

# Preliminary Ecological Assessment

Three Ways, Barrack Road, Assington, Essex, CO10 5LP.



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Project: Three Ways, Barrack Road, Assington, Essex, CO10 5LP.

**Date:** 28/7/2022

Client: Adrian Gasser

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## **Quality Control**

Version: Final

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## 1.0 Non-technical summary

- 1.1 To understand the site's ecology, this appraisal has outlined the likely impacts and opportunities for mitigation, compensation, and enhancement.
- 1.2 A desktop search for designated sites and habitats was undertaken using the Multiagency Geographic Information for the Countryside (MAGIC) website and Promap. In addition, a Habitat Survey of the land and the likely presence of protected species.
- 1.3 Natural England has not designated the site as a habitat for its importance for nature conservation at the national, regional or county level. In addition, the likelihood of protected species is negligible, and no additional surveys are needed.

#### 2.0 Introduction

## Purpose of the report

- 2.1 The survey aimed to assess potential ecological features, including the likely presence of rare or protected habitats and species within the zone of influence concerning the project. The key objectives are:
  - Identify the potential ecological constraints associated with the project;
  - Identify any mitigation measures likely to be required;
  - Identify any additional surveys that may be necessary; and,
  - Identify the opportunities offered by the project to deliver ecological enhancement.
- 2.2 The British Standard BS 42020:2013,<sup>1</sup> an appraisal by a suitably qualified professional ecologist is undertaken to ensure a rigorous and thorough independent review. The assessment has followed the Chartered Institute of Ecology and Environmental Management Guidelines,<sup>2</sup> which is proportionate to the scale of the project.
- 2.3 The preliminary ecological appraisal outlines the likely impact, mitigation, compensation, and enhancement opportunities. The assessment also considers whether consultation with statutory bodies is necessary and whether consent or licences are required.

<sup>&</sup>lt;sup>1</sup> Bidiversity – Code of practice for planning and development, BS 42020:2013.

<sup>&</sup>lt;sup>2</sup> CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2<sup>nd</sup> edition, and CIEEM (2017) Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.



#### **Qualifications and Competence of the Author**

- 2.4 The ecologist has over 25 years of conservation experience. Founder of a new conservation charity and previously worked as Head of Conservation for a Wildlife Trust, Director of Studies for the Field Studies Council and Course Director and Lecturer for the University of Essex and Cambridge.
- 2.5 The ecologist has been nationally recognised by respected organisations and awarded various fellowships for his *outstanding or significant contribution* to these disciplines, including conservation and biodiversity for landscape-scale conservation projects.
- 2.6 Currently on the external advisory board for the University of Essex and representing the Chartered Institute of Ecology and Environmental Management at the University of Southampton, judging national ecological projects and as an ecological expert for the Southwood Foundation.

# 3.0 Scope of works

#### **Legislation and planning policy**

3.1 This Preliminary Ecological Assessment has been undertaken regarding the relevant wildlife legislation and planning policies (Appendix 1).

#### Legislation

- 3.2 Relevant legislation considered within the scope of this document includes the following:
  - The Wildlife and Countryside Act 1981 (as amended);
  - The Conservation of Habitats and Species Regulations 2019 (as amended);
  - Natural Environment and Rural Communities (NERC) Act 2006;
  - The Countryside and Rights of Way (CRoW) Act 2000; and,
  - Protection of Badgers Act 1992.

#### **National Planning Policy Framework**

3.3 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied.<sup>3</sup> For example, planning law requires that

<sup>&</sup>lt;sup>3</sup> Ministry of Housing, Communities and Local Government, National Planning Policy Framework, July 2021



the development plan determine applications for planning permission unless material consideration indicates otherwise.

- 3.4 Material planning considerations include:
  - emerging new plans which have already been through at least one stage of public consultation;
  - government and planning inspectorate requirements, such as circulars, statutory instruments, guidance and advice; and,
  - adverse impacts on nature conservation interest and biodiversity opportunities.

#### **Biodiversity Net Gain**

- 3.5 National policy states that planning should provide biodiversity net gains where possible. National Planning Policy Framework (NPPF) paragraphs 174(d), 179(b) and 180(d) and the Natural Environment Planning Practice Guidance (PPG) refer to this policy requirement.
- 3.6 The Government's 25-Year Environment Plan aims to mainstream net biodiversity gain in the planning system and moves towards approaches that integrate natural capital benefits.

# 4.0 Methodology

## **Desk Study**

- 4.1 A search for designated sites and habitats was undertaken using the Multi-agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk) and Promap. The data collated will inform the impacts of the proposed works, ensuring that suitable mitigation and protection measures are considered.
- 4.2 A desktop study search was completed using an internet-based mapping service (www.magic.gov.uk) for statutory designated sites. In addition, internet-based aerial mapping services were used to understand the habitats present in and around the survey area and habitat linkages and features in the broader landscape.
- 4.3 No biological records were requested at this stage. Instead, a search on Natural England's magic website for any European Protected Species licence that has been granted. These licences allow the licence holder to safeguard European Protected Species from adverse development and potentially damaging activity.



#### **Habitat Survey**

The vegetation and habitat types are classified regarding the UK Habitat Classification. The Biodiversity Metric 3.1 operates on the UK Habitat Classification system. The UK Habitat Classification (UKHab) is a comprehensive habitat classification system for the UK to provide outputs suitable for ecological impact assessment, habitat metrics and better data integration between organisations. The UKHab translates easily into Priority Habitat Types and Annex 1 Habitat Types. In addition, an evaluation of the site to support protected species.

#### **Protected Species**

4.5 The protected species assessment provides a preliminary view of the likelihood of protected species occurring on-site, based on habitat suitability and direct evidence. The evaluation should not be taken as providing a complete and definitive survey of any protected species group. The assessment is only valid for the time of the study. Additional surveys may be recommended if, based on this assessment, it is considered reasonably likely that protected species may be present.

#### Badger (Meles meles)

- 4.6 Badger setts are excavated in woodland, scrub, hedgerows, gardens, buildings, and embankments. Badgers live in groups between two and twenty, feeding mainly on earthworms; however, they also consume insects, carrion, fungi and small mammals. When fruit is taken in the autumn, the seeds may be seen in the dung deposited in latrines, one of the characteristic field signs of this species.
- 4.7 A badger assessment was conducted to evaluate the level of badger activity on-site and locate any badger setts within the site boundary and, if possible, within a 30m radius. The evaluation of badger activity was based on the methodology developed for the National Survey of badgers<sup>5</sup> and includes searching for badger field signs such as setts, badger pathways, tracks, dung piles with latrines, badger hairs and feeding signs such as snuffle holes:

<sup>&</sup>lt;sup>4</sup> Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020) The UK Habitat Bank Classification User Manual Version 1.1.

<sup>&</sup>lt;sup>5</sup> Cresswell, P., Harris, S., & Jeffries, D.J., (1990). The history, distribution, status and habitat requirements of the Badger in Britain. Nature Conservancy Council.



- Setts: several sett types may be present within a social group territory, ranging from
  a single hole to numerous interconnecting tunnels. Particular attention focussed on
  areas where the vegetation and topography offered suitable opportunities, such as
  embankments and wooded areas. Setts can be main, annexe, subsidiary and outlier.
- Latrine sites: badgers characteristically deposit dung in pits located along the boundaries and within the social group territory. These sites serve as means of interand intra-group communication.
- Paths and runs: well-used routes between setts and/or foraging areas. Generations
  of badgers often use them.
- Snuffle holes: areas of disturbed vegetation often formed by badgers foraging for ground-dwelling invertebrates such as earthworms and larvae and the underground storage organs of plants.
- Hair: often found among spoil and bedding outside entrances to setts or snagged on fences and well-used runs.
- Footprints: these are easily distinguishable from other large mammal species. Often found along paths and runs or in spoil outside sett entrances.

#### Hazel Dormouse (Muscardinus avellanarius)

4.8 The hazel dormouse is a specialist feeder needing a habitat that can provide high protein food ranging from pollen and nectar to insects and nuts. Such food is only seasonally available, leading to a dormouse hibernation strategy. The dormouse favours deciduous woodland with secondary growth and scrub, especially edible seeds like hazel and beech. Frequent in the coppice, sometimes in species-rich hedgerows spending most of its time above ground. For example, in Essex, the dormouse occurs where oak and hazel abound, and sufficient woodland or overgrown hedgerow are present to protect it. The main problem with dormouse tends to be associated with a lack of woodland management leading to uniform structure with little re-growth and understorey.

<sup>&</sup>lt;sup>6</sup> The Handbook of British Mammals.

<sup>&</sup>lt;sup>7</sup> Mammals of Essex.



4.9 A dormouse assessment evaluated the level of activity on-site. The hedgerows were assessed for their potential to support dormice. This involved evaluating potential food species, diversity, and the structure, form, and management of features for dormice. Habitat connectivity was assessed from desk-based resources.

## Water Vole (Arvicola amphibious)

4.10 Water voles are usually found on the margins of slow-flowing rivers, streams, ditches and water bodies and spend most of their time foraging through vegetation. They leave a vole-sized length of cuttings piled up wherever they feed, and these can provide distinctive signs of their presence. They favour steeps banks, but they can also live in open reedbeds by weaving football-sized nests into stems above the water-line. In addition, they burrow into tussocks of aquatic plants along exceptionally shallow margins and are surprisingly tolerant of polluted water.

#### **Eurasian Otter (***Lutra lutra***)**

- 4.11 Otters have been part of the British fossil record for half a million years. Of the thirteen species in the world, the Eurasian otter is native to Britain. Otters are generally nocturnal; most prey is fish and shellfish. They hold large territories, typically covering many kilometres, with male territories overlapping two or three females.
- 4.12 Searching the stream banks for evidence of spraints, tracks, feeding remains, holts and couches.

#### Barn Owl (Tyto alba)

- 4.13 Barn owls are in rural Britain where rough grassland in fields, field margins, ditches, dykes and riverbanks are available for foraging. They generally select nest and roost sites free from excessive human disturbance; most commonly those associated with agricultural buildings and mature trees which stand alone in fields or those in a hedgerow or along the woodland edge with trunks of a sufficient girth:
  - Ash (Fraxinus excelsior), sycamore (Acer pseudoplatanus) and crack willow (Salix fragilis): 0.5 m diameter or more (>80 years old),
  - Horse chestnut (Aesculus hippocastanum) and beech (Fagus sylvatica): 0.75 m
     diameter or more (>150 years); and,
  - Oak (Quercus robur): 1.5 m diameter or more (>250 years).



4.14 Barn owls can utilise a variety of different habitat types. Fields of rough grassland provide the most prime foraging habitat in mainland Britain. In particular, rough grassland corridors along watercourses, roadsides, arable field margins, woodland edge, and occasionally wide woodland rides. The type of grassland can influence the suitability as a feeding resource which the structural composition can define:

#### a) Optimal habitat:

These habitats are associated with the optimum habitat for field voles (*Microtus agrestic*) for breeding, foraging, and shelter. In turn, they are of the highest value to barn owls. These habitats are usually permanent, unimproved or semi-improved grassland, rank and heterogeneous. The grasslands tend to be of a mixed height and with a high abundance of raised tussocks coupled with a small litter layer or 'thatch'. They tend to receive periodic management.

#### b) Sub-optimal habitat:

Habitats are sub-optimal to field voles and are of intermediate and often transient value to barn owls. This improved or semi-improved grassland has a homogeneous, more even-height sward, sometimes displaying some lush and emerging tussock structure but little sign of a litter layer or 'thatch'. It can sometimes constitute a mature clover/grass ley and usually receives some level of farm management such as occasional fertilisation, annual topping or light grazing.

## c) Poor habitat

These habitats offer very poor habitat for field voles and most other small mammals and are of low value to barn owls. These improved grasslands are characterised by a homogeneous sward, often kept short throughout the year, with no tussock structure and devoid of any litter layer at their base. They are usually mown closely for hay or silage, heavily grazed by sheep, horses or cattle or used for public amenities. Grasslands overgrown with scrub can restrict barn owls from hunting, which also fall into this habitat category.

#### d) Other Habitats

Non-grassland habitats, such as arable fields and mature woodland, generally have little or no value as a permanent foraging resource to barn owls. Arable fields containing



cereals, rapeseed, or other food crops do not provide suitable habitat for field voles. However, at certain times of the year, such as during harvest, they can, for short periods, expose wood mice (*Apodemus sylvaticus*) and temporarily attract barn owls.

# **Breeding Birds**

- 4.15 Birds breed in a wide range of habitats, e.g. woodlands, hedgerows, parks and buildings. Some birds will lay eggs directly on the ground without building a nest.
- 4.16 A visual survey was undertaken to evaluate the habitats associated with potential activity for breeding birds.

#### **Bats**

- 4.17 Bats use various landscapes or habitats to feed, roost, and travel throughout the year. They use hunting grounds or foraging habitats to find food and commuting habitats to travel between roosts and foraging habitats.<sup>8</sup> All UK bat species eat insects. Some bats prefer waterways; others prefer woods or grassland. Habitat choice can be species-specific, and some bats will journey further to seek their preferred habitat.
- 4.18 Bats utilise woodland edges, rivers, hedgerows and other linear features as corridors to commute from one area to another. e.g. roosts to foraging areas. If these commuting routes are severed, it prevents movements and possible links to foraging habitats.
- 4.19 Besides roosting in buildings, bats can use trees to rest, give birth, raise young and/or hibernate. Roosts may be in the following features:
  - Woodpecker holes, natural cracks and rot holes in trunks and branches;
  - Frost cracks;
  - Trunk and branch splits;
  - Hollow sections of trunk and branches;
  - Loose bark:
  - Cavities beneath old root buttresses and coppice stools;
  - Dense epicormic growth; and,
  - Dense ivy cover.

<sup>&</sup>lt;sup>8</sup> Bat Conservation Trust



- 4.20 Roosts of bats in trees may be identified from the following field signs:
  - Black stains beneath cracks, splits, and other features where bat droppings have fallen;
  - Dark marks at entrance points where bats have rubbed against the wood and left natural body oils;
  - Feeding remains beneath roosts, such as insect wings;
  - Chattering of bats;
  - Bat droppings under access points;
  - Scratch marks around a feature (cavity or split) caused by bat claws;
  - Urine stains below the entrance or end of split;
  - Large roosts or regularly used sites may produce an odour; and,
  - Flies around the entrance, attracted by the smell of guano.
- 4.21 Veteran trees typically exhibit many of these features. They should be sites with clear potential, but any tree possessing one or more such features may host bats. Trees can be suitable, but oak and beech are often preferred. However, bats rarely restrict themselves to one tree. They change their roost sites frequently, sometimes every two to three days, looking for minor differences in temperature and humidity.

#### Reptiles

- 4.22 A habitat suitability assessment involved looking for the presence of factors that would increase the suitability of the site for reptiles, such as:
  - Habitat heterogeneity ~ reptiles occupy a dynamic, successional habitat.
     Consequently, their requirements are met only in certain stages, e.g. a grass/scrub mosaic provides an ideal combination of micro-habitats for thermoregulation.
     Significant features include uniformity of habitat structure and increased shading.
  - Topography ~ the shape and structure of the ground and its features are vital components of any reptile habitat, e.g. providing south-facing basking opportunities.
  - Vegetation structure ~ the structural complexity of vegetation will impact prey
    availability, basking opportunities as well, and sheltering, e.g. a good grassland
    structure will show a variation from short sward to scrub;



- Hibernation sites ~ a lack of hibernation sites means that reptile occupancy of a site may be seasonal. Hibernation sites are a crucial part of a reptiles life cycle;
- Prey availability ~ an essential aspect of whether reptiles will be present at a site will be prey availability;
- Predators ~ areas with high numbers of predators can have an impact on the likely presence of reptile species even if the habitat affords good cover;
- Public pressure ~ site with public pressure may influence the management.
- Management ~ grazing/mowing intensity can have a significant positive or negative impact on the suitability of the habitat for reptiles; and,
- Connectivity ~ colonisation of remote sites may occur very slowly or not depending on the dispersal abilities of different species.

## **Great Crested Newts (Triturus cristatus)**

- 4.23 A habitat suitability assessment assessed the potential of the site to hold great crested newts. Before visiting the site, searches on Google Maps and Magic Maps evaluated the habitat types within the broader landscape. In addition, the great crested newt risk zone was accessed if available. Furthermore, the presence of factors suitable for great crested newts that would increase the suitability of the site for great crested newts was assessed, such as:
  - The presence of suitable breeding place (water bodies) on-site and within 500m of the site in the broader landscape;
  - Habitat connectivity between ponds (if present) in the broader landscape and onsite;
  - The condition of the ponds, whether there were factors that would render them unsuitable for great crested newts such as fish;
  - Land uses surrounding the site that may affect the potential of the site to hold great crested newts, such as agriculture;
  - Type of suitable habitat on-site such as scrub/grassland mosaic;

<sup>&</sup>lt;sup>9</sup> Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10 (4), 143-155



- Patches of woodland in the broader landscape that can provide terrestrial habitat;
- Any barriers between known populations of great crested newts such as roads; and,
- Hibernation features on-site for great crested newts, such as log and rubble piles.

#### White-clawed Crayfish (Austropotamobius pallipes)

- 4.24 The white-clawed crayfish is Britain's only native species of freshwater crayfish. Although locally abundant in some areas of England and Wales, the white-clawed crayfish has declined dramatically in recent years. As a result, it is under threat throughout its range in Britain and other regions of Europe. The principal causes of decline are competition from non-native crayfish and a lethal disease carried by introduced species.
- 4.25 Habitat deterioration and loss can also have significant impacts on remaining populations. Maintenance and enhancement of habitat form an essential part of the conservation strategy for white-clawed crayfish. Habitats can be a factor in isolating populations. A feature in reach of the watercourse may form a partial, or even a complete barrier to the movement of white-clawed crayfish, for example:
  - a major weir, dam or waterfall;
  - a length of highly modified channel lacking in suitable habitat;
  - a fast-flowing flume or culvert;
  - a dried-up section of a channel; or,
  - poor water quality.
- 4.26 A refuge is only suitable while it stays free of material, or the crayfish can push out the material. Accumulation of soft, loose silt makes refuges unfavourable for crayfish. The fine sediments clog and irritate the gills of crayfish and other gill-breathing invertebrates. Bacterial decomposition of organic fines can lead to localised de-oxygenation.
- 4.27 White-clawed crayfish of all ages need refuges. Juvenile crayfish are especially vulnerable to predation by fish, ducks and other water birds, otter and mink, carnivorous dragonfly larvae and other predatory invertebrates, including adult crayfish.
- 4.28 Acceptable methods for surveying crayfish include manual searching and hand netting when the water is clear and has low flow.



#### Hedgehog (Erinaceus europaeus)

- 4.29 Hedgehogs have declined, and in 2007 hedgehogs were made a UK Biodiversity Action Plan priority species. Various sources identified several negative factors, including habitat loss and fragmentation, road mortality, pesticides and other environmental contaminants, and various anthropogenic hazards, including disturbance.
- 4.30 A critical factor in the UK's long-term decline is likely to be the conversion of small-scale permanent pasture and rough grazing to larger-scale intensive arable production, coupled with growing urban development. The result is habitat loss and degradation with reduced availability of suitable safe nesting sites and invertebrate-rich foraging areas.
- 4.31 Hedgehogs are our largest insectivore requiring plenty of supply of earthworms, beetles and caterpillars to survive. They also consume invertebrates, including slugs, snails, earwigs, spiders and harvestmen.
- 4.32 Hedgehogs are found in various habitats, including urban gardens, rural pastures, meadows, woodland edges and hedgerows.
- 4.33 An assessment for Hedgehogs included field signs, direct observation and habitat appraisal.

#### **Buildings and other structures**

4.34 Any buildings or other structures on site were surveyed. The surveys comprised an external visual inspection and an internal search (where safety allowed) to look for signs of, or potential for, protected species. Indicators could include live animals, carcasses, droppings, feeding remains and nesting material. A ladder, high-powered torch, and angled mirror were available as required.

#### 5.0 Results

## Site location and description

5.1 The site was surveyed on the 23<sup>rd</sup> of July 2022. A risk assessment was completed, and all appropriate PPE was worn. The client granted the surveyor access to the site.

#### **Desk Study**

#### Designated sites and habitats of principal importance

- 5.2 The following habitats were recorded:
  - Special Protection Area/Special Area of Conservation within 5km: No (Appendix 2)



- Site of Special Scientific Interest (SSSI) within 2km: Yes (Appendix 3)
- Ancient Semi-Natural Woodland within 1km: Yes (Appendix 4)
- Priority habitat within 50 metres: Yes (Appendix 5)
- Ponds within 500 metres: No.
- River, streams or water-filled ditches within 100 metres: No dry ditch
- 5.3 No protected species were granted a European licence with 1 km (Appendix 6)

## **Habitat Survey**

#### **Building and Hard Standing**

5.4 Several disused sheds were present, including sheds for horses.

#### Other neutral grasslands

- The area resembled neutral grassland. Grasses included crested dog's tail (*Cynosurus cristatus*), ryegrass (*Lolium perenne*), cocksfoot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), meadow grass (*Poa trivialis*), sweet vernal (*Anthoxanthum odoratum*), Red fescue (*Festuca rubra*), false oat grass (*Arrhenatherum elatius*) and soft brome (*Bromus mollis*).
- 5.6 Herbs included cleavers (*Galium aparine*), curled dock (*Rumex crispus*), creeping buttercup (*Ranunculus repens*), spear thistle (*Cirsium vulgare*), black medic (*Medicago lupulina*), oxeye daisy (*Leucanthemum vulgare*), yarrow (*Achillea millefolium*), black knapweed (*Centaurea nigra*), St Johns wort (*Hypericum perforatum*), Birds foot trefoil (*Lotus corniculatus*), field bindweed (*Convolvulus arvensis*), ribwort plantain (*Plantago lanceolata*), prickly sow thistle (*Sonchus asper*) and nettles (*Urtica dioica*). In addition, Bramble (*Rubus fruticosus* agg.), dog rose (*Rosa canina*), and blackthorn (*Prunus spinosa*) saplings were within the grassland.
- 5.7 A area of bracken (*Pteridium aquilinum*) and ant hills was present.

#### Scrub

5.8 An area of blackthorn (*Prunus spinosa*) scrub linked the grassland to the young woodland.

#### Young woodland

5.9 The woodland included hazel (*Corylus avellana*) coppice with several other species such as ash (*Fraxinus excelsior*), oak (*Quercus robur*), hawthorn (*Crataegus monogyna*) and elder (*Sambucus nigra*). Nettles (*Urtica dioica*) dominated the ground vegetation with Jack by the Hedge (*Alliaria petiolate*), cow parsley (*Anthriscus sylvestris*), comfrey (*Symphytum* spp.),



hemlock (*Conium maculatum*). In addition, a small area of pendulous sedge (*Carex pendula*) and reed (*Phragmites australis*) were present.

#### **Protected Species**

#### Habitat Suitability for Badger (Meles meles)

5.10 There were no suitable habitats for Badgers. Therefore, this species will not require further consideration or survey.

#### Habitat Suitability for Hazel Dormouse (Muscardinus avellanarius)

5.11 There is suitable habitat to support dormice within the site boundary. Therefore, this species will not require any further consideration or survey.

## Habitat suitability for Water Vole (Arvicola amphibious)

5.12 There is no suitable habitat to support water voles. Therefore, this species requires no further consideration or survey.

#### Habitat suitability for Eurasian Otter (Lutra lutra)

5.13 No evidence of Eurasian otter was recorded on-site and therefore required no further consideration or survey.

#### Habitat suitability for Barn Owl (Tyto alba)

5.14 There were no roosting or breeding opportunities for barn owls within the site. Therefore, this species needs no further consideration or survey.

#### **Habitat suitability for Breeding Birds**

5.15 No birds were observed on-site. Therefore, this group needs no further consideration or survey.

#### **Habitat suitability for Bats**

5.16 There were no features for the potential to support roosting bats. Therefore, this group needs no further consideration or survey.

#### **Habitat Suitability for Reptiles**

5.17 The site contains no suitable habitat features for reptiles to be present. Therefore, this group needs no further consideration or survey.

#### Habitat Suitability for Great Crested Newts (Triturus cristatus)

5.18 The site contains no habitat features for amphibians to be present. Therefore, this species needs no further consideration or survey.



#### White Clawed Crayfish (Austropotamobius pallipes)

5.19 There was no suitable habitat for white-clawed crayfish on-site. Therefore, this species needs no further consideration or survey.

#### Hedgehog (Erinaceus europaeus)

- 5.20 Hedgehogs regularly occur in urban environments as well as more rural locations. In addition, hedgehogs may use the site for foraging and shelter.
- 5.21 No specific further survey is required, but they can benefit from sympathetic habitat management, particularly in built-up areas. Of crucial importance is ensuring hedgehogs can freely access the site.

## **Survey Constraints**

- 5.22 The survey was undertaken during the optimal survey season. Given the nature of the site, an accurate record of the habitats and species present was recorded. It may be that additional plant species were present, which were not visible at the survey time. It is important to note that species diversity and dominant plant assemblages may increase or change throughout the season.
- 5.23 Whilst every effort has been made to provide a comprehensive description of the site, no single investigation could ensure the complete characterisation and prediction of the natural environment. However, the survey provides a general assessment of the potential nature conservation value of the site and does not include a definitive plant species list.

#### 6.0 Conclusion

#### **Habitats**

6.1 Natural England has not designated the area as a site of importance for nature conservation at the national, regional or county level.

## **Protected species**

6.2 The habitats for protected species were evaluated for their likelihood of providing shelter, roosting, foraging, basking and nesting.<sup>10</sup> The likelihood of protected species is negligible, and no additional surveys are needed.

#### 7.0 Recommendations

<sup>&</sup>lt;sup>10</sup> National Planning Policy Framework, 2021, paragraph 180.



7.1 Any biodiversity enhancement should include the native species mix to improve the diversity and adapt to climate change.

## Appendix 1: Legislation and planning policy

## The Wildlife and Countryside Act 1981 (as amended)

Full legislation available - https://www.legislation.gov.uk/ukpga/1981/69/contents

## The Conservation of Habitats and Species Regulations 2019 (as amended)

Full legislation available – The Conservation of Habitats and Species (Amendment) (EU Exit)
Regulations 2019 (legislation.gov.uk)

## Natural Environment and Rural Communities (NERC) Act 2006

Full legislation available – Natural Environment and Rural Communities Act 2006 (legislation.gov.uk)

#### The Countryside and Rights of Way (CRoW) Act 2000

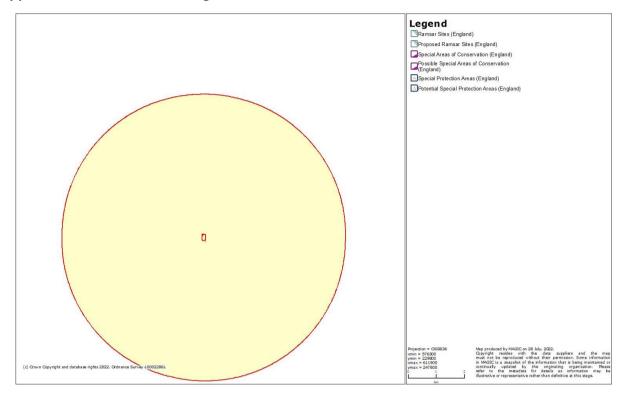
Full legislation available – http://www.legislation.gov.uk/ukpga/2000/37/contents

## **Protection of Badgers Act 1992**

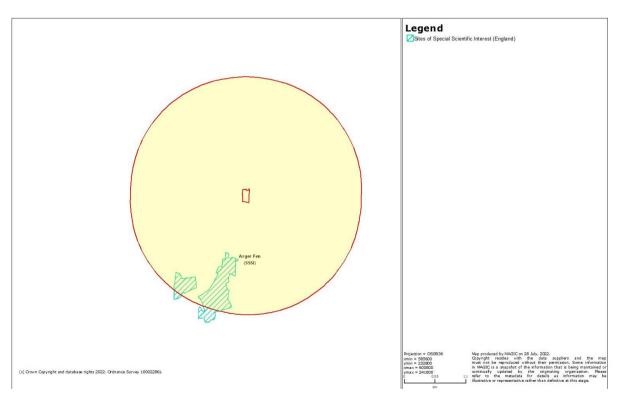
Full legislation available – http://www.legislation.gov.uk/ukpga/1992/51/contents



**Appendix 2: International Designated sites** 



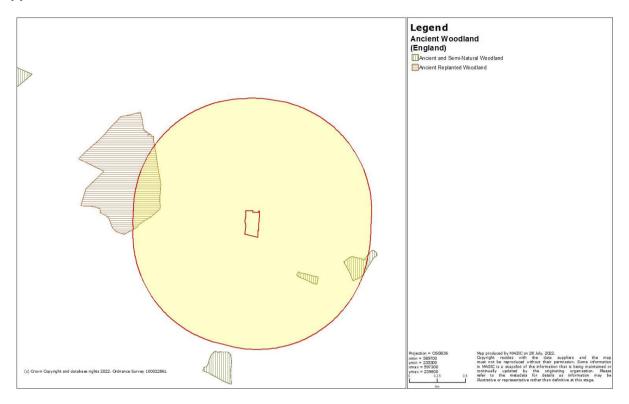
**Appendix 3: National Designated Sites SSSI** 



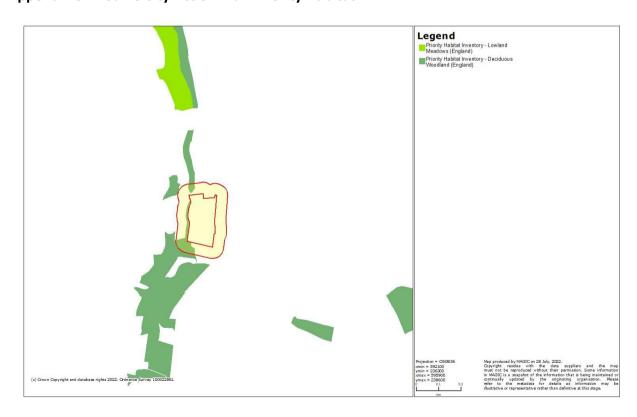
Note: Natural England maps do not currently include the OS layer in the printout.



# **Appendix 4: Ancient Woodland**

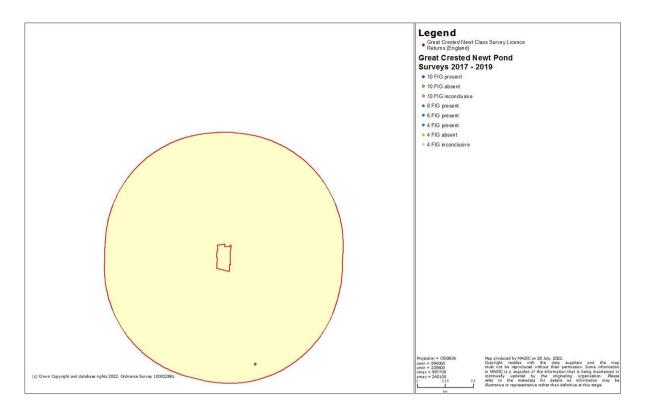


**Appendix 5: Biodiversity Action Plan Priority Habitat** 





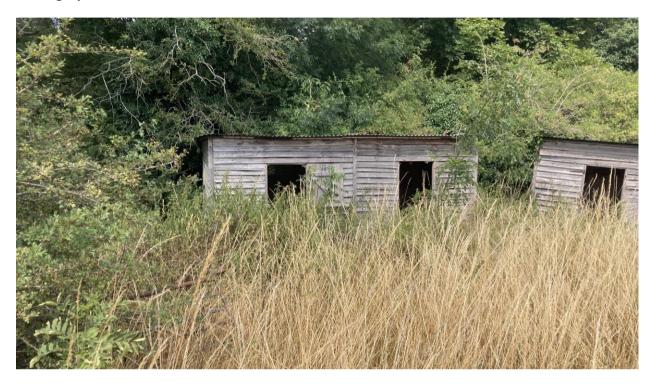
# Appendix 6: European protected species licence





Appendix 7: Photographic evidence

Photograph 1: The disused sheds



Photograph 2: The grassland





Photograph 3: The grassland



Photograph 4: Disused sheds





Photograph 4: Hazel coppice



Photograph 5: Woodland

