# Bell Meadow, Heveningham

# PRELIMINARY ECOLOGICAL APPRAISAL

**September 2019**

| ***Project no.*** | ***Report*** | ***Date*** |
|---|---|---|
| 047/19 | Final | 17th October 2019 |
| ***Prepared by*** | ***Checked and approved by*** | |
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**Prepared for:**
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**DISCLAIMER**

This report has been compiled in accordance with BS 42020:2013 Biodiversity - Code of practice for planning and development, as has the survey work to which it relates.

The information, data, advice and opinions which have been prepared and provided are true and have been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional *bona fide* opinions.

This survey was carried out and an assessment made of the site at a particular time. The evidence of the report can be used to draw conclusions as to the likely presence/absence of protected species and the impacts of any future development works. This survey is a snapshot in time and further work may be necessary, for instance, if there is a delay, or when applying for a Natural England European Protected Species Licence, or the requirement for a Habitat Regulations Assessment.

Every effort has been made to date to provide an accurate assessment of the current situation, but no liability can be assumed for omissions or changes after the survey has taken place.

The contents of this report should not be taken to indicate support of any planning application or subsequent development, on the part of SWT Trading Ltd or its parent company, Suffolk Wildlife Trust. Suffolk Wildlife Trust reserves the right to object to, or comment upon, any planning application that may arise on this site should any unacceptable wildlife impacts remain unresolved or should any relevant planning policies be compromised.

It is our policy to submit biological records to Suffolk Biodiversity Information Service (SBIS), for the purposes of increasing knowledge of the distribution of species within Suffolk. If you wish to discuss this, please contact us within three months of submission of this report.

## Contents

**EXECUTIVE SUMMARY**

Heveningham Parish Council commissioned SWT Trading Ltd to carry out a Preliminary Ecological Appraisal on an area of land north of The Street, Heveningham, part of which is proposed for a public community area.

There are no statutorily designated sites within 2km but there are 2 non-statutorily designated County Wildlife Sites within this zone. It is predicted that there will be 'negligible' impact upon these sites as a result of this development.

The site contains a mosaic of habitats, with scrub and grassland being dominant. The site has the potential to support several protected and/or Priority species (Species of Principal Importance) or groups including foraging and roosting bats, reptiles, otter, nesting birds (including some Birds of Conservation Concern including house sparrow and dunnock) and hedgehog. No invasive species listed on Schedule 9 of the Wildlife & Countryside Act, 1981 were recorded.

Recommendations to avoid impacts upon bats, otter, reptiles, breeding birds and hedgehog have been made. In addition, there is the opportunity to enhance the floristic diversity of the grassland through management. Specific details have been provided in two SWT Factsheets (Grassland Creation and Grassland Management for wild flowers (provided separately) .

# 1. INTRODUCTION

## 1.1 General Introduction

This report has been prepared by SWT Trading Ltd: Ecological Consultants, the ecological consultancy of the Suffolk Wildlife Trust, for Heveningham Parish Council. It comprises the results of a preliminary survey to investigate the potential impacts on wildlife that would result from site clearance ahead of a proposed community area including childrens play area, seating, sports area and wildlife areas.

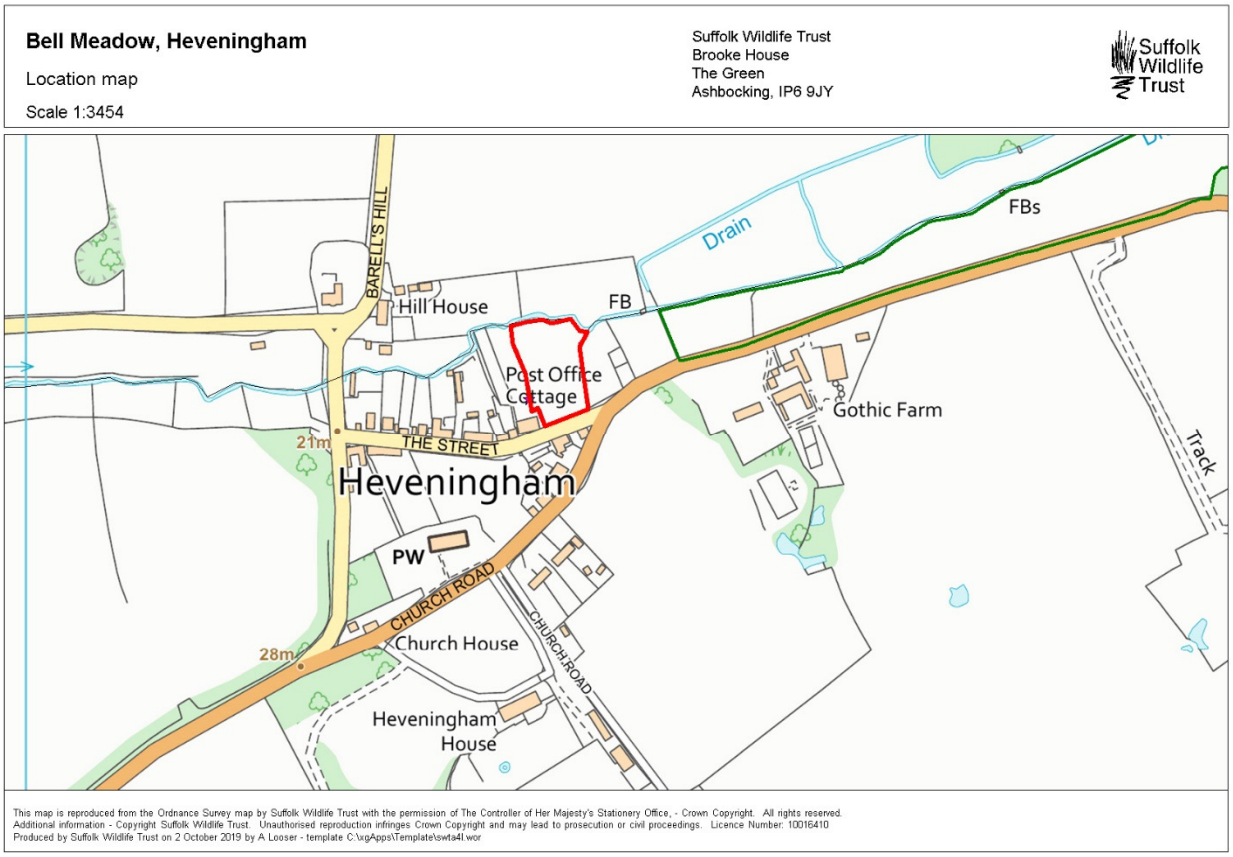
## 1.2 Location and Description of Site

The site is a small meadow situated to the north of The Street, Heveningham (TM 334 727) to the east of the main village settlement. The River Blyth forms the northern boundary of the site and there is a small area of allotments to the east. The river also forms part of the parish boundary between Heveningham and Ubbeston.

Dense scrub currently occupies the southern part of the site, whilst the northern part consists largely of poor semi-improved grassland with patches of dense scrub and some mature trees, particularly along the river.

Gothic Farm Meadow County Wildlife Site (CWS), which is a species-rich meadow lies approximately 70m east of the site.

Figure 1. Site Location




## 1.3 Outline of Proposed Works

The proposal is to create a multi-purpose community space including a childrens play area, seating, short mown sports area and woodland garden.

## 1.4 Objectives of Survey

The aim of the survey was to determine how the proposed work might impact on wildlife or habitats that are of significance in a local, regional or national context. This primarily involved the consideration of species that have legal protection, but also included an assessment of any other noteworthy species and communities, as well as the type and quality of the habitats.

A secondary aim was to identify any constraints or considerations placed upon the re-development of the site as the result of the flora or fauna present.

The advice given in this report is valid for 24 months. If, after this time, the proposed work has not been undertaken, the advice of an ecologist should be sought as to the possible need for a new survey prior to submitting a planning application or implementing the scheme.

Notwithstanding this, any obvious material changes in the area, such as the excavation of holes that might be new badger setts, the re-growth of tall vegetation, noting of invasive plant species or changes in the scheme design should be reported to SWT Trading Ltd. prior to any work commencing on site so that the advice herein can be revised, if necessary.

## 2. SURVEY METHODOLOGY

Before the site visit, a search of the Suffolk Biodiversity Information Service database was made for existing records of legally protected species and for sites with conservation designations within two kilometres of the proposed development site.

A site visit was made on 19th September 2019 by Alison Looser. Habitats on the site were mapped in accordance with the Phase 1 Habitat survey methodology (JNCC, 2010). The site was surveyed for signs of legally protected or otherwise noteworthy species, such as those of Principal Importance in England (Priority species included on the "Section 41 list" as required by the Natural Environment and Rural Communities Act 2006) and Red Data Lists, and assessed for habitats that might support legally protected species. Any habitats of value in their own right or that appeared to be of particular value to wildlife were also recorded. These features are identified on the Phase 1 map by means of Target Notes, which are then referred to in the text.

Where access was possible, the search extended beyond the boundary of the site, as populations of some species (*e.g.* badgers) living beyond the immediate boundary of the property could still be affected by activities upon it.

Specific searches and assessments were made as follows:

- Bats – identification of potential roost sites and searches for evidence of activity, assessment of foraging habitat and commuting routes;
- Water voles - assessment of suitable habitat and search for field signs including droppings, latrines and burrows;
- Otter – assessment of suitable habitat and search for field signs including footprints, spraints and holts;

- Great Crested Newts – assessment of suitable habitat including any ponds within 250m of the site;
- Reptiles – assessment of suitable habitat and potential hibernation sites;
- Birds – assessment of nesting habitat, e.g. hedgerows, trees, scrub, buildings; likelihood of the presence of species listed within Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), identified as a Bird of Conservation Concern (Eaton *et al.* 2015) or other significant assemblages;
- Species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) – where appropriate, identification and mapping of such species;
- Badger – search for and mapping of setts, pathways, footprints, holes, latrines, hairs;
- Species of Principal Importance in England listed in the Natural Environment and Rural Communities (NERC) Act 2006 such as hedgehogs, swifts and toads.

Where it was possible to do so, potential impacts were identified and assessed in accordance with the Institute of Ecology and Environmental Management's *Guidelines for Preliminary Ecological Appraisal* (CIEEM 2017) and *Guidelines for Ecological Impact Assessment in the UK and Ireland* (CIEEM, 2018), with particular reference to the geographic frame of reference that it contains. This suggests valuing ecological resources in the following context: International, UK, National (England), Regional, County, District, Local/Parish and Site. The scale and significance of each potential impact is then assessed using published guidance, which varies from species to species, and the risk of potential impacts occurring (without mitigation) is quantified in accordance with the CIEEM guidelines, using either 'certain' (95% probability or higher), 'probable' (50% to 94%), 'unlikely' (5% to 49%) or extremely unlikely (less than 5%). A combination of these factors can then be used as a guide to determining appropriate mitigation.

## 2.1 Competence

Alison Looser is an experienced field ecologist with extensive experience of Extended Phase 1 survey, she is also highly competent at water vole, otter, badger, bat, great crested newt and hazel dormouse surveys (Natural England survey licences for the latter three).

### 2.2 Constraints of Methodology

This survey was designed to provide a preliminary assessment of the site's wildlife value. No detailed surveys have been made for invasive or protected species, or specific botanical or faunal groups. Observations were made on and around the site to establish the potential of the habitats to support legally protected and other noteworthy species. Although presence or absence has been determined where possible, for some species-specific survey techniques or levels of survey effort are needed. Where necessary, additional survey work is recommended.

The wildlife and habitats present on any site are subject to change over time. All single-visit surveys of this kind can only record the situation as it is at the time, rather than providing a comprehensive analysis of the site's ecology.

## 3. LEGAL CONSIDERATIONS

The impact assessment and recommendations set out below are based on professional experience and available guidelines. While there is some interpretation of current legislation on this basis, it should be noted that the authors do not have legal training. In the case of any uncertainty it is recommended that a specialist environmental lawyer be consulted.

### 3.1 Planning Policy

The National Planning Policy Framework (NPPF) states that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity. Government Circular 06/2005 'Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system' (which is still live following the publication of the NPPF) states in paragraph 99: "It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."

The Natural Environment and Rural Communities (NERC) Act 2006 imposes an obligation on all public bodies, including local authorities, to have regard to the conservation of biodiversity, particularly of those species and habitats identified as being of principal importance. Section 41 of the Act requires a list to be published that identifies such species and habitats, and for

England these are now referred to as Species and Habitats of Principal Importance in England. Local authorities must have regard to the conservation of biodiversity in England, when carrying out their normal functions in order to implement their duty under section 40 of the NERC Act.

**Strategic Policy SP14: Biodiversity and Geodiversity within the Suffolk Coastal Local Plan (Core Strategy and Development Management Policies July 2013)** sets out the biodiversity policy of the Suffolk coastal district. The policy seeks to protect and enhance Biodiversity and geodiversity 'using a framework based on a network of: designated sites, wildlife corridors and links, the rivers, estuaries and coast, identified habitats and geodiversity features, landscape character areas and protected species.'

**Development Management Policy DM27 – Biodiversity and Geodiversity states that:**

All development proposals should:

(a) protect the biodiversity and geodiversity value of land and buildings and minimise fragmentation of habitats;

(b) maximise opportunities for restoration, enhancement and connection of natural habitats; and

(c) incorporate beneficial biodiversity conservation features where appropriate.

Reference is made to the hierarchy of designated sites (Global, European, UK and Local). The supporting text also highlights that in order to protect nature conservation, it will also be important to protect habitats outside designated sites and to protect particular species, such as those which are rare or protected.

### 3.2 Habitats

The Conservation of Habitats and Species Regulations 2017 (as amended) enshrine the EU Birds Directive (The European Community Council Directive on the Conservation of Wild Birds (2009/147/EC)) and EU Habitats Directive (The European Community Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC)) into English law, with Natural England as the appropriate nature conservation organisation for England. Ramsar sites are wetlands of international importance designated under the Ramsar Convention. Special Protection Areas (SPA) and Special Areas of Conservation (SAC) (Natura 2000 sites) are defined in the regulations as a 'European site'. The Regulations define competent authorities,

if a plan or project is likely to have a significant effect on a European site the competent authority is required to make an appropriate assessment of this effect in accordance with the requirements of the Regulations.

Sites of Special Scientific Interest (SSSIs) give legal protection to the best sites for wildlife and geology. Natural England holds responsibility for identifying and protecting SSSIs in England under the Wildlife and Countryside Act 1981 (as amended). Where public bodies request to carry out operations on a SSSI which have been identified as potentially damaging the special interest features of the SSSI, then assent under 28H of the Act is required.

County Wildlife Sites (CWS) are a non-statutory designation which is recognised by the National Planning Policy Framework and all Suffolk Local Planning Authorities within their Planning Policy.

### 3.3 Bats

Under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended) all species of bats receive full protection such that it is an offence, amongst other things:

- to deliberately capture, kill or injure any bat;
- to damage or destroy a breeding site or resting place used by bats (whether bats are in it at the time or not);
- to deliberately disturb bats in a way that is likely to impair their ability to migrate, hibernate, survive or reproduce, or in a way that is likely to affect significantly their local distribution or abundance;
- to intentionally or recklessly disturb bats while occupying a place of shelter or protection, or attempt to do so;
- to intentionally or recklessly obstruct access to any place of shelter or protection, or attempt to do so.

Any work that would otherwise result in one or more of these criminal offences must be carried out under a Natural England licence.

Damage to or destruction of breeding sites and resting places is an absolute offence and so there is no defence available within the law, even if the persons involved were not aware of a habitat's use by these animals. Courts will have regard to whether or not the impact could have been reasonably avoided in deciding upon a sentence. In all cases the risk of an offence occurring can be minimised by taking all reasonable precautions, as set out in available guidance.

The following bat species are those Species of Principal Importance in England that occur regularly in Suffolk: barbastelle, noctule, soprano pipistrelle and brown long-eared. However, there is also a Suffolk Grouped Plan for all bat species.

### 3.4 Otter

Otters are fully protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 such that it is an offence, amongst other things:

- to deliberately capture, kill or injure any otter;
- to damage or destroy a breeding site or resting place used by otters (whether they are in it at the time or not);
- to deliberately disturb otters in a way that is likely to impair their ability to hibernate, survive or reproduce, or in a way that is likely to affect significantly their local distribution or abundance;
- to intentionally or recklessly disturb otters while occupying a place of shelter or protection, or attempt to do so;
- to intentionally or recklessly obstruct access to any place of shelter or protection, or attempt to do so.

Any work that would otherwise result in one or more of these criminal offences must be carried out under a Natural England licence.

Otter is also a Species of Principal Importance in England.

### 3.5 Water vole

By virtue of their inclusion in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), it is an offence, amongst other things:

- to intentionally kill, injure or take water voles;
- to intentionally or recklessly damage, destroy or obstruct access to places used by water voles for shelter or protection (*i.e.* their burrows);
- to intentionally or recklessly disturb water voles while occupying a place of shelter or protection.

The Act does not include a provision for a licence to be granted for offences involving water voles as a result of the improvement or maintenance of waterways but there is a defence in the Act that permits otherwise illegal actions if they are the incidental result of a lawful operation and could not reasonably be avoided. To use this defence it would be necessary to demonstrate that all reasonable measures had been taken in an effort to avoid the impact. This would mean considering alternative development plans, undertaking precautionary measures and carrying out appropriate mitigation work.

Water vole is also a Species of Principal Importance in England.

### 3.6 Great Crested Newt

Great crested newts are fully protected by the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017. This makes it an offence, amongst other things:

- to deliberately capture, kill or injure great crested newts;
- to damage or destroy a breeding site or resting place used by great crested newts;
- to deliberately disturb great crested newts in a way that is likely to impair their ability to migrate, hibernate, survive or reproduce, or in a way that is likely to affect significantly their local distribution or abundance;
- to intentionally or recklessly disturb great crested newts while they are occupying a place of shelter or protection, or attempt to do so;
- to intentionally or recklessly obstruct access to any place of shelter or protection, or attempt to do so.

Any work that would otherwise result in one of these criminal offences must be carried out under a licence issued by Natural England. Guidelines produced by English Nature (which is now Natural England) state that any development work within 500 metres of a breeding pond should be carried out under a licence from Natural England, if it is likely that the population in the pond will be affected.

Damage to or destruction of breeding sites and resting places is an absolute offence and so there is no defence available within the law, even if the persons involved were not aware of a habitat's use by these animals. Courts will have regard to whether or not the impact could have been reasonably avoided in deciding upon a sentence. In all cases the risk of an offence occurring can be minimised by taking all reasonable precautions, as set out in available guidance.

Great crested newt is also a Species of Principal Importance in England.

### 3.7 Reptiles

All of the Suffolk species of reptiles are partially protected by the Wildlife and Countryside Act 1981 (as amended) such that it is an offence to:

- intentionally kill or injure any reptile.

There is no licensing system for reptiles, but there is a defence in the Act that permits otherwise illegal actions if they are the incidental result of a lawful operation and could not reasonably be avoided. For this defence to be used in a court of law it would be necessary to document and carry out a series of precautions and mitigation measures that seek to avoid the offence from being committed.

All reptile species are also Species of Principal Importance in England.

### 3.8 Birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence, amongst other things, to:

- Intentionally kill or injure any wild bird;

- Intentionally take damage or destroy the nest of any wild bird included in Schedule 1 (whether or not it is active);
- Intentionally take, damage or destroy the nest of any wild bird while that nest is in use or being built;
- Intentionally take or destroy the egg of any wild bird;
- Intentionally or recklessly disturb any bird species included in Schedule 1 of the Act while it is building a nest, or is in, on or near any nest containing eggs or young;
- Intentionally or recklessly disturb the dependent young of any bird included in Schedule 1.

Schedule 1 of the Act includes certain rare or threatened species. Licences to permit these offences can only be granted by Natural England for reasons of preserving public health or public safety.

### 3.9 Badger

Badgers receive legal protection under the Protection of Badgers Act 1992. This makes it an offence, amongst other things:

- to wilfully kill or injure a badger, or attempt to do so;
- to intentionally or recklessly damage, destroy or obstruct access to a sett;
- to intentionally or recklessly disturb a badger when occupying a sett, unless the action was the incidental result of a lawful operation and could not reasonably have been avoided.

Potentially unlawful activities can be made legal if they are covered by a licence, issued by Natural England.

### 3.10 Species of Principal Importance in England

Although the majority of Species of Principal Importance in England receive no direct legal protection, the Natural Environment and Rural Communities (NERC) Act 2006 places an obligation on local authorities to have regard to their conservation and this is most obviously brought to bear through their planning control functions. As such, the presence of such species can be a material consideration to a planning decision. Beyond this development

control function, it is good practice for any land manager to adhere to the underlying nature conservation principles.

### 3.11 Schedule 9 Plants and Animals

The Wildlife and Countryside Act 1981 (as amended) makes it an offence, amongst other things, to:

- plant or otherwise cause to grow in the wild any plant that is included in Part II of Schedule 9;
- to release or allow to escape into the wild any animal which is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state, or is included in Part I of Schedule 9 of the Act.

There is a defence available if it can be proven that all reasonable steps were taken to avoid the offence and due diligence was exercised.

## 4. RESULTS

### 4.1 Habitat

4.1.1 Habitat Description

The site is broadly split between two main habitat types; dense/continuous scrub and poor semi-improved grassland, with some scattered broad-leaved trees around the margins of the site. The grassland also has patches of tall ruderal vegetation. There is a native hedgerow along the southern boundary.

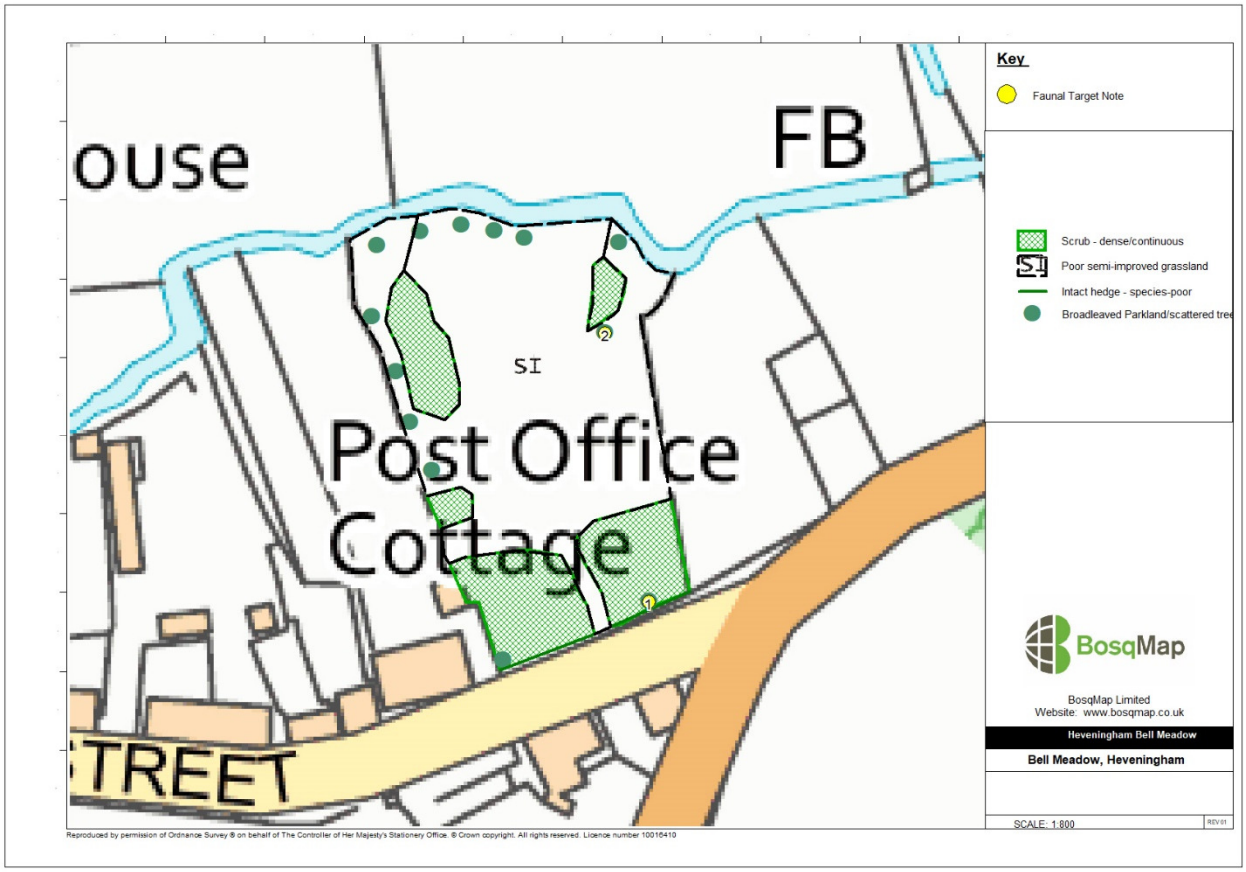
The scrub (A2.1 Scrub – dense/continuous) lies mainly in the south of the site, although there are also some smaller patches of it in the northern part. It is mainly comprised of bramble and blackthorn. There is a thick hedgerow along the road which is predominantly composed of blackthorn, elm and privet (J2.2 Species poor intact hedge)

The trees around the margins include willow, ash, field maple and sycamore (A3.1 Scattered broad-leaved trees).

The northern area of the site is an area of poor semi-improved grassland (B6 Poor semi-improved grassland). The majority of the grassland is dominated by grasses, particularly a mix of Yorkshire fog, cock's foot and false oat with common herbs including creeping thistle, nettle, broad-leaved dock, hogweed, mint spp, soft rush, yarrow, mugwort, ragwort, great willowherb and st john's wort spp.

The river Blyth has some emergent fools water cress with hemp Agrimony, reed canary grass and great willowherb along the banks

Figure 2. Phase 1 Map




4.1.2 Habitat Assessment

There are no statutorily designated sites within 2km of the site.

Although the habitats are currently of fairly low ecological value, the site lies adjacent to the River Blyth and is part of the wider ecological network within this area.

Table 1. County Wildlife Sites within 2km

| **Distance/ direction** | **Name and CWS Ref.** | **Description** |
|---|---|---|
| 70m E | Gothic Farm Meadows (Suffolk Coastal 89) | Species rich grassland. |
| 1.2km W | Ubbeston Wood (Suffolk Coastal 174) | Ancient woodland. |

## 4.2 Legally Protected Species

It should be noted that this section only covers species with legal protection that are likely to be relevant to the proposals. For example, species for which sale alone is an offence are not mentioned here.

### 4.2.1 Bats

There are several mature trees on site which have the potential to support a bat roost. In particular a mature ash tree on the southern boundary (Target Note 1) and a mature willow tree near the eastern boundary (Target Note 2). Both of these were assessed from the ground as having Moderate roost suitability. (See Table 2). It was not possible to fully assess all the trees.

The site has potential to be used by foraging and commuting bats as the River Blyth provides a good corridor. The foraging/commuting potential of the site has also been assessed as moderate.

Five species of bat have been recorded within 2km of the site, soprano pipistrelle, brown long-eared, natterers, Daubenton's and barbastelle, along with records of unidentified pipistrelle. The closest of which is located adjacent to the site.

This site is assessed as of 'Local' value for foraging bats.

Table 2: Guidelines for assessing potential suitability for bats (Collins, 2016)

| Suitability | Roosting Habitats | Commuting and Foraging Habitats |
|---|---|---|
| **Negligible** | Negligible habitat features on site likely to be used by roosting bats. | Negligible habitat features on site likely to be used by commuting or foraging bats. |
| **Low** | A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis by large numbers of bats (i.e. unlikely to be suitably for maternity or hibernation).<br>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. | Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.<br>Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or patch of scrub. |
| **Moderate** | A structure or tree with one or more potential roosting sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed). | Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.<br>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water. |
| **High** | A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. | Continuous, high quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.<br>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broad-leaved woodland, tree-lined water courses and grazed parkland.<br>Site is close to and connected to known roosts. |

4.2.2 Otter

Otter footprints were found at the north eastern end of the site on the river at TM 33435 72760. No evidence of a holt was discovered, however some of the mature trees along the river provide potential sites.

The site is likely to be of 'local' significance for otter.

4.2.3 Water voles

The River Blyth at the northern end of the meadow provides sub-optimal habitat for water voles as it is narrow and shady with shallow water. It is understood that the river dries out which also reduces the likelihood of water voles being present at this location. If the habitat were to improve, water vole could re-colonise the site.

There are records of water vole close to the site, with the closest record approximately 200m away.

4.2.4 Great Crested Newt

Although the terrestrial habitat is suitable for great crested newts, there are no ponds present within 250m of the site.

There are numerous records of GCN in the area including a cluster to the south of the site, however this is on the opposite side of the A1120 which is a busy road and therefore presents a substantial barrier to movement.

It is considered unlikely that GCN are present on site, therefore this species will not be considered further in this report.

4.2.5 Reptiles

Although no reptiles were observed during the survey, the habitat appears highly suitable with reasonable connectivity to other suitable habitat. The dense scrub and grass cover offer refuge and foraging opportunities. The habitat is particularly suitable for grass snake and slow worm.

Grass snake has been recorded within 2km of the site. The closest being approximately 100m from the site.

The site is likely to be of 'local' significance for reptiles.

4.2.6 Birds

The scrub with several berry producing species and grassland will attract a range of birds for nesting, over-wintering and foraging. During the survey a flock of house sparrows, a wood pigeon, blackbirds, blue tits and great tits were noted. House sparrow is listed on the Birds of Conservation Concern Red List 4 (BoCC4) and are UK Priority species.

The site assessment took place at a sub-optimal time for bird surveys. Feeding behaviour was observed, particularly amongst the house sparrows.

There are a number of bird records in the area. Several of these are from species which are likely to only pass through. The species recorded as desktop records include the following:

**BoCC4 Red List species:**

House sparrow, starling, song thrush, lesser redpoll, ring ouzel, skylark, tree pipit, yellow wagtail, spotted flycatcher, linnet, yellowhammer and marsh tit.

**BoCC4 Amber list species:**

Swift, dunnock, bullfinch and reed bunting.

**Birds protected under Schedule 1 of the Wildlife and Countryside Act (1981) (as amended):**

Barn owl

This site is likely to be of 'Local' significance for common assemblages of nesting birds but may also support declining species such as dunnock.

4.2.7 Badger

The nearest record of badgers is approx. 1km away and there was no observed badger activity during the survey. The river corridor provides potential habitat for foraging and sett creation.

If badgers were present, they would likely be of 'Local' significance.

## 4.3 Species of Principal Importance in England

This section considers those species listed by the Secretary of State, as required by Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 that are not covered in the preceding section. It should be noted that some of these species (formerly described as UK BAP species) do also receive legal protection, but not in a way that is considered relevant to this proposal. Furthermore, some of the species in the preceding sections are also Species of Principal Importance in England (see sections 3.3 *et seq.*).

Hedgehog

There are several records of hedgehog in the areas immediately surrounding the site, and there is optimal habitat within the site with dense scrub and varying grass sward heights. As well as for foraging, the site may represent an important local resource for nesting and hibernation. Hedgehog are a wide-ranging species, so it is possible that large numbers of hedgehog could utilise the site for hibernation if there are limited opportunities elsewhere in the locality.

Toad

Common toad has been recorded within 2km of the site but their presence on site is unlikely due to a lack of water bodies in the area, and the site being dry for the most-part.

Invertebrates

Cinnabar butterfly has been recorded within 2km and the site contains some suitable habitat with common ragwort, their larval foodplant, present.

### 4.3.1 Other Wildlife Issues

The habitats present on site represent suitable habitat for invertebrates. The grassland is likely to contain a diverse but typical assemblage of invertebrates. No butterflies were seen, however a number of common species are likely to be present during the year. Other common invertebrates such as crickets and grasshoppers are also likely to be present and the presence of the river will also provide habitat for dragonflies and damselflies.

The site is likely to support an assemblage of invertebrates significant at the 'local' level.

4.3.2 Schedule 9 Plants and Animals

Certain species listed within this Schedule have now become common and widespread (*e.g*. grey squirrel and muntjac deer) and are not dealt with here. Others, mainly plants but also including aquatic invertebrates, remain scarce in the wild, but threaten outward spread from gardens or established colonies in the wild.

No Schedule 9 species were recorded during the survey. However, a detailed invasive species search was not undertaken.

## 4.4 Limitations of the Survey

The survey was carried out at a sub-optimal time of year for most surveys including botanical, birds and bats.

## 4.5 Summary of Results

- The site contains a mosaic of habitats, with scrub and grassland being dominant.
- There are no statutorily designated sites within 2km but there are 2 non-statutorily designated County Wildlife Sites.
- The site may be used by foraging and roosting bats.
- The site contains habitat suitable of supporting reptiles.
- A common bird assemblage is likely to be present, but the site could also support birds of Conservation Concern including house sparrow and dunnock.
- Although the habitat is suitable, no evidence of badger was found during the survey.
- Priority species such as hedgehog are likely to be present and the site may represent an important hibernation resource for them.
- The site provides habitat for locally common invertebrates.

## 5. POTENTIAL IMPACTS AND ZONE OF INFLUENCE

### 5.1 Habitat

The impacts that may result from the proposals, as they are understood at present, are as follows:

- Loss of small area of scrub
- Alteration to the management of existing grassland

In the absence of mitigation, this proposal would result in a 'minor negative' impact on a site level.

### 5.2 Bats

The impacts that may result from the proposals, as they are understood at present, are as follows:

- Potential disturbance/killing/injury of bats and potential loss of roosting site resulting from pruning of mature trees

In the absence of mitigation, this proposal could result in a 'moderate negative' impact on a site level.

### 5.3 Otter

The impacts that may result from the proposals, as they are understood at present, are as follows:

- Potential disturbance to an otter

In the absence of mitigation, this proposal could result in a 'minor negative' impact on a site level.

### 5.4 Reptiles

If present, the impacts on reptiles that may result from the proposals, as they are understood at present are as follows:

- Injury/killing of reptiles
- Reduction in habitat suitable for reptiles

If reptiles are present, in the absence of mitigation, this proposal could result in a 'moderate negative' impact on a local level.

### 5.5 Birds

The impacts that may result from the proposals, as they are understood at present are as follows:

- If any trees or shrubs have to be cut or removed during the main breeding season, *i.e*. between March and August inclusive, there is a danger that active birds' nests may be damaged or destroyed and that eggs or nestlings may be destroyed
- Permanent loss of potential nesting opportunities

In the absence of mitigation, this proposal could result in a 'minor negative' impact on a local level.

### 5.6 Species of Principal Importance and other wildlife

The impacts that may result from the proposals, as they are understood at present are as follows:

- Injury/killing of Priority species such as hedgehog
- Loss of potential hedgehog breeding, nesting, hibernation and foraging habitat

In the absence of mitigation, this proposal could result in a 'moderate negative' impact at a local level.

## 6. RECOMMENDATIONS FOR MITIGATION AND ENHANCEMENT

The following recommendations are made on the assumption that the plans and proposals made available during the preparation of this report remain unchanged and, unless specified, are subject to the successful resolution of any planning application. Where further survey work is recommended that could be material to the planning application, it should be completed and the results made available to the Local Planning Authority prior to any planning decision being made.

The proposals should retain as much of the existing habitat as possible and integrate it within a landscaping scheme. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. It is desirable to reduce any potential impacts to 'negligible' but ideally, there should be an overall biodiversity 'net gain'. This means leaving biodiversity in a measurably better state post-development than it was beforehand. The forthcoming Environment Bill is to mandate 'biodiversity net gain'.

### 6.1 Habitats

The plans are to retain and improve much of the existing habitats on site. The proposed scrub should be cleared during the winter (see birds and hedgehogs below). It is proposed that part of the meadow will be underplanted with bulbs to provide early spring flowers, but there are additional opportunities to increase the biodiversity value of the grassland area through green hay, seeding and plug planting.

**Table 2: Methods and considerations for establishing wildflowers in existing grassland**

(Taken from SWT Factsheet: Grassland Creation)

| Method and the key considerations | **Key establishment management points** | **Resulting grassland** |
|---|---|---|
| Introduce herb-rich green hay<br>Select donor site with similar physical characteristics (soil type, pH, dampness etc).<br><br>Harvest donor meadow at optimum time for maximum seed catch<br>i.e. late June to early July (check meadow timing for best harvest). | Method 1: For a reseeded sward of low botanical diversity one method is to completely remove all vegetation on existing grass sward by herbicide (glyphosate) in late summer. Then follow method outlined in Table 1.<br><br>Method 2: To avoid total vegetation removal of grass sward, retain but cut very short or graze very hard prior to hay strewing and create sites for germination by harrowing, raking or discing.<br><br>After strewing hay as in Table 1, put livestock on field after a week or so to poach the site, eat hay and aid germination by digestion process. | As Table 1 for method 1.<br><br>Method 2 is cheaper and less disruptive for soil-dwelling invertebrates but may not achieve as good result as method 1. |

| | | |
|---|---|---|
| Rotovate and seed site with wildflower seeds<br>Ideally use seed harvested from local species-rich site. Alternatively obtain British native origin wildflower seeds appropriate to soil and pH type. | Rotovate sward to open it up and broadcast seed (manually/by machine) in early autumn. The grass matrix will be reformed as many of the original grasses regrow. Regular cutting (and removal of cuttings) may be required between April and October to prevent vigorous grass growth blanketing the slower establishment of wildflower plants.<br><br>The following year manage by hay cutting, but delay grazing for two years or so to allow good root mats to establish. | |
| Slot seeding site with locally harvested seed Ideally use seed harvested from local species-rich site. Alternatively obtain British native origin wildflower seeds appropriate to soil and pH type. | Ensure existing grass is cut short or grazed hard prior to seeding in early autumn.<br><br>Using a Hunters seeder, rotovate 10cm strips into existing sward.<br><br>Using a Stanhay or Gibbs drills seed (2kg/ha bulked up by sand or barleymeal) and spray glyphosate herbicide along the seeding 'slot' or strip.<br><br>Cut grass the following year whenever it exceeds 5cm to help reduce competition of establishing plants and to encourage good growth of root systems but avoid 'scalping' turf. The following year manage by hay cutting or grazing. | Over a few years valuable grassland can be created, especially if local provenance seed is used helping to maintain local genetic diversity.<br>Mobile wildlife will colonise quickly. |
| Introduce wildflower plugs, pot grown plants or turves dug from a species-rich site<br>Useful for small sites and where the early visual appearance of the site is important. | Ensure existing grass is cut short or grazed hard prior to planting. Do this in early autumn or, less ideally, in spring providing the soil is damp (but not frozen).<br><br>To reduce competition from existing sward, spot treat areas with glyphosate to plant groups of plants or remove turf. Areas to treat and numbers to plant will depend on budget or turf size. The more plugs or larger turves planted, the greater the success! A recommended planting density is 2-9 plants per $m^2$. Due to their small rootstock, plants and turves may need additional watering, especially on lighter land. The following year manage by hay cutting or grazing. | Useful for introducing plants which do not establish easily from seed in mixes or those that produce little seed in cultivation but easily reproduce vegetatively. |

Ongoing management is very important to improving and retaining floristic diversity. At the very least, these grassland area should be cut annually in late/July August with the cuttings removed. There may be a requirement for a second cut in Autumn. However, cuts should be undertaken on rotation to ensure some grass is left long over winter to provide habitat for invertebrates and also any reptiles (see below).

More detail is provided in the two SWT factsheets which have been provided separately:

- Grassland creation
- Grassland Management

### 6.2 Bats

The boundary features including scrub and trees, particularly along the river should be retained to avoid interruption to commuting routes. Planting of native species attractive to invertebrates will help maintain and replenish foraging habitat.

If any mature trees need heavy pruning or removal, further advice must be sought from a suitably qualified ecologist and further surveys may be required.

As an enhancement, the use of bat boxes sited on the mature trees (three boxes per tree) could provide permanent roosting opportunities. Woodcrete boxes are the most durable. The boxes should be installed high on the tree and should be free from obstructions.

### 6.3 Otters

The proposals should have minimal impact on otters. Ideally paths should be routed to avoid going too close to the river to reduce disturbance by people and dogs.

### 6.4 Reptiles

The areas planned for the children's play area and sports area should be cut short during the winter, whilst reptiles are in hibernation. These areas should then be maintained short to encourage any reptiles to move out of those areas when they emerge in spring. Any below ground disturbance should only take place April-September when animals have emerged from hibernation. The margins of the site should be retained with long grass to provide continued habitat for them and managed on rotation to avoid scrub invasion.

### 6.5 Breeding birds

Any clearance of trees, shrubs or undergrowth should preferably be carried out between September and the following February, inclusive, to reduce the possibility of damage to birds' nests, although it is possible for some species to nest earlier in the year. Guidance should be sought from a suitably qualified ecologist if there is any reason for doubt.

If clearance is planned to take place from March to August, inclusive, it will first be necessary to carry out a survey to determine whether or not there are active nests present. If there are, then the work would have to wait until any young had fledged. If not, the vegetation could be cleared immediately, before any nests could be established, but any further delay would necessitate another survey.

### 6.6 Badger

Badgers are a highly mobile species and can quickly colonise new areas. If any large holes (approximately 30cm width) are found during clearance, works should cease immediately, and a suitably qualified ecologist contacted for further advice.

### 6.7 Species of Principal Importance and other wildlife

Removal of scrub should be carried out in early autumn to avoid impacts upon hibernating hedgehog. If any hedgehog is found during clearance then further advice should be sought from a suitably qualified ecologist.

Any winter clearance has the potential to impact upon hibernating hedgehogs. At this time of year vegetation should be cut no lower than 300mm above ground level in the first instance to avoid injury or harm to hibernating hedgehogs. Closer cuts should be undertaken carefully and if any hedgehog is found then further advice should be sought from a suitably qualified ecologist.

Retention of some boundary scrub and trees would allow a degree of hibernation and refuge habitat available for hedgehogs while also benefiting other groups, including bats, birds and invertebrates.

#### 6.7.1 Schedule 9 Plants and Animals

No Schedule 9 plants or animals were recorded, however, should any be discovered upon site clearance, works should cease immediately, and a suitably qualified ecologist contacted for further advice.

## 7. REFERENCES

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*Withdrawn from publication, but holds relevant information

## APPENDIX 1: PHOTOGRAPHS

*Dense scrub in south of site*

*Looking north across grassland towards river*