the form of a diurnal walkover and can be carried out at any time of the year. It provides an opportunity to check for signs of bat occupancy and/or the suitability for bat roosting.

Evidence of bat activity includes droppings, scratch marks, feeding remains, carcasses, or even roosting animals, whilst suitability is determined by the type and number of potential roost features (PRFs) typically used by bats.

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 Horseshoes *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 these 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.

Where bats are found, or there is evidence of bat occupation or activity, i.e. that bat use is confirmed, a roost characterisation survey is undertaken. The results are used to inform the impact assessment and design of mitigation measures. Roost characterisation includes nocturnal emergence surveys, unless sufficient information has already been collected using robust survey methods with no significant constraints.

Nocturnal emergence surveys allow numbers and species of bats to be confirmed, and should only be undertaken when bats are out of hibernation and in their summer roosts.

The bat active period is generally considered to be between April and October, although particularly cold weather will affect the level and extent of bat activity. Indeed, the air temperature at the start of each survey should be at least 10°C or above, with no strong wind or heavy rain. The survey starts 15 minutes before sunset and continues for one and a half to two hours after sunset.

Visits will be a minimum of three weeks apart, and the number of surveys and timing is dependent on the evidence found or the suitability of the site to bats. This will be determined by the ecologist. In general, at least two emergence nocturnal surveys will be carried out, but a third visit may be necessary if the results are inconclusive or further information is required.

Nocturnal emergence surveys are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but the suitability for bat roosting is considered to be low, moderate or high.

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

For moderate suitability a minimum of two visits are needed between May and September, of which one must be in the period May to August.

With high suitability, three visits will be necessary between May and September, of which two must be in the period May to August.

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

The number of surveyors and/or the use of night vision aids (NVAs) is determined by the ecologist, and is dependent on the complexity of the structure. For simple structures just one surveyor using an appropriate number of NVAs will be sufficient, but for larger sites and/or more complex or irregularly shaped structures, e.g. those with multiple elevations and/or roof slopes, more surveyors will be required.

On 22nd August 2023 a thorough inspection of the garage was made by Mollie Paxford (Natural England bat licence No. 2020-47378-CLS-CLS), including roof covering, internal and external walls, eaves, gables, timbers, window casements, doorframes and roof space.

10x42 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 or 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.

2.3.3 Birds

Most resident and migrant birds breed in the spring and summer, although Woodpigeons *Columba palumbus* and Collared Doves *Streptopelia decaocto* nest throughout the year, and as a result could be on eggs in almost any month.

In season, signs of breeding include singing males, display and copulation, birds gathering nesting materials, adults carrying food, calling chicks, etc.

In winter none of these activities may be occurring, so a survey for old nests and/or nest holes is the most reliable method of determining the presence or absence of breeding birds.

This was carried out during the Preliminary Ecological Appraisal, along with a general site walkover to identify the presence of foraging birds.

2.3.4 Great Crested Newts

A survey for Great Crested Newts (GCN) may be indicated when background information on distribution suggests that they may be present. More detailed indicators are:

- ❑ *Any historical records of Great Crested Newts on the site or in the general area*
- ❑ *A pond on or near the site (within around 500 m), even if it holds water only seasonally*
- ❑ *Sites with refuges (such as piles of logs or rubble), grassland, scrub, woodland or hedgerows within 500 m of a pond.*

There are several field survey methods which can be employed depending on the time of year:

- ❑ *Bottle or funnel trapping – adults ideally February to May, with June and July sub-optimal, and August to September for detection of larvae (i.e. young)*
- ❑ *Egg search – April to June ideally, with March and July sub-optimal*
- ❑ *Torch survey – March to May for adults, with February and June to July sub-optimal, and August to September for larvae*
- ❑ *Netting – March to May for adults, with February and June to July sub-optimal, and August to September for larvae*
- ❑ *Pitfall trapping – March to May and September for adults, with February, June to August and October sub-optimal*
- ❑ *Refuge search – April to September ideally, with March and October sub-optimal.*

The latter two methods involve terrestrial habitats, the others aquatic habitats, for which a minimum of 4 visits per year are recommended, with at least 2 visits between mid-April and mid-May to record peak numbers (English Nature, 2001).

None of these methods were carried out as there was nothing to suggest that newts would be present on the site.

2.3.5 Otters

Otters are nocturnal and are active all year round. They are large with an adult male reaching up to 1.2 m from nose to tail, and weighing about 10 kg.

Feeding mainly on fish and amphibians, Otters live by undisturbed waters where there is plenty of cover, mostly by freshwater lakes, rivers and quiet small streams as well as some coasts.

An Otter may use over 40 km of river and needs many resting places throughout this range. A female otter will give birth to 1 to 3 cubs in a natal holt, which is often away from the main river and must be completely undisturbed. Field signs include:

- ❑ Prints in soft mud;
- ❑ Spraints (faeces);
- ❑ Holts.

A search for evidence of Otter presence on site was undertaken as part of the Preliminary Ecological Appraisal.

2.3.6 Reptiles

Commoner reptiles which may be encountered in rural areas include Grass Snake, Slow-worm *Anguis fragilis*, and Common Lizard *Zootoca vivipara*.

During the winter months, from mid-October to late February or early March, they are in hibernation, usually deep in underground hibernacula, such as holes and cracks in the ground, among rocks or the roots of large trees, down animal burrows, or in piles of rubble or stone.

In the spring and summer they live above ground in well-vegetated places, with Grass Snakes often near or in water. Being cold-blooded all reptiles like to bask, and can often be found in open places.

There are very few signs of reptile presence, but these include:

- ❑ Shedded skin (snakes);
- ❑ Eggs (but not Common Lizard which gives birth to live young).

The site was searched for potential refugia as part of the Preliminary Ecological Appraisal.

2.3.7 Water Voles

The Water Vole is the largest of the British voles. It lives in a series of holes or burrows at the water's edge and can be found along the banks of ditches, streams, rivers, lakes and canals.

Although Water Voles live in colonies, the breeding females are territorial, each defining their contiguous territory with latrines during the breeding season. This lasts from March to October.

The Water Vole is herbivorous, feeding primarily on the lush aerial stems and leaves of waterside plants. Its activity is normally confined to the area within two metres of the watercourse, the bankside vegetation in this area not only essential for food, but also for cover from predators.

Water Vole activity can be assessed by looking for the following signs:

- ❑ Burrows;
- ❑ Faeces and latrines;
- ❑ Feeding stations;
- ❑ Runs;
- ❑ Paw prints in areas of soft mud;
- ❑ Feeding 'lawns';
- ❑ Predator field signs.

A search for evidence of Water Vole presence on site was undertaken as part of the Preliminary Ecological Appraisal.

3. RESULTS

3.1 Desk study

3.1.1 Designated sites

A search of ecological data revealed a number of records of Protected, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species and designated sites within a 1.0 km radius of the land.

The site lies on the boundary of the Cotswolds – an Area of Outstanding Natural Beauty (AONB). There were no statutory sites within a 3.0 km radius of the survey area. However, there were two non-statutory wildlife sites within 1.0 km; Bledington Meadows Local Wildlife Site (LWS) and Heath Lane LWS.

3.1.2 Protected species

Bat records for the area include Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, pipistrelle species, Noctule, Leisler's, Serotine, Barbastelle, Natterer's, Brown Long-eared Bat, Lesser Horseshoe and unidentified species.

Other mammal records within the area included Otter, Badger and Hedgehog.

Amphibian records included a single Common Toad. No records of Great Crested Newts were found. Reptiles on record included Grass Snake, Common Lizard and Slow Worm.

3.2 Habitat survey

3.2.1 *Habitat descriptions*

The following habitats were recorded across the site:

- ❑ Buildings and hardstanding;
- ❑ Amenity grass;
- ❑ Introduced shrubs;
- ❑ Wall.

These habitats are described below and are shown on the Phase 1 Habitat Survey map in Appendix 1, with the target notes (where applicable) in Appendix 2.

Buildings and hardstanding

The site comprised a stone cottage with a slate tiled roof and an attached pitched roofed garage (Figs. 1 and 2). There was a driveway of hardstanding, as well as a small area of patio around the house (Figs. 3 and 4).



Figs. 1 & 2 House and garage



Figs. 3 & 4 Hardstanding

Amenity grass

There was a small rear garden which was dominated by amenity grass (Figs. 5 and 6). Grasses present included Creeping Fescue, Cocksfoot, Rough Meadow-grass and False Oatgrass. Wildflowers were represented by Creeping Buttercup, Red Clover, Dandelion and Ribwort Plantain.



Figs. 5 & 6 Garden

Introduced shrubs

Introduced shrubs were present in beds as part of the formal landscaping within the garden of the house (Ref. Figs. 5 and 6).

Wall

The garden was enclosed with a drystone wall (Ref. Fig. 5).

3.2.2 Flora

The botanical composition of each habitat was typical, and all species recorded were common and widespread.

No rare vascular plants were found, and there were no invasive or notifiable species.

3.3 Protected species survey

3.3.1 *Badgers*

The site held no habitat suitable for sett building, although the habitats were considered to be suitable for foraging purposes. Despite this, no evidence of Badger presence was recorded, such as setts, tufts of hair, pathways, footprints or latrines.

3.3.2 *Bats*

The house, link and garage all had slate tiled roofs. The ridges were intact and sealed, whilst all the roof tiles were tightly overlapping, with none raised, broken, missing or dislodged (Figs. 7-12).



Figs. 7 & 8 Ridge and roof tiles



Figs. 9 & 10 Ridge and roof tiles



Figs. 11 & 12 Ridge and roof tiles

The lead flashing along the roof joins and around the chimney bases was tightly moulded. The eaves were sealed all round (Figs. 13 and 14).



Figs. 13 & 14 Eaves of garage (L) and house (R)

The stonework was sound throughout, with no cracks or holes. The window casements and doorframes were all tightly fitting, although there was a narrow gap along the top of the garage doors.

Internally the roof void of the house and link was lined with a membrane which was in good condition. The garage was open to the underside of the roof which was also lined (Figs. 15-18).

No signs of bat activity or occupation were found in or around the house or garage and they were considered to be of negligible suitability for roosting bats.



Figs. 15 & 16 Roof void and garage roof space



Figs. 17 & 18 Interior of garage

3.3.3 Birds

A total of 2 species of bird were observed during the visit, both of which were Species of Low Conservation Concern (RSPB Green list).

No old or in use birds' nests were found, although there was potential for nesting in the shrubs.

A full list of species noted is given in Appendix 3.

3.3.4 Great Crested Newts

Although the site lies within an amber risk zone for Great Crested Newts, their presence was considered highly unlikely due to a lack of any ponds within 500 metres from the site (according to MagicMap and Ordnance Survey). Furthermore, the proposed works will not cause the loss of any potentially suitable terrestrial habitat. Although there was some refugia within the wall of the garden, the proposed works will not impact on this. As such, no further works for Great Crested Newts were considered necessary.

3.3.5 Otters

No evidence of Otter was found during the survey.

3.3.6 Reptiles

Reptiles are unlikely to be encountered as the site was very small in extent, formally maintained, with very limited foraging opportunities and no suitable basking areas.

3.3.7 Water Voles

No evidence of Water Voles was found on or immediately around the site, and they are considered to be absent.

3.3.8 Invertebrates

Since the majority of the site was buildings and hardstanding with formally managed garden, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan.

3.3.9 Other species

No other important or notable species were recorded during the site visit.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Site evaluation

The site was concluded to be of low wildlife interest.

The formally landscaped garden was not diverse and of poor quality, although it would hold some limited value for invertebrates, small mammals, and foraging birds.

The site itself was of little value to foraging bats as there was no cover and the site was small in extent. There were no signs of bat activity or occupation in or around the house and garage and they were considered to be of negligible suitability for roosting. As such, no further surveys or mitigation measures are required.

No evidence of breeding birds, particularly in the form of nests, was recorded on the land, although the shrubs were considered to hold some potential for nesting birds.

There were no signs of Otters or Water Voles and no evidence of Badgers.

Although the site lies within an amber risk zone for Great Crested Newts, their presence was considered highly unlikely due to a lack of any ponds within 500 metres from the site (according to MagicMap and Ordnance Survey). Furthermore, the proposed works will not cause the loss of any potentially suitable terrestrial habitat. Although there was some refugia within the wall of the garden, the proposed works will not impact on this. As such, no further works for Great Crested Newts were considered necessary.

Reptiles are also unlikely to be encountered as the site was very small in extent, formally maintained, with very limited foraging opportunities and no suitable basking areas.

It was also possible to assess the potential importance of the habitats within the application site to invertebrates. Since the majority of the site was buildings and hardstanding with formally managed garden, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan.

4.2 Possible impacts of proposed work and recommendations

The proposed development is unlikely to lead to the loss of bird nesting sites, as the garden will not be impacted on and there is an abundance of suitable habitat in the surrounding area.

Nevertheless, since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal that is subsequently required, should be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance.

Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the sensitivity of the species.

Although no evidence of reptiles or amphibians was found, the potential for small mammals to be present on site exists, and thus care should be taken at all times during any vegetation removal and topsoil stripping. Any small mammals disturbed or uncovered should either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. If trenches cannot be infilled immediately then they should either be covered overnight or escape routes should be provided. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

4.3 Further surveys

If any tree or scrub removal cannot be timed appropriately to avoid the bird nesting period (considered to be March to August inclusive), then further surveys of the trees and/or scrub to be removed will be required.

No other surveys are considered necessary.

5. REFERENCES

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APPENDICES

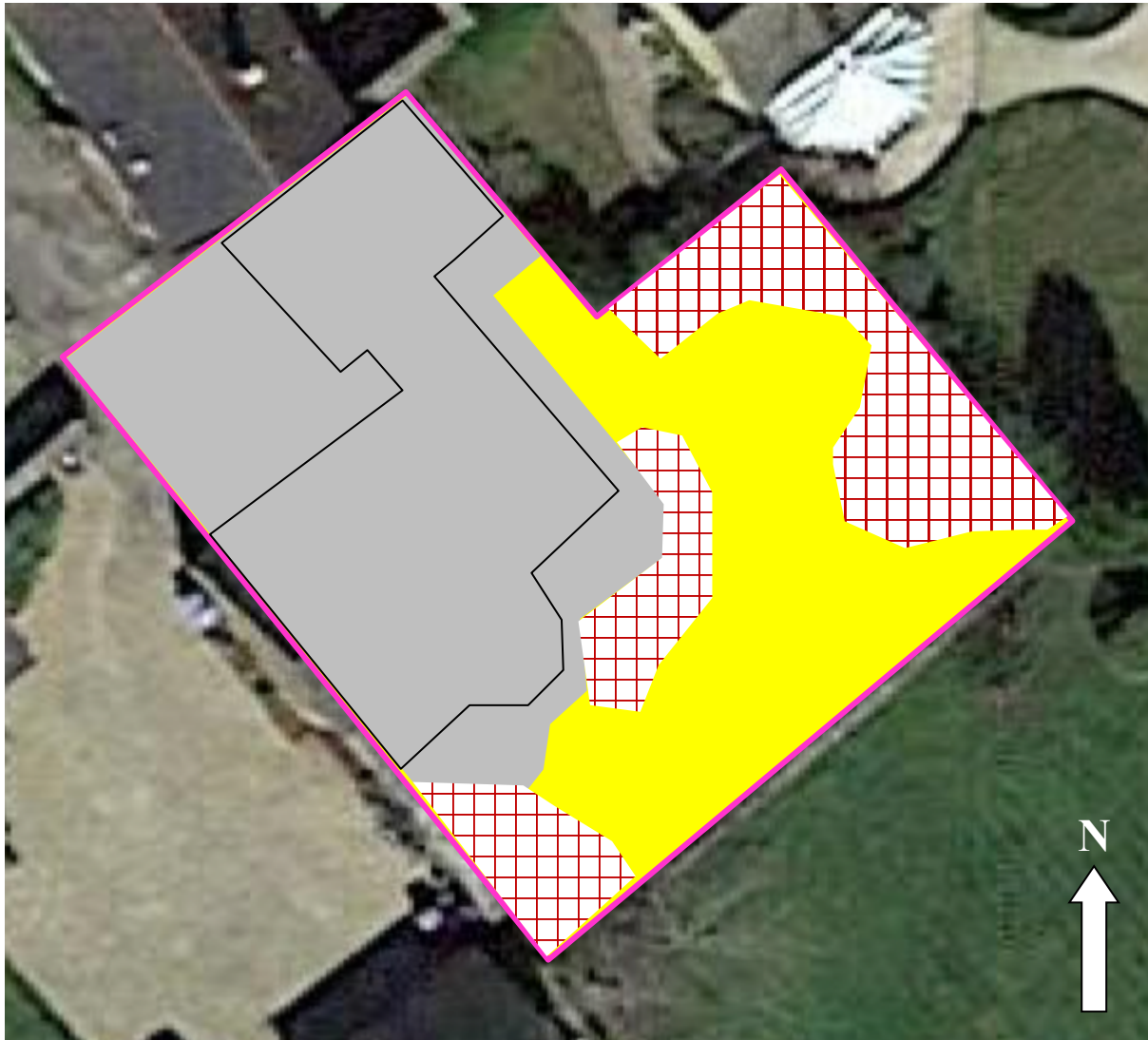
Appendix 1: Phase 1 Habitat Survey Map

Appendix 2: Target Notes






Appendix 3: Bird species list

Appendix 4: Relevant legislation

Appendix 1: Phase 1 Habitat Survey Map



Legend

-  Survey Boundary
-  Amenity grassland
-  Introduced shrubs
-  Buildings and hardstanding
-  Target Note
- Not to scale

Appendix 2: Target Notes

Target Number	Notes
	No target notes

Appendix 3: Bird species list

Common name	Latin name
Woodpigeon	<i>Columba palumbus</i>
Wren	<i>Troglodytes troglodytes</i>

Appendix 4: Relevant legislation

4.1 *Badgers*

Badgers are protected in Britain by the Protection of Badgers Act 1992. The purpose of this Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause them harm. Under this legislation it is an offence to:

- ❑ Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- ❑ Interfere with a sett by damaging or destroying it;
- ❑ Obstruct access to, or any entrance of, a Badger sett;
- ❑ Disturb a Badger when it is occupying a sett.

Note that if any of the above resulted from a person being reckless, even if they had no intention of committing the offence, their action would still be considered an offence.

A person is not guilty of an offence if it can be shown that the act was 'the incidental result of a lawful operation and could not have been reasonably avoided'; only a court can decide what is 'reasonable' in any set of circumstances. Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as 'any structure or place which displays signs indicating current use by a Badger'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as 'any sett within an occupied Badger territory regardless of when it may have last been used'.

A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

4.2 *Bats*

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), which adds 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 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

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.

4.3 Birds

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- ❑ *Killing, injuring or capturing them, or attempting any of these;*
- ❑ *Taking or damaging the nest whilst in use;*
- ❑ *Taking or destroying the eggs.*

4.4 Great Crested Newts

Great Crested Newts are protected under Schedule 5 of the Wildlife & Countryside Act (1981) as amended, and Schedule 2 of the Conservation of Habitats and Species Regulations 2010. As a result of their rarity across Europe, they are also protected under Annexes IIa and IVa of the Habitats and Species Directive, and under the Berne Convention (the Convention on the Conservation of European Wildlife and Natural Habitats).

The above legislation can be summarised thus (Langton *et al*, 2001):

- ❑ *Intentionally or deliberately capture or kill, or intentionally injure Great Crested Newts;*
- ❑ *Deliberately disturb Great Crested Newts or intentionally or recklessly disturb them in a place used for shelter or protection;*

- ❑ *Damage or destroy a breeding or resting place;*
- ❑ *Intentionally or recklessly damage, destroy or obstruct access to a place used for shelter or protection;*
- ❑ *Possess a Great Crested Newt, or any part of it, unless acquired lawfully;*
- ❑ *Sell, barter, exchange or offer for sale Great Crested Newts or parts of them.*

4.5 Reptiles

All common reptiles (Common Lizard, Grass Snake, Slow-worm and Adder *Vipera berus*) are afforded legal protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) largely as a consequence of a national decline in numbers associated with persecution and habitat loss.

Under the terms of the Act it is illegal to intentionally kill or injure a reptile.

4.6 Otters

Otters are protected under Sections 9.1 and 9.4, Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), Annex 2 and 4 of the Conservation (Natural Habitats &c.) Regulations 1994 as amended, and are a priority species under the UK BAP. Actions that are prohibited include intentional killing, injuring or taking; and intentional or reckless damage, destruction or obstruction of any structure or place used for shelter or protection.

4.7 Water Voles

As of 12 August 2008, Water Voles have been given full protection under Section 9 of the Wildlife and Countryside Act 1981.

Offences under Section 9 carry a maximum penalty of a fine up to £5000, imprisonment for up to six months, or both, for each animal in respect of which an offence is committed. It is now an offence to:

- ❑ Intentionally kill, injure or take (capture) a Water Vole;
- ❑ Possess or control a live or dead Water Vole, or any part of a Water Vole or anything derived from a Water Vole;
- ❑ Intentionally or recklessly damage, destroy or obstruct access to any structure or place which a Water Vole uses for shelter or protection;
- ❑ Intentionally or recklessly disturb a Water Vole while it is occupying a structure or place which it uses for shelter or protection.