# FOREST HEATH WILDLIFE AUDIT Proposed site allocations 2015

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#### 1.0 INTRODUCTION

SWT Trading Ltd: Ecological Consultants, the wholly owned company of Suffolk Wildlife Trust (SWT), was commissioned by Forest Heath District Council in 2015 to carry out a Wildlife Audit of proposed development sites within the District. An initial list of 202 sites was drawn up by the Council which was subsequently amended.

Surveys commenced in May 2015 and continued until autumn 2015. The survey protocol conformed to Extended Phase 1 and the information was presented as individual site reports using a standardised reporting form including a Phase 1 map and photographs. The presence, or likely presence, of Biodiversity Action Plan habitats and species and also protected species was recorded. Information was also provided under various broad taxonomic groups, including flora, avifauna, invertebrates, herpetofauna and mammals. In addition, the structural diversity each habitat and the connectivity of sites within the overall ecological network across the Borough was assessed. Recommendations were provided for further survey work.

#### 2.0 OBJECTIVES

The aim of the surveys was:

- To undertake an Extended Phase 1 habitat survey for all the identified sites during the 2012 or 2013 survey seasons;
- To provide information and a description of the wildlife interest for each site;
- To map specified habitat types, using standard colour codes for each site including a breakdown of habitat types within it;
- To list species including protected species or evidence of their presence, BAP species and habitats, remark on biodiversity and appraise the nature conservation value;
- For those sites with previous survey data available, to take these findings into account:
- To rank sites in terms of wildlife value with which to evaluate sites;
- To provide an electronic photographic record of the sites;
- To provide a written report of results and recommendations for any necessary compliance or requirements for further survey.

#### 3.0 METHODOLOGY

In order to achieve the overall aims of the project the following tasks were undertaken:

- Existing digital information for each site was collated using data provided by Suffolk Biological Records Centre and from 1:10,000 maps and aerial photographs.
- Each site was surveyed and a record made of its conservation value, with the exception of those sites identified as small gardens or where no access could be obtained.

- Photographs were taken of relevant features within the sites, both geotagged and digital high quality images.
- Criteria and a ranking system were used to evaluate sites.
- Comments were made on habitats/species of wildlife interest.
- Ecological issues were highlighted.
- Recommendations for further surveys were provided as appropriate.
- The sites were mapped with Phase 1 colour codes using BosqMap software.

#### 3.1 Criteria for site evaluation

At each site the following was recorded:

- Location: Site name, number and grid reference;
- Size: the size was noted in hectares (ha);
- Survey details: Date, surveyor, weather conditions;
- Phase 1 map and photos;
- Status: Designation, ranking and overall wildlife value;
- Habitat type: distinct, dominant habitat types were briefly detailed;
- **Subsidiary habitat:** this included additional habitats of particular note such as dead wood;
- **Site description:** a detailed account of the site;
- **Connectivity:** if a site linked to other green corridors, this was noted and described in detail where relevant. The juxtaposition of other proposed sites was also considered:
- **Structural diversity:** the differing vegetation structure (height) providing a variation in niche potential for a wide range of taxa was described for each site if relevant;
- Protected species: these were noted if recorded, or if previously recorded;
- Protected species potential: this was noted if the habitat was deemed suitable for named protected species;
- Priority species: these were noted if seen, or if previously recorded. NB: if the species is a 'protected species' and a 'priority species', then it was only listed under protected species;
- Priority species potential: this was noted if the habitat was deemed suitable for priority species;
- **Priority habitats:** these were noted if present;
- Flora, avifauna, herpetofauna, mammals, invertebrates etc: species seen or recorded were noted and habitat which offered potential for specific taxa was noted;
- **Comments and recommendations:** overall impressions of each site were noted and further survey work was recommended where relevant;
- References: these were included when it was appropriate to reference other surveys.

**Biodiversity Action Plan (BAP) species and habitats:** In 2012 the 'UK Post-2010 Biodiversity Framework' succeeded the UK BAP and 'Conserving Biodiversity – the UK Approach'. This was the result of a change in strategic thinking following the publication of the Convention on Biological Diversity's (CBD's) 'Strategic Plan for Biodiversity 2011–2020' and its 20 'Aichi

targets', at Nagoya, Japan in October 2010 and the launch of the new EU Biodiversity Strategy (EUBS) in May 2011. Much of the work previously carried out under the UK BAP is now focussed at a country level via the creation of biodiversity strategies. However, the UK BAP lists of priority species and habitats remain important and valuable reference sources. Notably, they have been used to help draw up statutory lists of priorities which in turn inform the local plans which have been produced for those priority species and habitats occurring in Suffolk (Suffolk Local Biodiversity Action Plans). In addition, several other habitats and species that are important with a Suffolk context have been identified and termed 'Suffolk Character Plans'.

**Protected species:** species protected by law under the Wildlife and Countryside Act (1981) (as amended), The Conservation of Habitats and Species Regulations (2010) (as amended) and the Protection of Badgers Act (1992).

#### 3.2 System of site ranking

A system of ranking each site from the information gathered during surveys was established, using a simple numbering method. Numbers 1-6 were used (1 = high, 6 = low).

- Statutory designation e.g. SSSI (Site of Special Scientific Interest) scheduled under the Wildlife and Countryside Act (1981) (as amended).
- 2 Non-statutory designation e.g. County Wildlife Site (CWS). CWSs are sites regarded as important in a county/regional context.
- Non-statutory designation e.g. Local Wildlife Site (LWS), priority species and habitats (except those that are locally common e.g. song thrush) and/or species protected under the Wildlife and Countryside Act (1981) (as amended).
- 4 No designation but clearly of value due to size, connectivity, species diversity, potential for priority and protected species and locally common priority and protected species.
- No designation but has some natural capital: is in character with the area (e.g. woodland), provides limited connectivity.
- 6 No designation and of no conservation value.

**Site Ranking 1: Sites of Special Scientific Interest (SSSIs):** the most important sites for wildlife within a national context. The criteria used to assess such sites have been developed by English Nature (now Natural England).

Site Ranking 2: County Wildlife Sites (CWSs): these sites have a high priority for protection. Although there is currently no statutory protection, all of Suffolk's local authorities have included a policy in their local plans to protect CWSs from development. The criteria used to assess CWSs have been developed by Suffolk Wildlife Trust, Suffolk County Council, Natural England and Suffolk Biological Records Centre (SBRC) (The County Wildlife Site panel). The information is available on the Suffolk Biodiversity Partnership website: http://www.suffolkbiodiversity.org/wildlife-sites.aspx accessed 23/02/16.

**Site Ranking 3:** sites which do not fulfil the criteria for SSSI or CWS status but have a high conservation value. In some districts these are designated as 'Local Wildlife Sites' when they

are situated within urban areas. These sites comprise the best examples of different habitats or are important for a particular species and are assessed of the following criteria:

- Non-recreatability. The sites must have some degree of naturalness.
- <u>Diversity and presence of indicator species</u>. Sites that are less diverse than CWSs will be included. For example, grassland that is not a remnant of old meadow but has a good number of grass and herb species. Areas dominated by amenity grassland will not be included.
- Rarity. Sites that contain habitats, plants and animals that are rare within the town but may be common throughout the county are included here.
- <u>Potential value</u>. These sites may have greater value once appropriate conservation management work is carried out. Some sites that could benefit from habitat creation are included, but only those that already have some conservation value.
- <u>Size</u>. There is no minimum size but sites that do not have a great diversity of species or habitats and contain no rare species are unlikely to be included if they are less than 0.25 hectares.
- Woodland. Normally such sites are secondary woodland as all ancient woods are designated as CWSs. The exceptions are small sites that may contain remnants of ancient woodland within woods of more recent origin. All secondary woodlands with a reasonably diverse ground flora or containing some old woodland indicator species are included. Woodland strips and shelter belts are not usually included unless they fulfil the criteria of having a reasonably diverse ground flora. Any sites containing exceptionally old trees are included because of their wildlife value.
- <u>Scrub</u>. Scrub is particularly important for breeding birds and invertebrates, particularly when it is adjacent to grassland and mature trees.
- Grassland. Areas of grassland of some diversity that do not qualify as CWSs are included. These may represent recently established grasslands and areas of amenity grassland where soil type and management favour a more species-rich sward. <a href="Freshwater">Freshwater</a>. Freshwater sites can include rivers, streams, ditches and ponds. Sites which contain a reasonable variety of aquatic or marginal plants are included, as are those with good populations of amphibians.
- <u>Created habitats</u>. Some sites which have developed from former arable or industrial use have a high diversity of species or are important for a particular species.
- Species. Sites are included if they provide important habitat for one or more of the following groups: invertebrates, amphibians and reptiles, birds and mammals. This includes priority species and habitats (except those that are locally common e.g. song thrush) and/or species protected under the Wildlife and Countryside Act (1981) (as amended). Note: where species are of sufficient rarity or where there are exceptional populations, sites may be designated as CWSs or SSSIs.

**Site Ranking 4 Other Sites of Nature Conservation Interest:** sites which are less important for wildlife but still retain a degree of naturalness. Locally common priority species such as song thrush may be present and also locally common protected species such as reptiles. However, this ranking applies only in cases of low numbers of a single species and not significant populations of one or more species (see LWS and CWSs). In addition, these sites often provide valuable stepping stones and wildlife corridors along which species can travel between sites.

#### Site Ranking 5: Areas that have limited value for wildlife:

These may include arable fields or regularly mown amenity grassland with some features of wildlife value, such as some boundary hedgerows or rough grass margins.

**Site Ranking 6: Areas that have no or very limited value for wildlife:** These may include built areas, large arable fields, other disturbed ground or regularly mown amenity grassland with no other semi-natural features.

#### 3.3 Biodiversity value

Linked to the ranking system is a broad approach to describing whether a site was of high, medium or low biodiversity value:

- 1-2 <u>High conservation value:</u> These sites include designated sites such as SSSIs and CWSs. It may also include undesignated sites where it is recommended that they should be assessed by the CWS Panel as to whether they meet the criteria for designation.
- 3-4 <u>Medium conservation value:</u> These are undesignated sites which have a known wildlife value and contribute to the overall ecological network.
- 5-6 <u>Low conservation value:</u> These sites have limited wildlife value. However, a change in future management or additional enhancement may result in an increase in ecological value and a change in site ranking.

#### 4 SUPPLEMENTARY INFORMATION

## 4.1 Site coverage and distribution

Although the original site list included 202 sites, a number of sites were subsequently removed from the list by FHDC. The list was subsequently modified to exclude sites which represented small gardens or groups of small gardens combined together. Access was obtained to most sites.

The final numbers of sites visited are as follows:

Beck Row	23
Brandon	18
Exning	5
Kentford	11
Lakenheath	19
Mildenhall	27
Newmarket	19
Red Lodge	18
West Row	21

#### 4.2 Gardens proposed as potential site allocations (not surveyed)

Where small gardens or groups of small were proposed as potential development sites, these were not surveyed. Instead, a statement has been prepared below to encompass the range of ecological features likely to be found in gardens within the Forest Heath district. The sub-headings broadly relate to those used within the site surveys.

The following sites fall into this category of unsurveyed garden(s):

Beck Row: BR/04

Brandon B/02, B/03, B,04, B/05, B/07, B/16, B/25

Exning: E/07, E/09

Lakenheath: L/03, L/06, L/10

Mildenhall: M/03, M/04, M/05, M/06, M/07, M31

Newmarket: N/07

Red Lodge: RL/01, partial RL/02, RL03 West Row: partial WR/17, WR/20, WR/32

#### **4.2.1** Site description for gardens:

This statement relates to a range of gardens of varying size and composition associated with residential buildings within the audit area. Whilst each site is different, some of these gardens are likely to contain remnants or small areas of valuable habitat which have intrinsic wildlife value and others may be managed to encourage wildlife. Mature or established sites provide nesting, feeding, breeding, over-wintering and refuge opportunities for a wide range of species. Some will contain features which enhance the wildlife value of the garden further such as ponds, or incorporate specific micro-habitats such as insect 'homes' for bees or ladybirds, bird boxes or log piles which have been installed to encourage wildlife. Others contain features of which certain species or groups will utilize, such as raised paving slabs, compost heaps or grass piles, which, although not specifically installed for wildlife, will provide refuges.

#### 4.2.2 Habitat type(s) in gardens:

Residential gardens may contain elements or remnants of a number of habitats including grassland (many of which are of sandy or chalky soil and of Breckland character), scrub, hedgerow, ponds, secondary woodland and orchard.

## 4.2.3 Subsidiary habitats in gardens:

Residential gardens may contain numerous features of this type: Deadwood, individual mature trees, native herbs and grasses and additional features found in species-rich wildlife gardens such as compost areas, grass heaps, and insect-attracting plants.

#### 4.2.4 Protected species seen or known:

The garden sites within the remit of this audit have not been surveyed individually. However, a number of protected species have been recorded within the survey area of the audit and therefore have the potential for being present in the gardens highlighted, as detailed below.

#### 4.2.5 Protected species potential:

Slow-worm
Grass snake
Common lizard
Great crested newt

Water vole

#### 4.2.6 Priority habitats present:

Features of small remnants of the following priority habitats may potentially be present: Lowland Heathland & Acid Grassland

Hedgerows

**Ponds** 

Traditional orchards

#### 4.2.7 Priority species seen or known:

Whilst the garden sites within the remit of this audit have not been surveyed individually, some of the species recorded within the parishes covered will have been present within the garden sites and others will have the potential for being present, as detailed below.

#### 4.2.8 Priority species potential:

The species with potential to be found within or associated with the garden sites include the following, although this list is not exhaustive:

Birds: Swift, Song thrush, Starling, Dunnock, House sparrow, Bullfinch, Spotted flycatcher.

Mammals: Hedgehog, Soprano pipistrelle bat, Brown long-eared bat.

<u>Herpetofauna:</u> Common toad, Common frog, Smooth newt, great crested newt, common lizard, slow worm and grass snake.

<u>Invertebrates:</u> Garden tiger butterfly, Wall butterfly, Small emerald moth, White ermine moth, Large garden bumblebee, Red-shanked carder bee.

Scarce or uncommon plants (not priority species but of interest): Common cudweed

## 4.2.9 Connectivity:

Whilst each of the garden sites may be individually quite isolated from each other, the potential wildlife value of a garden increases significantly if it is adjacent to a wildlife-rich site or habitat functioning as a corridor connecting it to other areas of semi-natural habitat. Similarly, the close proximity of a wildlife-rich garden can increase the likelihood of a site maintaining viable populations, particularly of the more mobile species.

#### 4.2.10 Structural diversity:

A range in structural diversity across garden sites is provided by grasses, herbs, shrubs, climbing plants and trees, offering opportunities for members of all species group. Further diversity is provided on a smaller, topographical scale by other features and micro-habitats,

such as deadwood, long grass, ant hills, paving slabs, compost heaps and grass piles.

#### 4.2.11 Flora:

A wide diversity of flora can be found in gardens, from mosses, lichens and fungi to fully mature native trees. These offer feeding, breeding and over-wintering opportunities for a large number of species, particularly in gardens which are adjacent to wildlife-rich sites. Many native grasses and herbaceous species, such as ox-eye daisy, germander speedwell, common knapweed, field scabious, white campion, common cat's ear and meadow buttercup will spread easily from adjacent sites and thrive in a garden setting. On garden sites on Breckland soil, these could also include more specialized native species such as viper's-bugloss and common cudweed. Other common non-native garden species present in gardens will also attract invertebrates such as bees and butterflies and add to the overall wildlife value of these sites.

Many native species of shrub and tree are commonly present in gardens and will provide additional wildlife value. The light soil present in many parts of the audit area will be particularly suitable for species that are common to Breckland such as silver birch and gorse but will also include other common native species such as blackthorn, holly, hawthorn, ivy, oak, hazel, elder, field maple and bramble.

#### 4.2.12 Avifauna:

Mature trees and dense native shrubs, particularly in the form of a mixed native hedge, can provide good roosting and nesting sites for this group. Species such as holly, ivy, bramble and hawthorn provide a valuable source of food for fruit-eating species, longer areas of grass and lawn provide opportunities for ground feeders and a good invertebrate population, encouraged through features such as those discussed below, will be beneficial for insect-eating birds.

#### 4.2.13 Invertebrates:

Mature trees, dense scrub, deadwood, herbs and grasses can all provide opportunities for this group. Many species of invertebrate may over-winter in a garden, making particular use of compost heaps, grass heaps, log piles, dense grassland and dead stems/flower heads. The addition of man-made features for invertebrates will increase the potential for this group.

#### 4.2.14 Herpetofauna:

A wildlife-friendly garden can provide good feeding, breeding and over-wintering opportunities for this group and their presence is increased if the garden has good connectivity to other areas of suitable semi-natural habitat.

Garden ponds or damp areas can provide breeding and feeding sites for amphibians, whilst long vegetation on pond edges, log piles, paving slabs and undisturbed areas, beneath sheds or water butts for example, will be valuable terrestrial or over-wintering sites.

Reptiles will also benefit from these refuge or hibernation sites. Garden features such as grass piles or compost heaps can also be important refuge or breeding sites. Stone features

such as paving slabs and brick walls, or log piles and compost heaps in a sunny site, can be used as basking areas.

#### 4.2.15 Mammals:

Nesting opportunities for bats can be present in gardens in the form of dense scrub (mature ivy on trees, for example), in holes or fissures in trees and in potential nesting sites in the buildings themselves.

Gardens can be valuable feeding, shelter and over-wintering habitats for hedgehogs and overgrown gardens can provide an important overwintering resource in the form of suitable habitat for hibernation (which can be a limiting factor). Permeability of boundary features is very important for retaining the local hedgehog population.

Small mammals such as common species of mouse, vole and shrew may be present and larger mammals such rabbit, fox, and deer will also visit gardens to feed, particularly if connected to other natural habitat. .

#### 4.2.16 Comments and recommendations:

Garden sites can be a valuable resource for a wide range of species. They can contain a good diversity of common species as well as providing opportunities for some less common species, particularly those that require the characteristics of Breckland habitat.

Gardens can provide an essential link between valuable open spaces or wildlife-rich habitat, reducing the risk of fragmentation of habitat on a wider countryside scale and providing opportunities for species, particularly mobile species, to maintain viable populations.

## 4.3 Constraints to the surveys undertaken for the Wildlife Audit

This survey represents a snapshot in time and should be considered as an initial assessment of the habitats and the potential species which they may support. 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. In particular, no detailed surveys have been made for invasive or protected species, or specific botanical or faunal groups.

# Appendix 1 Catalogue of surveyed sites

## **Beck Row**

		Ranking	Biodiversity
Code	Site Name		Value
BR01	Lamble Close	3	Medium
BR02	Land adjacent to RAF Mildenhall	5	Low
BR03	Land adjacent to Smoke House Inn, Skeltons Drove	3	Medium
BR05	Land off The Grove	4	Medium
BR06	Land south of Rookery Drove	4	Medium
BR08	Land to the north of Wilde Street	4	Medium
BR09	Land at corner of Wilde Street/Aspal Lane	4	Medium
BR10	Land adjacent to and south of caravan park on Aspal Lane	3	Medium
BR11	Land between Aspal Lane and Wildmere Lane	3	Medium
BR12	Land adjacent to Beck Lodge Farm, St Johns Street	4	Medium
BR13	Land West of Aspal Hall Road	2	High
BR15	Land south of St John's Street	6	Low
BR17	Land East of Skeltons Drove	5	Low
BR18	Former coal yard, Wilde Street	5	Low
BR19	Land adjacent to Moss Edge Farm and west of the A1101	4	Medium
BR21	Aspal Nursery, Aspal Lane	4	Medium
BR23	Land at White Gables, Stocks Corner	4	Medium
BR24	Land between Wildmere Lane and Holmsey Green	4	Medium
BR25	Land adjacent to Wilde Street Farm	4	Medium
BR26	Land East of Aspal Lane	5	Low
BR27	Land adjacent to Beck Lodge Farm	5	Low
BR28	Land at junction of Aspal Lane and Johns Street	4	Medium
BR29	Scrap Yard, Skeltons Drove	6	Low

## **Brandon**

Dianaon		Ranking	Biodiversity
Code	Site Name		Value
B01	Land off Fengate Drove	6	Low
B06	Land off School Lane	5	Low
B09	Land at Station Way	6	Low
B10	Land south-west of Station Way	4	Medium
B11	Land north of Gas House Drove	4	Medium
B12	Land off Manor Road	2	High
B13	Omar Homes	6	Low
B14	Land off Green Road	2	High
B15	Riverside Lodge off High Street	4	Medium
B18	Land south River Little Ouse and west of High Street	4	Medium
B19	Land south Railway line including Lignacite Site	3	Medium
B20	Land at Brandon Cottage, Bury Road	4	Medium
B21	Land north of Gas House Drove (small block)	5	Low
B23	Land off Bury Road	1	High
B24	Land west of Bury Road	1	High
B27	Land off London Road	1	High
B28 B17/B12	Land at Abbotts Court, North of Victoria Avenue	4	Medium
combined	Land to the west of Brandon	2	High

## **Exning**

Site Name	Ranking	Biodiversity Value
Land off The Drift/Burwell Road	5	Low
Land to the rear of Laceys Lane (includes Frogmore)	5	Low
Land south of Burwell Road	6	Low
South of Burwell Road	5	Low
Land to rear of York Villas, North End Road	5	Low
	Land off The Drift/Burwell Road Land to the rear of Laceys Lane (includes Frogmore) Land south of Burwell Road South of Burwell Road	Site Name Land off The Drift/Burwell Road 5 Land to the rear of Laceys Lane (includes Frogmore) 5 Land south of Burwell Road 6 South of Burwell Road 5

## Kentford

		Ranking	Biodiversity
Code	Site Name		Value
K01	Land east of Moulton Road	5	Low
K02	Meddler Stud	4	Medium/low
K03	Land north of A14	6	Low
K04	Land north of Bury Road	5	Low
K05	South and east of Flint House, Bury Road (near Village Hall)	4	Medium
K06	Site opposite 1 to 4 Bury Road	4	Medium
K09	Fothergills, Gazeley Road	5	Low
K13	Land to rear of Flint House	6	Low
K14	Land east of Gazeley Road	6	Low
K16	Land to the rear of Cock Public House	4	Medium
K17	Land between Bury Road and A14	5	Low

## Lakenheath

Code	Site Name	Ranking	Biodiversity Value
L04	Land north of Station Road	5	Low
L07	3 Cemetery Road	4	Medium
L11	East of The Mallards	5	Low
L12	Land north of Burrow Drive and Briscoe Way	5	Low
L13	Rabbithill Covert, Station Road	5	Low
L14	Land off Maids Cross Way	5	Low
L15	Land off Covey Way and Maids Cross Hill	3	Medium
L18	Near Broom Road, off Eriswell Drive	5	Low
L19	Land north-east of South Road	5	Low (CWS)
L22	Land south of Broom Road	4	Medium (CWS)
L25	Land east of Eriswell Road and south of South Road	4	Medium (CWS)
L26	Land west of Eriswell Road	4	Medium
L27	Land south of Broom Road	5	Low (CWS)
L28	Middle Covert, land south of Station Road	4	Medium
L29	Matthews Nursery	4	Medium
L35	Land off Briscoe Way	5	Low
L36	North Lakenheath	4	Medium
L37	Land north of Cemetery	6	Low
L38	Land to north of Maids Cross Hill	6	Low

## Mildenhall

Code	Site Name	Kanking	Biodiversity Value	
M01	South of Gonville Close	2	High	
M09	Land South of College Heath Road	5	Low	
M10	Land off Finchley Avenue	5	Low	
M11	Land adjacent to College Heath Road	2	High	

M12	Woodlands Park off Brandon Road	4	Medium
M13	Land between the River Lark and Worlington Road	5	Low (Lark)
M14	Former builders yard north of Worlington Road	6	Low
M15	Land south of Lark Road/Raven Close	5	Low
M16	Land north of Brandon Road	1	High
M17	Land north of Thetford Road	1	High
M18	Land south of Lark Road	4	Medium
M19	Land west of Mildenhall, south of West Row Road	4	Medium
M20	Land south of Pine Trees Avenue	5	Low
M21	Land west of Miles Hawk Way	6	Low
	Land south of Mildenhall to River Lark (including Jubilee Field	4	Medium
M22	and site M44)		
M23	Land east of Mildenhall to A1065 and Fiveways Roundabout	1	High
	Land north of Mildenhall, east of the A1101 (including Airfield	1	High
M24	landing lights)		
M25	Precinct	6	Low
M26	Land south of Bury Road and east of A11	3	Medium
M27	Site adjacent to Parkers Mill	5	Low
M28	Land at 54 Kingsway	5	Low
	Land south of Worlington Road and adjacent to former dairy	5	Low
M29	site.		
M30	The old railway station site	4	Medium
M33	Land to west of Folly Road	4	Medium
M40	Land west of Industrial Estate	6	Low
M41	Land at Meadow View Cottage	5	Low
M42	Rose Forge, south of Worlington Road	4	Medium

## Newmarket

	Newmarket		
		Ranking	Biodiversity
Code	Site Name		Value
N03	Former Gas Works, Exning Road	6	Low
N05	Land West of Fordham Road (A12)	5	Low
N08	Allotments Studlands Park	4	Medium
N09	Brickfield Stud, Exning Road	5 (4)	Low (Tree Belt)
N10	Land at Balaton Stables, Snailwell Road	5	Low
N11	Land at Black Bear Lane and Rowley Drive Junction	4	Medium
N12	Coronation Stables, Station Approach	6	Low
N13	Land off Brickfields Avenue	4	Medium
N14	Land east of Newmarket, south of A14 (Hatchfield Farm)	4	Medium
N15	Old Newmarket Station site car park	6	Low
N18	George Lambton playing fields	5	Low
N20	Grassland off Leaders Way and Sefton Way	5	Low
N21	Land south of Exning Road and adjacent to Hamilton Road	5	Low
N24	Site off Wellington Street	6	Low
N26	East of Palace Street	6	Low
N27	Market Place	6	Low
N29	North of the High Street	6	Low
N30	Site on Depot Road	6	Low
N31	Former Scaltback Middle School Site	6	Low

# **Red Lodge**

		Ranking	Biodiversity
Code	Site Name		Value
RL02	Land to rear 14 – 16 Turnpike Road	-	
RL03	Land off Turnpike Road Phase 2 (Red Lodge Masterplan)	-	
RL04	Coopers Yard and Cafe	5	Low
	Land adjoining Public House, Turnpike Road and Turnpike	4	Medium
RL05	Lane		
RL06	Land adjoining Twins Belt, land east of Red Lodge	4/5	Medium/Low
RL07	The White Star Stables, Warren Road	5	Low
RL08	Land to rear 4 to 14B Turnpike Lane	4	Medium
RL09	Land at Greenhays Farm	4	Medium
RL10	Land west of Elderberry Road, Kings Warren	5	Low
RL11	Land east of Turnpike Road	1 (6)	High/low
RL12	Land east of Warren Road	5	Low
RL13	Land west of Newmarket Road	6	Low
RL15	Land north and east of Red Lodge, either side of A11	Variable	
RL16	Employment land north of Hundred Acre Way	5	Low
RL18	Land south of The Carrops	4	Medium
RL19	Land south of Green Lane	3	Medium
RL20	Land north of Elderberry Road	5	Low
RL21	Land north-east of Bilberry Close	4	Medium

## **West Row**

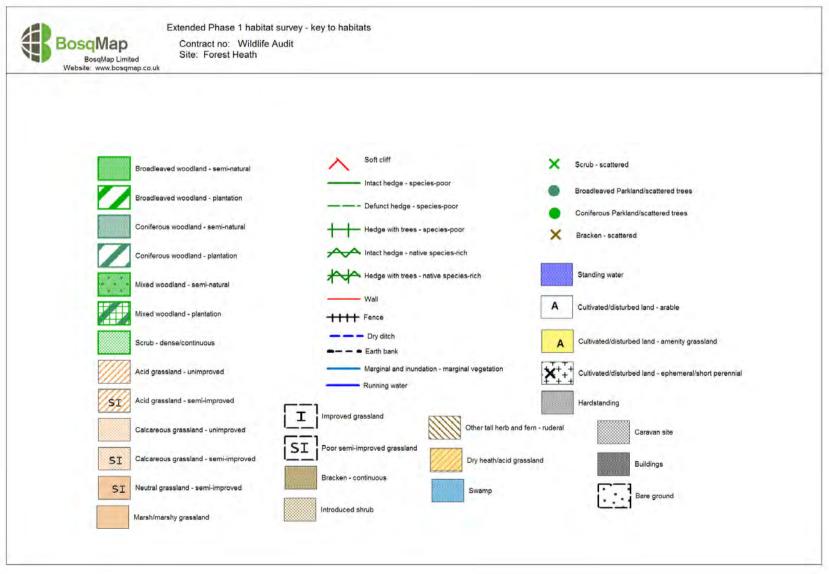
		Ranking	Biodiversity
Code	Site Name		Value
WR01	Land south of Chapel Road	5	Low
WR02	Land off Pott Hall Lane	4	Medium
WR03	Land north of The Green	6	Low
WR04	Land at the junction of Jarman's Lane and Beeches Road	4	Medium
WR06	Land north of Mildenhall Road	5	Low
WR07	Land east of Beeches Road	6	Low
WR09	Land south of Manor Farm Road	6	Low
WR10	Land off Chapel Road	6	Low
WR11	Land off Parker's Drove	5	Low
WR12	Land adjacent to Park Garden, Friday Street	5	Low
WR13	Land behind St Peter's Church, Church Lane	5	Low
WR14	Off Friday Street, behind Williams Way	5	Low
WR15	Popes Farm, Church Lane	5	Low
WR16	Land to north of Ferry Lane	6	Low
WR19	Land at junction of Mildenhall Road and Jarman's Lane	5	Low
WR21	Land east of Pott Hall Road	6	Low
WR23	Land off Friday Street	6	Low
WR25	Land off Pott Hall Road	4	Medium
WR26	Land off Parkers Drove	5	Low
WR27	Land south-west of Jarman's Lane	5	Low
WR33	Land at Popes Farm	5	Low

# Unsurveyed sites due to lack of access:

Brandon: B/08 (under construction)

Beck Row: BR/20 Kentford: K10 Mildenhall: M/43 Newmarket: N/32 Red Lodge: RL/03

#### Key to phase 1 Maps



# Site name B/01 Land off Fengate Grove

**FHDC Ref:** B/01

**Site status:** No wildlife designation

 Grid ref:
 TL 78184 87238

 Area:
 0.96 hectares

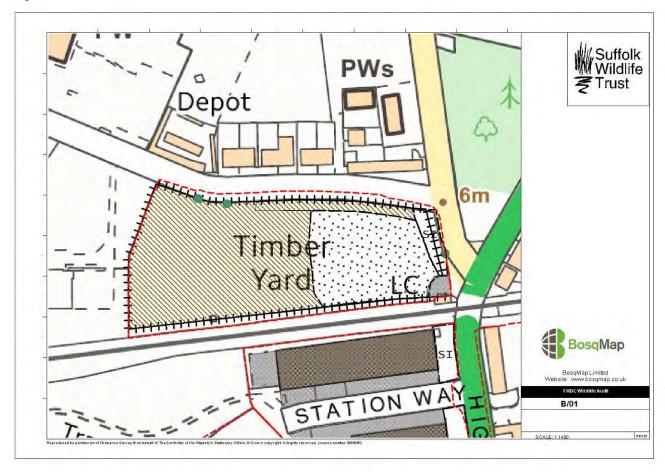
 Date:
 8 September 2015

**Recorder:** A Looser

**Weather conditions:** Overcast and cool

**Ranking:** 6 **Biodiversity value:** Low

# Map:



# **Photos:**



View of site looking west with bare ground and tall ruderal vegetation in background



View looking south towards railway line with large mound and tall ruderal vegetation

## **Habitat type(s):**

Bare ground, tall ruderal

## **Subsidiary habitats:**

Poor semi-improved grassland, scrub

#### **Site description:**

This site is a former timber yard and lies to the west of High Street, immediately north of the railway line. It is a mixture of bare ground with tall ruderal vegetation colonising the site and is believed to have been cleared of vegetation in late 2013 as reported in Wild Frontier Ecology (December 2013). There is a large earth mound along the southern boundary. The site is surrounded by Herras fencing and was only surveyed from the boundaries.

#### **Protected species seen or known:**

-

#### **Protected species potential:**

Common lizard, slow-worm

## **Priority habitats present:**

-

## **Priority species seen or known:**

-

#### **Priority species potential:**

Common lizard, slow-worm

#### **Connectivity:**

The railway line to the south of the site provides good connectivity for wildlife.

#### **Structural diversity:**

The structural diversity is poor although the tall ruderal vegetation provides a small amount of variation.

#### Flora:

The strip of semi-improved grassland along the eastern boundary of the site was species-poor and dominated by Yorkshire fog and occasional wood small-reed with some common herbs including dandelion, smooth hawk's-beard, common ragwort, ribwort plantain, dove's-foot crane's-bill, soapwort and mugwort. There is occasional rose and bramble scrub.

Most of the site was dominated by tall ruderal vegetation typical of disturbed ground including common nettle, white dead-nettle, spear thistle, creeping thistle, Canadian fleabane, prickly lettuce, hemlock, perforate St John's-wort, white campion, forget-me-not sp, cleavers, burdock, black horehound and common mallow. Weld was present on the large mound.

#### Avifauna:

The site is sub-optimal for birds, although the tall ruderal vegetation will provide some seeds for birds during the autumn.

#### **Invertebrates:**

The site is sub-optimal for invertebrates, although common species are likely to be present.

## Herpetofauna:

The site is currently sub-optimal for reptiles, but should vegetation re-establish then common lizard and slow- worm may recolonise from the railway line corridor to the south.

#### **Mammals:**

There are very limited opportunities for mammals on this site.

#### **Comments and recommendations:**

If this site remains undeveloped and vegetation is allowed to recolonise, then the wildlife interest will increase. In particular, if low vegetation is allowed to develop then various reptile species may colonise the site from the adjacent railway line corridor.

## For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew and therefore requires a Habitats Regulations Assessment (HRA) prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

#### **References:**

Wild Frontier Ecology. (December 2013). Proposed Residential Development at Fengate Drove, Brandon, Suffolk. Ecological Site Appraisal & Code for Sustainable Homes Ecology Assessment.

# Site name B/06 Land off School Lane

FHDC Ref: B/06

**Site status:** No wildlife designation

 Grid ref:
 TL 78329 86380

 Area:
 1.19 hectares

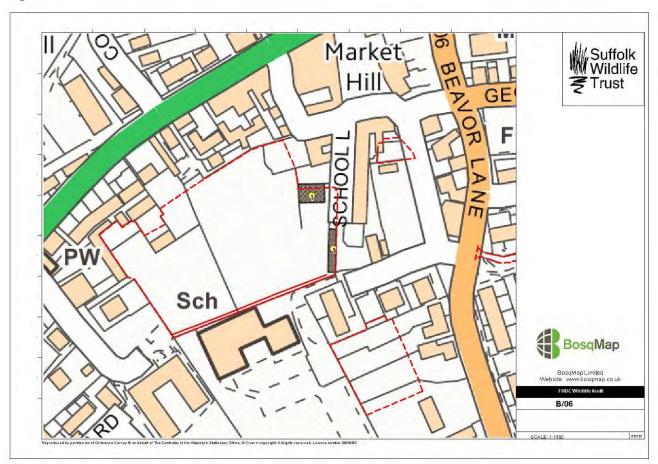
 Date:
 3 September 2015

**Recorder:** A Looser

**Weather conditions:** Overcast and cool

**Ranking:** 5 **Biodiversity value:** Low

# Map:



# **Photos:**



View of garden with scattered trees



Building with potential for bats and nesting birds

## **Habitat type(s):**

Poor semi-improved grassland

#### **Subsidiary habitats:**

Scattered trees, buildings

#### **Site description:**

These are large gardens situated to the west of School Lane. The Forest Academy primary school lies to the south of this site. Access was not available to this site, so it was viewed from the boundaries.

## **Protected species seen or known:**

•

#### **Protected species potential:**

Bats

#### **Priority habitats present:**

-

#### **Priority species seen or known:**

-

## **Priority species potential:**

Hedgehog, swifts (Suffolk Character Species)

#### **Connectivity:**

Connectivity is poor, being surrounded by roads and residential housing.

#### **Structural diversity:**

Although these are large gardens, structural diversity appears to be limited to the various trees and shrubs.

#### Flora:

Much of the site appeared to be ornamental trees and closely mown lawn with red fescue and false oatgrass with daisy, ribwort plantain, yarrow, groundsel, sun spurge common cat's-ear, and greater celandine being noted.

#### Avifauna:

The buildings could support nesting birds including swifts. Common species of garden birds will nest on this site.

#### **Invertebrates:**

The site is sub-optimal for invertebrates.

#### Herpetofauna:

There is no suitable habitat for reptiles.

#### **Mammals:**

The building on site may provide a potential roosting site for bats. The site also contains suitable

habitat for hedgehogs and this species has been recorded within 200m, so there is a high likelihood that this species will be utilizing this site.

#### **Comments and recommendations:**

As this site was not fully accessed, surveys are incomplete and further detailed assessment is required should any development be proposed for this site. Furthermore, no clearance of trees and shrubs should take place until this assessment has been undertaken. In addition, due to the nature of the building on the eastern side of the site, it is recommended that an assessment for bats and breeding birds is undertaken.

#### For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew and therefore requires a Habitats Regulations Assessment (HRA) prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/09 Land at Station Way

**FHDC Ref:** B/09

**Site status:** No wildlife designation

 Grid ref:
 TL 78242 87151

 Area:
 1.21 hectares

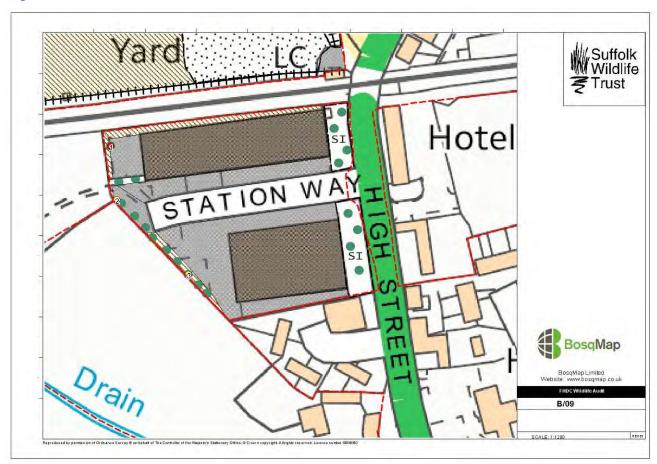
 Date:
 8 September 2015

**Recorder:** A Looser

**Weather conditions:** Overcast and cool

**Ranking:** 6 **Biodiversity value:** Low

# Map:



# **Photos:**



View west along Station Way



Mature oak tree by railway line (Target Note 1)



Large fallen logs (Target N ote 2)



Mature chestnut tree with peeling bark (Target Note 3)

## **Habitat type(s):**

Hardstanding, poor semi-improved grassland, tall ruderal, scattered trees

## **Subsidiary habitats:**

Dead wood

## **Site description:**

## Protected species seen or known:

# **Protected species potential:**

Common lizard, bats

#### **Priority habitats present:**

## **Priority species seen or known:**

#### **Priority species potential:**

Common lizard, bats

#### **Connectivity:**

The railway line running along the northern boundary of the site provides a good wildlife corridor.

#### **Structural diversity:**

With the exception of the western boundary, structural diversity is poor.

#### Flora:

Along the boundary with Site B10 was a thin strip of tall ruderal vegetation including wall barley, false oat-grass and cock's-foot grasses with greater celandine, dandelion, fat-hen, common nettle, mugwort and creeping thistle.

The thin strip of tall ruderal and poor semi-improved grassland along the railway line contained a good range of species including false oat-grass, cock's-foot and red fescue grasses with mugwort, white campion, common nettle, prickly lettuce, mint spp, comfrey, hawk's-beard spp, common ragwort, yarrow, hollyhock, great mullein and spear thistle.

The verge along the road was species-poor with perennial ryegrass, false oat-grass and wall barley with a few common herbs including ribwort plantain, yarrow, dandelion, common ragwort, beaked hawk's-beard, white clover, mugwort, Canadian fleabane, common poppy and black horehound.

The trees along the road included fairly young planted robinia with oak and cherry. There was a small area of introduced shrub, comprising mostly variegated holly.

Along the western boundary, most of which adjoins site B10, was a line of mature sycamore trees with occasional horse chestnut and oak. Target Notes 1 and 3 refer to two particularly large trees.

#### **Avifauna:**

The site is sub-optimal for birds although the mature trees provide some habitat.

#### **Invertebrates:**

This site is sub-optimal for invertebrates although common species will be present. There were some large logs present which will support a range of invertebrate species (Target Note 2).

## Herpetofauna:

Common lizard and possibly other species of reptile may be present along the railway corridor.

#### **Mammals:**

The large horse chestnut tree along the western edge of the site had peeling bark which provides potential roosting sites for bats (Target Note 3). Otherwise the site is sub-optimal for mammals, although common species such as mole and fox are likely to be present.

#### **Comments and recommendations:**

This site is of low ecological value with the exception of the trees along the western boundary and the strip of tall vegetation on the northern boundary along the railway line. If any of these trees are to be affected by proposed development they should be assessed for their bat potential. No clearance of vegetation adjacent to the railway line should be carried out without a reptile survey being undertaken and a mitigation plan put in place as appropriate.

## For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew and therefore requires a Habitats Regulations Assessment (HRA) prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely

to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/10 Land South-West of Station Way

**FHDC Ref:** B/10

**Site status:** No wildlife designation

 Grid ref:
 TL 78180 87073

 Area:
 1.75 hectares

 Date:
 3 September 2015

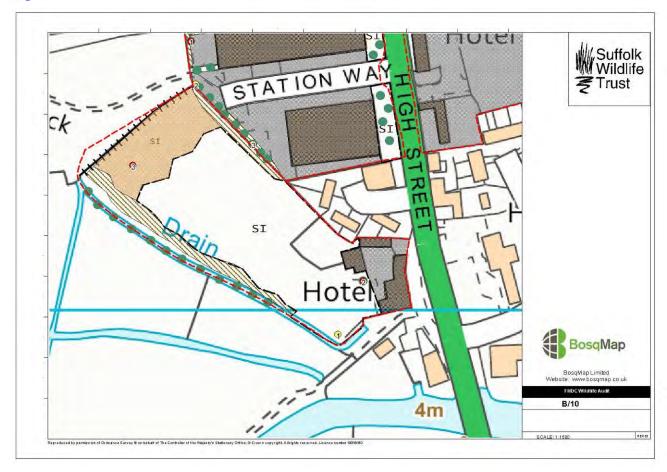
**Recorder:** A Looser

**Weather conditions:** Overcast and cool

Ranking: 4

**Biodiversity value:** Medium

# Map:



# **Photos:**



Pill box in south west corner of site (Target Note 1).



Line of tall trees and tall ruderal vegetation looking north west



Mature horse chestnut tree in pub garden. (Target Note 2)



Breck grassland at northern end of site (Target Note 3)

## **Habitat type(s):**

Poor semi-improved grassland, neutral grassland

#### **Subsidiary habitats:**

Tall ruderal, tree belt and scattered trees

#### **Site description:**

The site includes and lies to the rear of a public house/hotel and includes the pub gardens with a very large horse chestnut tree (Target Note 2) an area currently used for caravans. The majority of the site is poor semi-improved grassland which appears to be regularly mown, but in the northern section of the site the soils are more free-draining and rabbit grazed and consequently have a more interesting flora typical of the Brecks (Target note 3). A water-filled and tree-lined drain runs along the south-western boundary. A line of trees marks the north-eastern boundary. There is an old pill box in the south western corner of the site (Target Note 1).

#### **Protected species seen or known:**

-

## **Protected species potential:**

Grass snake, common lizard

## **Priority habitats present:**

-

#### **Priority species seen or known:**

Water shrew

## **Priority species potential:**

Grass snake, common lizard, hedgehog

#### **Connectivity:**

There is very good connectivity to the south and east of this site with a good mosaic of habitats leading down to the River Ouse to the south and the railway line to the north.

#### **Structural diversity:**

The structural diversity of much of the site is poor, being short mown grassland. However the tall ruderal and trees along the boundaries of the site provide some structural diversity.

#### Flora:

The majority of the site is poor semi-improved grassland dominated by perennial rye-grass with a range of common herbs including white clover, ribwort plantain, greater plantain, yarrow, creeping buttercup, dove's-foot cranesbill, shepherd's purse, dandelion and autumn hawkbit. There were a few flowering plants of soapwort.

Further north and east the grassland becomes drier with a greater range of species including red fescue, creeping and common bent grasses with field wood-rush, common cats-ear, mouse-ear-hawkweed, white campion, viper's- bugloss, perforate St John's-wort, goat's-beard, wild mignonette, moth mullein, hare's-foot clover, upright hedge-parsley, rough hawkbit, lady's bedstraw and evening

primrose. Hoary alison, a rare plant of waste ground, only recorded in 4 tetrads in Suffolk, was also found in this area (record confirmed by Susan Stone, SWT). (Target Note 3)

Along the southern boundary is a ditch with a line of tall alder and willow trees and a strip of tall ruderal vegetation along it including common nettle, white dead- nettle, hedge bindweed, burdock and comfrey.

Along the boundary with site B/09 is a line of mature trees dominated by sycamore with occasional horse chestnut and oak. There is a thin strip of tall ruderal vegetation along that boundary with cock's-foot, common ragwort, common nettle and mugwort.

#### Avifauna:

The site is sub-optimal for this group, although the boundary trees and ruderal vegetation will provide feeding and nesting habitat for some common birds. No birds were recorded during the visit.

#### **Invertebrates:**

The site has reasonable potential for invertebrates. Good numbers of grasshoppers and crickets were seen, particularly at the northern end where the soils are light and free-draining. The tall ruderal vegetation along the boundaries also provides some habitat for invertebrates.

#### Herpetofauna:

There is good reptile habitat bordering the site on the southern and north eastern boundaries so there is a high potential for reptiles, particularly common lizard. Grass snake is highly likely to be in the southern part of the site and is a highly mobile species and so could be present around the margins of the site.

#### **Mammals:**

There is an old pill box in the south western corner of the site. At the current time it is likely to be too drafty for bats but if this feature is retained there is potential to modify it to enhance its potential for bats. Bats are also likely to forage over the site, particularly along the tree belts. A number of trees adjacent to the site (see B/09) have the potential to support bat roosts. There are a numbers of older buildings to the east, including the hotel and these also have the potential to support bats.

A dead water shrew was seen by the ditch along the southern boundary of the site.

Hedgehogs have been recorded close to the site in 2014 and the grassland provides excellent foraging opportunities for hedgehogs although shelter is limited.

#### **Comments and recommendations:**

Further surveys are recommended for this site as part of any development proposals. These should include a spring plant survey of the north-western area where there is an interesting assemblage of species. Bat and reptile surveys should also be undertaken as part of the suite of surveys.

For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within

400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew and therefore requires a Habitats Regulations Assessment (HRA) prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/11 Land North of Gas House Drove

**FHDC Ref:** B/11

**Site status:** No wildlife designation

 Grid ref:
 TL 78590 86790

 Area:
 3.34 hectares

 Date:
 3 September 2015

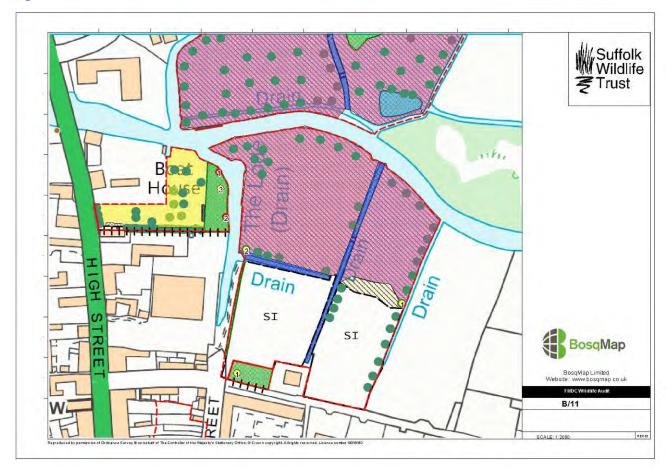
**Recorder:** A Looser

**Weather conditions:** Overcast and cool

Ranking: 4

**Biodiversity value:** Medium

# Map:



# **Photos:**



Looking north from Gas House Drove at sheep grazed pasture



Northern area of site showing fen vegetation



Large alder tree with bat potential (Target Note 2)

# **Habitat type(s):**

Sheep pasture, lowland fen

# **Subsidiary habitats:**

Scattered trees, wet ditches

### **Site description:**

Access to the site was limited so only parts of the site were able to be surveyed. The areas closest to Gas House Drove have short, species-poor grassland used for grazing. Closer to the river the sward changes to flood-plain valley fen, dominated by sedges and with scattered scrub and mature alders. Lines of scrub and trees demarcate the lines of the drains within the site.

### **Protected species seen or known:**

Grass snake

# **Protected species potential:**

Bats, water vole

## **Priority habitats present:**

Fens

#### **Priority species seen or known:**

Dunnock, grass snake

## **Priority species potential:**

Bats, water vole, otter, water shrew (recorded approx. 360m to the west in 2015), harvest mouse, common toad

#### **Connectivity:**

There is excellent connectivity to the north and east as this site lies in the floodplain of the river Little Ouse.

#### **Structural diversity:**

The northern sections of this site have excellent structural diversity, with a mosaic of fen and scrub and trees

#### Flora:

The southern parts of the site were grazed by sheep and were species-poor, being dominated by cock's-foot, Yorkshire fog, common couch and false oat-grass with common herbs including creeping thistle, dandelion, greater plantain, creeping buttercup, white dead-nettle and burdock.

Further north, bordering the river, the vegetation becomes wetter with more vegetation typical of floodplain valley fen habitat. This area is dominated by sedges including lesser pond sedge and spiked sedge with reed sweet-grass, creeping thistle, comfrey, hedge bindweed, common nettle, hemlock, valerian spp, yellow flag iris and gypsywort.

Scattered through the fen and marking the line of the drains are willow and alder with some hawthorn, oak and elder.

#### Avifauna:

This was a sub-optimal time of year for surveying this group. Dunnock, blackcap, robin, great tit were recorded and the site is likely to support a diverse assemblage of species.

#### **Invertebrates:**

This site is likely to support a good invertebrate assemblage, but no detailed assessment was made.

#### Herpetofauna:

A medium-sized dead grass snake was seen during the visit. It is likely that the site supports a good population of grass snake as the habitat is highly suitable for this species. Amphibians such as common frog are also likely to be present as well as possibly toad.

#### **Mammals:**

There were several large trees with woodpecker holes and cracks and crevices that could support bat roosts (See Target Note 2)

The ditches provide good habitat for water vole and as it borders the Little Ouse to the north they are likely to be present. There are numerous records of otter along the Little Ouse so they are also highly likely to be present along the northern boundary and may use suitable features within the undisturbed habitat as a holt (den) or resting area. No investigation of bankside trees was made to look for any holts.

There is good habitat for harvest mouse (Priority Species) and water shrew (Suffolk Character Species) so both could be present.

The site provides good habitat for common species of mammal such as fox, deer and grey squirrels, as well as small mammals such as mice, voles and shrews.

#### **Comments and recommendations:**

Prior to any development proposals further surveys will be required. These should include a detailed spring plant survey and bat, breeding bird, otter and reptile surveys should also be undertaken as part of the suite of surveys. No vegetation clearance should take place until the surveys have been undertaken and a mitigation plan drawn up and implemented as appropriate.

Notwithstanding the outcome of any surveys, any removal of scrub and trees should avoid the bird nesting season (March to August inclusive).

## For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew and therefore requires a Habitats Regulations Assessment (HRA) prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/12 Land off Manor Road

**FHDC Ref:** B/12

Site status:

Grid ref:

Area:

Date:

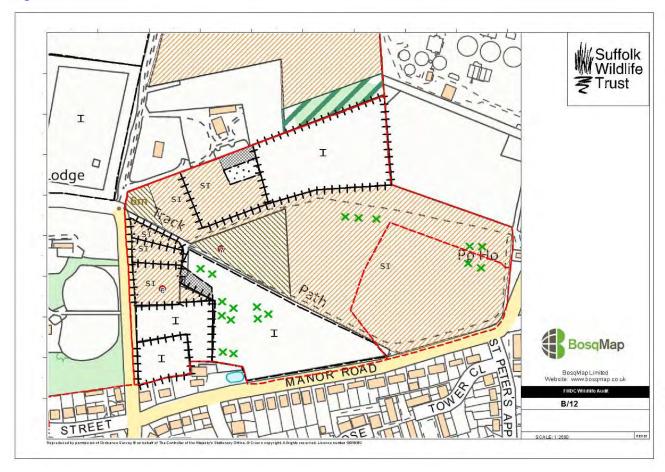
No wildlife designation
TL 77393 86250
9.5 hectares
23 June 2015
Recorder:

A Walmsley

**Weather conditions:** Overcast, breezy, 13°C

Ranking: 2 Biodiversity value: High

# Map:



### **Photos:**



Tall grassy swards occupy the eastern part of site B/12, with paddocks to the north and west



A field at the northern end of the site supports nesting skylark



Some of the horse paddocks are heavily damaged with an impoverished flora



The south bank of the river is choked with tall, dense vegetation, and is fenced off from the field

## **Habitat type(s):**

Acid grassland, pond (usually dry)

## **Subsidiary habitats:**

Scrub, deadwood, bare ground, damp grassland

## **Site description:**

The site lies on the south-east corner of site B/17, separated from it by a quiet lane. Brandon town is immediately to the south and east and a sewage treatment works a little way to the north-east. The site is on sandy loam soils and is made up almost entirely of open grassland, with at least half of the area, to the north and south-west, occupied by individual horse paddocks. Several of these contain scattered mature scrub and most are very heavily grazed with a number in poor condition. The rest of the site consists of open long grassland with scattered young hawthorn and rose scrub, and herb-rich patches. There is a small, dry, overgrown pond within an ungrazed enclosure near the centre. A line of tall trees and scattered mature scrub lines part of the south boundary, and a dense plum hedge marks the southernmost section of the eastern perimeter.

There are several mown paths through the area and vehicles have access into a limited area in the north-west corner via an unmade track. Several of the paddocks have sheds, corrals and huts, and a few parked vehicles in these areas appear to be on the site semi-permanently.

Target Notes for this site also relate to the larger B/17 report which incorporates this site within its boundary.

This site forms part of a larger area which is subject to a planning application (Forest Heath DC reference: DC/15/1072/OUT) for the development of 1,650 dwellings, employment areas and a relief road. The application includes an Environmental Statement setting out the ecological survey and assessment work which has been undertaken across the whole application area (Barton Willmore LLP, 2015). The Wildlife Audit for site B/17 also incorporates B/12. The findings of the survey work undertaken for the planning application have not been separated out to relate only to this site. Reference should therefore be made to the findings of these reports when considering any development at this site.

#### **Protected species seen or known:**

Grass snake (2009)

### **Protected species potential:**

Barn owl, bats, common lizard, slow worm, bats

### **Priority habitats present:**

Acid grassland

### **Priority species seen or known:**

Common toad (2009)

#### **Priority species potential:**

Marsh tit previously (recorded at adjacent sewage works, 2010), skylark, song thrush, spotted flycatcher, swift, barn owl, cuckoo, over 50 Priority Species moths previously recorded near Brandon Hall (west of the site)

### **Connectivity:**

Connectivity is good, with just a very small lane and unmade bridleway separating the site from B/17 to the west, and direct contiguity with the Little Ouse river corridor, via B/17, to the north.

## **Structural diversity:**

The site is structurally very varied, with a range of sward heights, areas of bare ground, patches of mature and young scrub, and tall trees and dense scrub particularly along the south and on parts of the east boundary.

#### Flora:

The site is largely composed of acid grassland, particularly to the east, although some of the horse paddocks support a sward that bears few acid grassland indicator species due to nutrient enrichment.

The longer areas are dominated by tall grasses such as Yorkshire fog, false oat-grass, yellow oat-grass and cock's-foot. Wood small-reed is also present in a small area, dominating it entirely. Herbs are present throughout, and in some places very frequent. Species which occur throughout the site include bladder campion, yarrow, ribwort plantain, mugwort and red clover. A wide range of other broadleaved plants occur more patchily, and include lady's bedstraw, goat's-beard, common toadflax, biting stonecrop, ribbed melilot, mouse-ear-hawkweed, sorrel, beaked and smooth hawk's-beard, autumn hawkbit, hop trefoil, heath groundsel and common cat's-ear. Cotton and nodding thistles and hairy and prickly sedge also occur in low numbers. There is some scattered small scrub in the long grass, mainly of hawthorn and wild rose.

The north, west and south-west of the site are occupied by a series of enclosed horse paddocks, some with permanent fencing and others with electric fencing. With one exception, (which is ungrazed and encloses a small, overgrown, dry pond) the paddocks are heavily or over-grazed and most have a low, grass-dominated sward with significant areas of bare ground and latrine areas dominated by nettle and other coarse species. Some enclosures in the south-west contain scattered mature scrub, mainly of hawthorn with some elder. Herbs include species such as yarrow, ribwort plantain, smooth hawk's-beard, common ragwort, spear thistle, white clover and greater plantain. On the west side are one or two enclosures which, although also very heavily grazed, have so far been less damaged by nutrient enrichment and erosion, and these are significantly more herb rich than the others. The Nationally Scarce smooth cat's-ear (Target Note 6) was found in one of these, with a range of other species typically including lady's bedstraw, hop trefoil, germander speedwell, wild mignonette, common knapweed, common sorrel, red clover, dove's-foot crane's-bill, prickly sedge, biting stonecrop, common stork's-bill, autumn hawkbit, common cudweed, thyme-leaved sandwort and sheep's sorrel. The remains of anthills were frequent in one of these enclosures.

There is a small, dry, overgrown pond (Target Note 7) near the centre of the site. A thick bank of bramble and dense stands of common nettle, tall grasses and common hop grow around the edges and down into the middle and base of the pond. It does not appear to hold water but a common toad was recorded near this feature in 2009.

There are no trees in the site, but tall ash with mature ivy forms a boundary along the west half of the south boundary, with younger ash saplings and scrub making an incomplete hedge along the remaining side. A dense hedge of hybrid plum runs for approximately 30m from the south-east corner up the eastern boundary, and there are scattered sycamores along the western perimeter. Young pine trees are dotted along part of the north-east boundary and, within the site, along the north edge of the pond

enclosure. Tall grasses and ruderal species dominate the north-west corner adjacent to the vehicle access track.

#### Avifauna:

The ungrazed parts of the site are likely to be used for hunting by insectivorous bird species and raptors, and there are ample nesting opportunities in the mature ivy stands along the south boundary and in some of the mature scrub inside the site. A skylark was heard singing above the grassland, and this species may potentially nest is less disturbed parts of the site. Cuckoo was also heard while in the site, although the call appeared to come from the north. Marsh tit has previously been recorded in the nearby sewage works. Surveys in support of the current planning application recorded a number of Priority bird species in the area (Barton Willmore, 2015).

#### **Invertebrates:**

The site is potentially important for invertebrates, particularly species such as spiders, bugs and weevils, grasshoppers, crickets, butterflies and moths, which would make use of the longer areas and litter layer below the wood small-reed. Ground beetles and other ground nesting species would benefit from the more eroded paddocks. One or two anthills and some old/disused anthills were noted during the survey, as well as meadow brown butterfly, a bumblebee collecting pollen on melilot and a large group of celery-leaf beetles on hogweed close to the pond.

### Herpetofauna:

Grass snake and common toad have been recorded in the vicinity of the pond in the past. Surveys in support of the current planning application recorded grass snake and common lizard in the area (Barton Willmore, 2015). Slow worm may also be present in the area.

#### **Mammals:**

This open grassland site is likely to be well-used by bats for hunting, and potentially for roosting in tall trees along the south boundary. There are bat boxes in neighbouring B/17, and there is a previous record (2005) of a brown long-eared bat on Chalk Road. Surveys in support of the current planning application recorded activity from nine species of bat across sites B/17 and B/12 (Barton Willmore, 2015). A roe deer was seen in the site during the survey. In particular, a wide range of small mammals, including hedgehog, may use the less disturbed, central and eastern parts of this site.

#### **Comments and recommendations:**

This site is of high ecological interest due both to the presence of a Nationally Scarce plant species (smooth cat's-ear) and to the biodiversity value of the long grassland which provides nesting and overwintering habitat for invertebrates and excellent hunting grounds for a range of bird and bat species. The site is also known to support the protected species grass snake and common toad, and may contain skylark nest sites.

If this site is proposed for development in isolation of site B/17 then detailed surveys and impact assessment will be required for flora, reptiles, amphibians, bats, birds (breeding and wintering) and invertebrates.

For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km

grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and therefore requires a HRA prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

#### **References:**

Barton Willmore LLP (May 2015) Environmental Statement – Land West of Brandon

# Site name B/13 Omar Homes

FHDC Ref: B/13

Site status: No wildlife designation, but adjacent to Breckland Forest SSSI and Breckland

SPA and Thetford Forest Park CWS

Grid ref: TL 77726 85675
Area: 5.45 hectares
Date: 3 September 2015

**Recorder:** A Looser

Weather conditions: Overcast and cool

**Ranking:** 6 **Biodiversity value:** Low

# Map:



### **Photos:**



Poor semi-improved grassland amongst mobile homes with forest in background

### **Habitat type(s):**

Hardstanding

### **Subsidiary habitats:**

Ephemeral/short perennial, poor semi-improved grassland

### **Site description:**

The site is situated within the industrial estate on the southern edge of Brandon. The mature forest of Brandon Country Park borders the southern boundary (SSSI and SPA). The site is primarily hard standing and buildings, although in the southern section there are patches of poor semi-improved grassland and ephemeral short perennial vegetation in the area used for storage of completed mobile homes.

# Protected species seen or known:

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# **Protected species potential:**

-

## **Priority habitats present:**

River (northern boundary)

## **Priority species seen or known:**

-

#### **Priority species potential:**

-

#### **Connectivity:**

There is no connectivity within the site but Brandon Country Park lies adjacent to the site on the southern boundary.

#### **Structural diversity:**

There is very poor structural diversity on site.

#### Flora:

Most of the site is hardstanding. The areas where the mobile homes are being stored comprised ephemeral/short perennial vegetation including ribwort plantain, yarrow, creeping cinquefoil, dandelion, groundsel, perennial sow-thistle, perforate St John's-wort, mugwort, prickly lettuce and smooth hawk's-beard. In an area of poor semi-improved grassland, there are patches of more diverse flora, including red fescue, Yorkshire fog, wood sage, common cats-ear, viper's-bugloss, hare's foot clover, common centaury, white melilot and upright hedge parsley.

There was a small amount of scrub and trees, mainly along the northern boundary of the site including sycamore, oak, silver birch, bramble and hops.

#### Avifauna:

The site itself is sub-optimal for birds, although common species such as blackbird may forage on the areas of short mown grass.

#### **Invertebrates:**

This site represents poor habitat for invertebrates.

#### **Herpetofauna:**

The habitat is unsuitable for reptiles and amphibians.

#### **Mammals:**

The site is securely fenced which restricts potential mammal activity on site. Common species such as rabbits and squirrels may be able to pass through the fence where it abuts the forest. Bats may forage along the southern edge habitat.

#### **Comments and recommendations:**

This site is currently used for construction of mobile homes and has low wildlife value. However it is adjacent to the Thetford Forest SSSI and Breckland SPA. Any future changes in usage of the site should take this fully into account, including issues such as light spillage and noise disturbance.

## For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar and therefore requires a HRA prior to the determination of any planning application.

### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/14 Land off Green Road

**FHDC Ref:** B/14

Site status: Undesignated, but adjacent to Breckland Forest SSSI and Breckland SPA

and Thetford Forest Park CWS

 Grid ref:
 TL 79160 85760

 Area:
 19 hectares

 Date:
 10 June 2015

**Recorder:** A Walmsley **Weather conditions:** Cool, overcast, windy, 12°C

Ranking: 2 Biodiversity value: High

# Map:



### **Photos:**



Acid grassland in the north-east corner of the site with sparse sward, lichens and bryophytes



The areas around the private properties provide excellent wildlife habitat with a mixture of tall herbs and grasses, dense scrub and scattered trees



Developing broom scrub in acid grassland at the east end of the site



This gnarled Scot's pine is the oldest in a group of veteran coppiced conifers located inside the north boundary, just south of the reservoir (Target Note 1)



At the west end of the site is a large expanse of acid grassland with patches of scrub, providing excellent habitat for invertebrates, reptiles and birds



A remnant area of heathland south of New Viking Lodge with patches of heather and wavy hair-grass – a basking adder was seen here (Target Note 2)



Scot's pines in the south-west part of the main wood



A block of silver birch and Scot's pine woodland situated south of Farm Cottage

## **Habitat type(s):**

Lowland deciduous woodland, acid grassland, lowland heath

#### **Subsidiary habitats:**

Scrub, deadwood, bare ground

## **Site description:**

This large and varied site is situated on the south-east edge of Brandon, sandwiched in a narrow strip of undesignated land between the town and the Breckland SPA; Breckland Forest SSSI and Thetford Forest Park County Wildlife Site to the south. The SSSI is notified for its assemblage of Nationally Rare and Nationally Scarce vascular plants, including five species which are listed on Schedule 8 of the Wildlife and Countryside Act (1981); and for its exceptionally rich invertebrate fauna. The SPA designation is for its woodlark and nightjar populations. The CWS designation recognises the importance of the area for its plant assemblage, as well as its diversity of reptile, invertebrate and bird species.

Near the centre of the site are three private dwellings, set in their own grounds. Outside of these, the site is very diverse with a broad range of habitats including: at the eastern end, an L-shaped area of undulating, semi-improved to improved acid grassland; at the centre of the site, various blocks of broadleaved, mixed and conifer woodland, interspersed with more open areas of scattered scrub and pockets of grassland; and at the west end, an open area of moderately species-rich acid grassland and scrub. Small remnants of heathland in the south-west support patches of heather and other heathland species.

There are some unusual features within the site, most notably a collection of veteran, coppiced Scot's pines (Target Note 1) located close to the site's north boundary, near to the reservoir (see photo above). In the same area there are also occasional 'wolf' pines i.e. trees of greater age and stature than other conifers within the block. The Nationally Rare plant species, maiden pink, and Nationally Scarce sickle medick have previously been recorded in the site (in 1997 and 1996 respectively), although neither was seen during this survey. Woodlark, a Priority species, was also recorded in the eastern part of the site in 1997. Parts of the site have a very undulating topography, particularly in the north-west, probably caused by cryoturbation during the last ice age. These topographical features are frequent in this area of Suffolk.

The site is fenced on the north, east and west sides and is not open to the public, although there is a narrow footpath at the western end which provides access across the site into the forest.

## **Protected species seen or known:**

Woodlark (recorded in 1997), adder

### **Protected species potential:**

Bats, grass snake, common lizard, slow worm

#### **Priority habitats present:**

Lowland deciduous woodland, acid grassland, lowland heath

## **Priority species seen or known:**

-

### **Priority species potential:**

Skylark, song thrush, spotted flycatcher, swift, barn owl, hedgehog, there is also the potential for a wide range of Priority invertebrates to be present in the site

#### **Connectivity:**

The site is contiguous with Breckland Forest on its south side, as well as with similar but undesignated habitat on its immediate east and west sides, providing excellent connectivity on all but the north side (which is formed by Green Road and Brandon town).

# **Structural diversity:**

Structural diversity within the site is excellent, with a great variety of grassland sward heights and textures, with both very open swards and dense tussocky areas represented. A wide range of tree and scrub species and ages, from young seedlings to veterans are also present, along with plenty of variation in substrate type, including bare ground, leaf, grass and needle litter. There is also a significant quantity of both standing and fallen deadwood, and many trees with dead limbs, and cracked and creviced bark. Cool shaded and sheltered sunny areas are also well-represented throughout the site.

#### Flora:

The site is botanically very diverse due to the variety of habitats present. At the eastern end is a large open expanse of semi-improved to improved grassland over nutrient-poor, free-draining sandy soils. The topography is undulating, particularly on the north side, where the land slopes down markedly towards the adjacent wood. Historical aerial imagery indicates that this entire area has been cultivated in the relatively recent past, but the low nutrient status of the soil has allowed an acid grassland flora to recolonise some areas. To the north, the sward is open and sparse, with frequent bare ground and patches of lichens and bryophytes. A suite of typical acid grassland species has developed, and viper'sbugloss, sheep's sorrel, bird's-foot, common stork's-bill and dark mullein are very frequent, along with common mouse-ear, hop trefoil, white clover, bird's-foot trefoil and dove's-foot crane's-bill. The range of grasses is narrow, consisting mainly of barren and soft brome, cock's-foot and Yorkshire fog. To the south the sward is taller and often coarser, dominated by the same group of grasses, but with a much lower density of herbs. Sand sedge and wood small-reed are also frequent here. Although herbs are very scattered and few, there are some species that do not occur elsewhere, including bugloss, foxglove and parsley-piert. A small area of the grassland is now starting to be colonised by low scrub, mainly of broom. Between this grassland and the main access track through the site is a narrow, maintained grass verge. The higher nutrient status here has produced a denser, more neutral sward with herbs such as germander speedwell, yarrow, creeping buttercup, smooth hawk's-beard, hop trefoil, dark mullein, white clover and common daisy.

The open grassland area at the western end of the site has sward that is more tussocky, often with a deep litter layer. The ground is also very undulating in this area. The range of grasses is very similar to those at the east end, with the addition of wavy hair-grass, a species typical of heathland. Herbs include coarser species such as common nettle, mugwort and hogweed, but in finer, lower-growing patches are lady's bedstraw, germander speedwell, dove's-foot crane's-bill, common cat's-ear and autumn hawkbit. The area is becoming very scrubby, with an age-range of shrubs from young seedlings to tall mature blocks. The main species are broom and regenerating Scot's pine, forming dense blocks in places, but wild rose, bramble and young oak are also frequent. At the south end of this area, and for a short distance along the verge bordering the track to the south, an area of heathland vegetation with regenerating heather, wavy hair-grass, heath bedstraw, wood sage, sand sedge and broom seedlings. Another small fragment of heath is located in a small clearing among Scot's pine south of New Viking

Lodge. This area was clearly once larger, but is now being invaded by Scot's pine and silver birch scrub. The sward here is very tussocky, with abundant wavy hair-grass, bryophytes, sand sedge, regenerating heather, and occasional other herbs such as yarrow, lesser stitchwort and mouse-ear-hawkweed. A large adder (Target Note 2) was seen basking among the tussocks here.

The central areas of the site are occupied largely by extensive areas of woodland, interspersed with more open patches of scattered scrub, grass and tall herbs. In the south-east, west of the main track and to the south of Farm Cottage, is a block of tall, spindly silver birch and Scot's pine. The wood is dark, and the understorey sparse, with very occasional hawthorn and young oak. The ground vegetation is also poor, composed of false oat-grass, wood sage, sand sedge and a narrow range of bryophytes. Deadwood is occasional. North of the east-west track, the woodland forms one large block, extending in an L-shape from the west of Pinefields around the west perimeter of New Viking Lodge and down to the south boundary of the site. This block divides roughly into broadleaved woodland in the north-east and north-west corners, a mixed canopy in the middle, and pure conifer in the south-west. The broadleaved components are mainly of tall oak and silver birch, with occasional sycamore and sweet chestnut. Below the trees is a patchy understorey of occasional holly and bramble, with the addition of sweet chestnut, scrubby oak, hawthorn and holly towards the western edge. The ground flora is mainly made up of wood sage, nettle, false oat-grass, herb Robert, heath groundsel and broom seedlings, with sweet vernal grass and sand sedge more frequent below the conifer stands. Bare leaf litter and deadwood are abundant. The most notable feature in this area is a group of veteran, coppiced Scot's pine trees (Target Note 1) which clearly pre-date the rest of the wood. These are located in a scattered group near the north boundary, just south of the reservoir, but their origin is unclear. Although not in linear formation, they may have been planted and coppiced to prevent sandblow, as is typical elsewhere in the Brecks.

Small areas of scattered native scrub and trees are located in and around the three properties. These pockets are structurally very diverse and undisturbed, often sheltered and sunny, providing excellent habitat for a wide range of species. They typically consist of dense thickets of bramble, with broom, rose, elder and hawthorn, and scattered oak and silver birch forming an open canopy. The tall sward around the scrub is generally of grasses such as cock's-foot, false oat-grass, rough meadow grass, Yorkshire fog, wood sage, field woodrush, germander speedwell and occasional stands of dense nettle. A small patch of species-rich acid grassland and scrub is located adjacent to the track on the south-east side of New Viking Lodge. Maiden pink has been found in the location previously. The area supports sand sedge, lady's bedstraw, sweet vernal grass, hop trefoil, occasional heather and mouse-ear-hawkweed. There is scattered oak, bramble, broom and silver birch scrub. There are occasional horticultural species scattered in this area, including Oregon grape and ornamental iris.

The grasslands within the gardens are all closely mown and managed.

#### **Avifauna:**

Its juxtaposition with Breckland Forest and array of undisturbed habitats indicate that the site is highly likely to support a wide range of bird species. The range of tree and scrub species, excellent structural diversity and areas of sheltered scrub and open grassland provide abundant nesting, roosting and foraging habitat. Woodlark has previously been recorded within the site. In particular, the grassland areas and trackways are likely to provide excellent hunting grounds for raptors such as barn and tawny owls, kestrels and sparrowhawks, as well as for insectivorous species such as flycatchers, swallows and swifts. There are also ample nesting opportunities for ground-nesting species such as skylark.

#### **Invertebrates:**

The site is likely to be important for a wide assemblage of invertebrates due to its very broad range of habitats suitable for this group. These include numerous sheltered sunny spots; variably-aged scrub; flower-producing species including bramble, broom and lower growing herbs; abundant deadwood; bare ground; variable sward heights and textures; and varied vegetation litter of dead grass, leaves and pine needles. Species most likely to be using the site will include a wide range of grasshoppers and crickets, moths and butterflies, spiders, ground beetles, bees, wasps and hoverflies, including ground-nesting species, and saproxylic species which feed on dead wood and vegetation, particularly weevils, bugs and beetles.

## Herpetofauna:

The site's direct contiguity with Breckland Forest and own array of suitable habitat indicate it is highly likely to be used by many species in this group, including common lizard, slow worm and grass snake. A large adder was found basking among tussocks of grass and heather in a sheltered, sunny spot (Target Note 2). Piles of grass clippings close to the properties also provide ideal egg-laying sites for grass snake..

#### **Mammals:**

The size and relative lack of disturbance in the site, together with its connectivity to adjacent habitat to the east, west and south, suggest it is likely to be used by a wide range of mammal species. Many of the trees have creviced bark providing suitable bat-roosting sites, while the open grasslands and trackways provide excellent foraging habitat for bats. Deer, which are numerous in the larger forest, will also use the site. Small mammals are likely to be abundant. The site may also be important for Priority species such as hedgehog, with its deep litter layers, excellent food supply and protection (via a fence) from the busy road to the north. Rabbits were seen in the western grassland, and foxes are highly likely to use the site.

#### **Comments and recommendations:**

Despite its lack of wildlife designation, the site is of high ecological importance and also contains some historically important features such as the veteran coppiced Scot's pines which clearly pre-date most of the woodland.

The site provides a very wide range of habitats in a large, little-disturbed area and is situated directly adjacent to extensive area of forest designated for its high diversity of reptile, invertebrate and avifauna. It is likely to be particularly important for its invertebrate and reptile populations, as well as for birds. Nationally Rare and Scarce and also Priority species have also been recorded within the site in the past.

The site also supports small areas of heathland, a habitat that has suffered major loss at national and local scale. Full botanical, reptile, ornithological and invertebrate surveys will need to be undertaken at the site if there are proposals in the future to develop any part of it, as well as bat surveys to establish both the extent of usage of the site and the species involved. In addition, surveys to establish usage of the area by hedgehog, which is a Priority species, should also be included.

Some management to extend and maintain the small pockets of heathland would be beneficial, as would management to diversify the area of grassland at the west end and prevent its eventual loss to scrub.

Much of this site is of high wildlife value and it is recommended that a proposal to amend the boundary

of the adjacent County Wildlife Site to include these high value areas should be put before the County Wildlife Site panel.

# For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar and therefore requires a HRA prior to the determination of any planning application.

### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/15 Riverside Lodge off High Street

**FHDC Ref:** B/15

**Site status:** No wildlife designation

 Grid ref:
 TL 78450 86830

 Area:
 0.51 hectares

 Date:
 8 September 2015

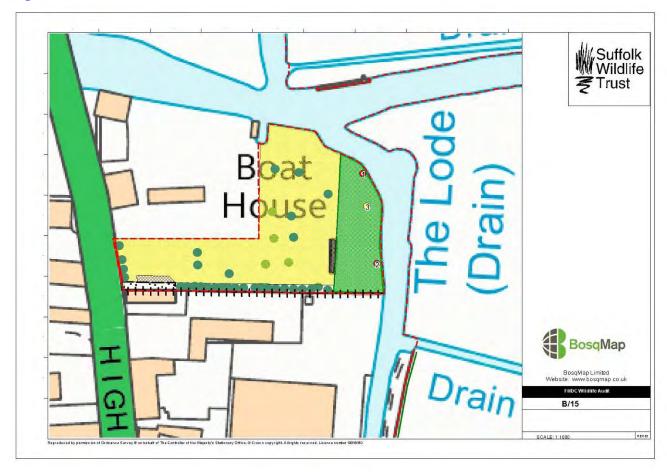
**Recorder:** A Looser

**Weather conditions:** Overcast and cool

Ranking: 4

**Biodiversity value:** Medium

# Map:



# **Photos:**



River along northern boundary looking west



Very large ash tree with bat potential (TN 1) Mature oak trees with bat potential (TN 2)



Rubble pile – potential hibernation site for grass snake (TN 2)



View across garden looking east

# **Habitat type(s):**

Amenity grassland with scattered trees, broadleaf woodland

# **Subsidiary habitats:**

Dead wood and rubble piles

## **Site description:**

This site is situated to the east of the A1065 and is part of the garden of the Riverside Lodge hotel. The River Ouse runs along the northern boundary. The site is a large garden with a variety of sheds, a marquee and scattered trees. The eastern end of the site is more wooded with some large, mature trees and is adjacent to a watercourse named The Lode, which connects to the river. There are several rubble piles in this area. There is a high brick wall along the road frontage but this boundary includes a wide entranceway.

#### **Protected species seen or known:**

-

## **Protected species potential:**

Bats, grass snake, otter, water vole

## **Priority habitats present:**

-

# **Priority species seen or known:**

-

### **Priority species potential:**

Hedgehog, water shrew

## **Connectivity:**

The location of this large garden to the south of the river Little Ouse and west of The Lode and the proximity of areas of flood-plain fen habitat to the north and east, means that the site has excellent connectivity to the wider ecological network.

#### **Structural diversity:**

For a site of this nature, there is good structural diversity with a mosaic of grassland, scattered trees and a small block of woodland to the east. Riparian habitat borders the water courses.

#### Flora:

The close-mown lawn is amenity grassland dominated with perennial rye-grass and cock's-foot with common herbs including creeping cinquefoil, dandelion, daisy, dove's-foot crane's-bill, common stork's-bill and sun spurge.

The area of woodland at the eastern end of the site included alder, elder, elm, hazel and hawthorn with some very large ash and oak. Nettle was the dominant plant in the field layer.

In the centre of the garden were scattered trees including apple, beech, sycamore, silver birch and cherry. Along the southern edge of the site was a line of trees including hazel, ash, elm and horse chestnut.

The fringe of riparian habitat bordering the river Little Ouse included reed canary grass and slender sedge.

#### **Avifauna:**

The site provides some foraging, roosting and nesting opportunities for birds, although it is likely that these will be typical garden species. Blue tit and chaffinch were seen during the visit. Kingfisher are likely to be present along the river corridor.

#### **Invertebrates:**

This site will support common invertebrates and in addition, the piles of logs and standing dead wood provide good habitat for a range of invertebrate species. The river Little Ouse and its junction with The Lode provides excellent habitat for dragonflies and a common darter was seen.

# Herpetofauna:

There are rubble piles at the eastern end of the garden near The Lode which provide good opportunities for grass snake to hibernate (TN 3). A dead grass snake was seen on the adjacent site, B/11, during this site visit. Common amphibians such as frog are likely to be present.

#### **Mammals:**

There are several very large trees at the eastern end of the garden near The Lode which have cracks and crevices suitable for bat roosts (Target Notes 1 and 2).

The Little Ouse and The Lode both provide good habitat for water vole so they could be present along the boundaries. There are numerous records of otter along the river so it is likely that they also pass through this site. The woodland appears undisturbed and may provide a lying-up site for otter.

There are several records of hedgehog in the area and they are likely to forage within the site..

During the site visit evidence of common mammals were found including squirrel, muntjac and mole.

Other common species are likely to be present including various small mammals. The proximity of the water courses may mean that water shrew (Suffolk Character Species) is also present.

#### **Comments and recommendations:**

The location of this site next to the river and adjacent flood-plain habitats increases the wildlife potential of this site. Prior to any development proposal on this site, it is recommended that further surveys are undertaken for otter, water vole, bats and reptiles. No vegetation clearance or tree felling or cutting back should take until the surveys are complete and mitigation undertaken as appropriate.

The river Little Ouse and The Lode should be buffered from any potential development, particularly the effects of noise disturbance and light spillage. The semi-natural fringe of riparian habitat should be maintained along these water courses.

# For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the

determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and therefore requires a HRA prior to the determination of any planning application.

### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/17 Land to the West of Brandon incorporating B/12

**Land to West of Manor Road** 

**FHDC Ref:** B/17 (incorporating B/12)

Site status: Largely no wildlife designation, but contains Barberry Hedge, Chalk

Road County Wildlife Site (CWS)

**Grid ref:** TL 76550 86000 **Area:** 99.5 hectares

**Date**: 15 and 23 June 2015

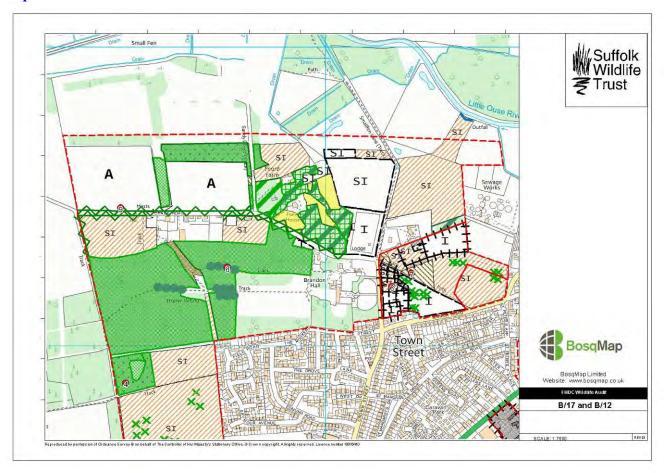
**Recorder:** A Walmsley

**Weather conditions:** Day 1: Fine, sunny, light breeze, 16°C

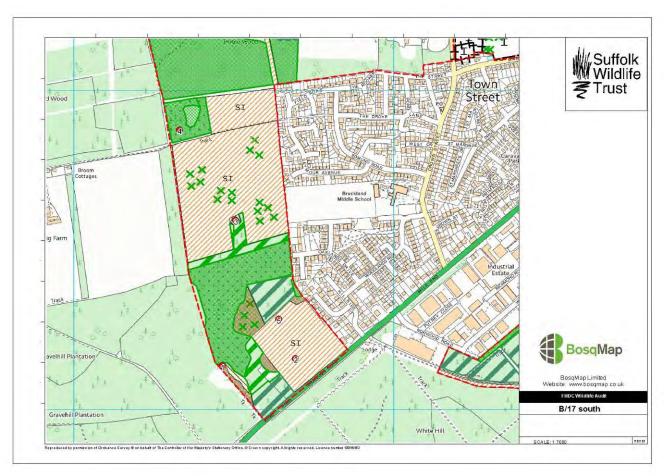
Day 2: Overcast, breezy, 13°C

**Ranking:** 2 **Biodiversity value:** High

# Map:



Northern Section



Southern Section

# **Photos:**



A belt of dense native scrub and trees separates two arable fields in the north-west corner of the site



Extensive open grassland at Foord Farm provides valuable habitat for invertebrates, and hunting grounds for birds, bats and raptors



Heavily-grazed paddocks in the north-west, with cotton thistle and hound's tongue in foreground



A dry overgrown pond located among Paddocks in Site B/12 (Target Note 7)



Excellent structural diversity in woodland west of Brandon Hall provides nesting and overwintering habitat for a wide range of species



Mature lime trees line both sides of the main avenue through the wood to Brandon Hall (Target Note 8)



A broad tract of grassland and bracken below the wayleave west of Brandon Hall



The western end of the same wood displaying a tree canopy that is frequently more open



A large area of open grassland provides ideal habitat for invertebrates, including bare ground, varied sward heights, flowering plants, dead wood and scrub



The same area, looking north, showing scattered scrub and undulating ground



Where swards are sparse and low, a broader range of herbs is able to survive, making these valuable areas for invertebrates



A large expanse of grassland with gorse scrub in the south (Target Note 2). Heavy grazing pressure has suppressed grass growth enabling a wide range of herbs to thrive, including the Nationally Scarce smooth cat's-ear (Target Note 5- see also Target Note 6 for this species)



Large open patches in woodland in the southwest have stands of scattered mature scrub and bracken



Tall grassy swards occupy the eastern part of Site B/12, with paddocks to the north and west



The northernmost part of the site, looking south. This area supports numerous skylark nests



The south bank of the river is choked with tall, dense vegetation, and is fenced off from the field

## **Habitat type(s):**

Lowland deciduous woodland, acid grassland, pond (usually dry)

#### **Subsidiary habitats:**

Scrub, deadwood, bare ground, damp grassland

## **Site description:**

B/17 and B/12 together form a very extensive site which incorporates a section of the proposed Brandon relief road route, entering the site from the north-east corner. Site B/17 lies immediately to the north of the Breckland SPA and Breckland Forest SSSI and Thetford Forest Park CWS, separated from them by the A1065 which delineates the southern boundary. Barberry Hedge, Chalk Road CWS, lies entirely within B/17 in the north-west. This wildlife site consists of an ancient, species-rich, native hedge bordering both sides of Chalk Road, forming a green lane. The hedge contains a number of large old barberry bushes (Target Note 9) which are now scarce in the wild and in Suffolk are confined to the Brecks.

Large areas of B/17 are covered with broadleaved woodland and there are one or two small blocks of conifer plantation in the south-west. Across both sites, there are also extensive areas of open acid grassland, mostly semi-improved but often herb-rich. However, horse paddocks occupy at least half of the grassland areas. The majority of these are very heavily grazed, with short, tight swards and significant patches of bare ground. Many have been damaged by overgrazing and nutrient enrichment, but some are still relatively species-rich; smooth cat's-ear (Target Note 5 and Target Note 6) was found in two such areas. Arable fields occupy the north-west corner of site B/17.

Several domestic properties lie within the site's boundary, at the north end. These generally contain a mixture of woodland and grassland, the latter varying between tightly mown, species-poor lawns to tall swards with a good range of grasses and herbs.

Parts of the site, particularly at the south end, are on very undulating ground, while the large open, horse-grazed field adjacent to the south perimeter (Target Note 2) slopes down quite steeply from the north and west towards the south-east corner. A large area of open grassland adjacent to the school also has marked contours at its southern end, with a large shallow depression, and a smaller but relatively deep, dry pit (Target Note 3) surrounded by scrub and trees. The pit does not appear to hold water at any time of year. There is also a small overgrown pond (Target Note 7) in B/12 which was dry and heavily vegetated with nettle and tall grasses.

The short stretch of river bank that falls within site B/17 at the north-eastern corner is densely vegetated with tall herbs and marginal vegetation and frequent willow scrub.

With the exception of the private properties, the arable land at the north end and most of the horse-grazed fields and paddocks, the site is open to the public. Public footpaths cross B/12.

The site is currently the subject of a planning application (Forest Heath DC reference: DC/15/1072/OUT) for the construction of 1,650 dwellings, employment areas and a relief road. The application includes an Environmental Statement setting out the ecological survey and assessment work which has been undertaken at the site (Barton Willmore LLP, 2015).

#### **Protected species seen or known:**

Grass snake (near the pond in B/12, 2009 and Barton Willmore LLP, 2015), otter (Barton Willmore

LLP, 2015), common lizard (URS, 2015), brown long-eared bat, common pipistrelle bat, soprano pipistrelle bat, noctule bat, Daubenton's bat, serotine bat, natterer's bat, Leisler's bat, barbastelle bat (all Barton Willmore LLP, 2015), Roman snails (2015)

#### **Protected species potential:**

Adder, slow worm, water vole, great crested newt

### **Priority habitats present:**

Lowland deciduous woodland, acid grassland

# **Priority species seen or known:**

Barn owl, bullfinch, cuckoo, dunnock, grasshopper warbler, grey partridge, house sparrow, lapwing, linnet, marsh tit, nightjar, reed bunting, skylark, song thrush, spotted flycatcher, starling, turtle dove, woodlark, yellowhammer, hawfinch, herring gull, lesser redpoll (all Barton Willmore LLP, 2015), hedgehog, common toad

### **Priority species potential:**

Swift, brush-thighed seed-eater beetle (recorded to the north of the site, Barton Willmore LLP, 2015), over 50 Priority species moths recorded at site boundary

## **Connectivity:**

Connectivity within the site overall is excellent. Site B/17 forms part of, and is directly contiguous with, a much larger area of open grassland, woodland and conifer plantation, particularly to the west and north, and (beyond the A1065) to the south. Brandon town is immediately adjacent to the site on its south-east side. The River Little Ouse connects the north-east corner of the site to other habitats beyond, forming a vital wildlife corridor. Site B/12 is adjacent to Site B/17, although separated from it by a quiet lane and unmade bridleway.

### **Structural diversity:**

Overall, the site is structurally very diverse with a broad range of habitats from short, heavily grazed grassland and bare ground to extensive areas of longer grass, scattered and dense scrub and blocks of diverse, broad-leaved woodland, conifer plantation and mixed woodland. Within the wooded areas there is also often very good variation, with clearings, patches of dense and scattered scrub, carpets of ground vegetation interspersed with bare leaf litter, and canopies of varying heights and densities. Both standing and fallen deadwood are frequent.

#### Flora:

The variety of habitats across the site has given rise to a diverse vegetation, although within habitat types the flora may not vary significantly.

#### Woodland

Broad-leaved woodland occupies large blocks on the western side, mainly in the centre and south, with small fragments in the north. The largest continuous wooded tract lies to the west of Brandon Hall. The main canopy species here are oak, ash and sycamore, with occasional beech, sweet chestnut, silver birch and hybrid poplar. Older trees are relatively frequent, including some very unusual coppiced oaks and avenues of large lime trees (Target Note 8) which partially line the two main tracks through the wood. The understorey is diverse and often very well-developed, particularly on the eastern side, providing excellent structural variation. Typical species are hawthorn, elm, elder and holly, with regenerating sycamore, beech and aspen and occasional dense bramble along the tracks. The ground

flora is intermittent, with frequent patches of bare leaf litter. Vegetation includes garlic mustard, common nettle, ground ivy, cleavers, wood avens and herb-Robert, with the grasses cock's-foot, wood false-brome, rough meadow grass and creeping soft grass. The western half of the wood is a little more open in character, on slightly more acidic soils. Bracken is more frequent here, growing with occasional foxglove and broom, and there are dense patches of wood small-reed. At the south-west corner of this area is a former game-rearing pen (Target Note 4). Deadwood is frequent throughout the wood, both as fallen and standing timber.

In the south of the site, the woodland is again quite acid, largely dominated by silver birch and oak, with some beech, chestnut, sycamore, and locally abundant aspen and acacia trees. Small patches of younger, planted trees include cherry. The understorey is patchy, with occasional hawthorn and elder, and rare stands of gooseberry. Below the trees, the ground flora is intermittent and of low diversity, mainly consisting of bracken, nettle and ground ivy. In clearings and more open areas, species diversity increases with the addition of wood sage, broom, bracken, prickly sedge, sand sedge, rough meadow grass, wood small-reed, Yorkshire fog, creeping soft grass, wavy hair-grass, soft brome and sweet vernal grass. Sheep's sorrel and the uncommon field mouse-ear were also found in one such area towards the west boundary. In the same area is a short, deep dry drainage ditch, completely overgrown with bracken (Target Note 1).

At the north end of the site, the woodland blocks are smaller and usually planted. Around domestic properties, they are typically composed of conifer planted with chestnut and beech, often over closely mown, species poor grassland (as at Foord House), while at the western side of Foord Farm a small planted woodland contains oak, elm, walnut, cherry, ash and sycamore. There is a sparse understorey in this area of elder and regenerating elm, with a patchy ground flora of nettle, garlic mustard, herb-Robert and rough meadow grass.

#### Grassland

The grasslands across both sites are generally acid (except where heavily enriched from dung and feed) and vary from species-poor to moderately species-rich. There are six areas of longer grass, five of them very extensive. Of these, two appear to be unmanaged and the rest are either lightly or sporadically grazed and/or occasionally cut. The first area is at Foord Farm, in the north. Although largely dominated by grasses, the sward is frequently herb-rich. Herbaceous species include lady's bedstraw, yarrow, germander speedwell, hairy tare, sheep's sorrel, ribwort plantain, common ragwort, field mouse-ear, common cat's-ear, lesser trefoil, mouse-ear-hawkweed, hound's-tongue, toadflax, sorrel and tormentil. Grasses include Yorkshire fog, rough meadow grass, yellow oat-grass, downy oat-grass, sweet vernal grass, crested hair-grass, red fescue, false oat-grass, cock's-foot and bent grasses. Sand sedge and prickly sedge also occur. Management of this area is unclear, but it may be periodically cut or cut for hay.

The second area, in the southern half of the site adjacent to the school, straddles a bare sandy track and is unmanaged. It is dominated over very large areas by wood small-reed over a deep litter layer, with other tall grasses also very abundant in places. Stands of hound's-tongue, forget-me-not and common mouse-ear are frequent, and there are smaller 'lawns' where the vegetation is low-growing and finer in texture, with patches of bare ground. These areas are the most diverse, supporting common cudweed, Canadian fleabane, common mouse-ear, dove's-foot crane's-bill, red clover, forget-me-not, autumn hawkbit, thyme-leaved sandwort, viper's-bugloss, bladder campion, perforate St John's-wort, prickly and sand sedges, biting stonecrop, smooth hawk's-beard, common cat's-ear, hairy tare, wild mignonette and hop trefoil. There is scattered scrub throughout, mainly of self-sown Scot's pine with occasional birch, broom, hawthorn and bramble, becoming particularly prevalent in the south-west

corner where there is also a significant amount of deadwood brash.

The third area is in the eastern part of B/12. Again, the sward is dominated with tall grasses such as Yorkshire fog, false oat-grass and cock's foot, but yellow oat-grass is also very abundant here. Herbs are frequent, particularly bladder campion, yarrow, mugwort and red clover; with other species locally numerous, such as lady's bedstraw, goat's-beard, common toadflax, biting stonecrop, ribbed melilot, mouse-ear-hawkweed, sorrel, beaked and smooth hawk's-beard, autumn hawkbit, hop trefoil, heath groundsel and common cat's-ear. Cotton and nodding thistles and hairy sedge also occur. There is some scattered small scrub, mainly of hawthorn and wild rose. Paths are mown through the grass, but it otherwise appears unmanaged.

The remaining longer areas are all in the north-east. These all appear to be lightly or only periodically horse-grazed. All are generally dominated by a range of grasses, but they support various herbs, typically including viper's bugloss, bladder campion, yarrow, ribwort plantain, common ragwort, bugloss, hound's-tongue, red and white clovers, hare's-foot clover, dove's-foot crane's-bill, common mouse-ear, common cat's-ear, sheep's sorrel and cotton thistle. The grass assemblage is variable and less diverse in some areas than others, but typically includes sweet vernal grass, Yorkshire fog, yellow oat-grass, false oat-grass, barren and soft bromes, rye grass, lesser cat's tail and timothy.

Most of the remaining grassland is heavily managed and is either species-poor and frequently mown, as at Foord House, or heavily horse-grazed. With the exception of a very large field at the south of the site, the pastures are in the form of small fenced paddocks, the majority with a very low, patchy sward. Depending on grazing intensity, some are still relatively herb-rich, although most are low in species diversity. The richer areas typically support tall specimens of unpalatable species such as hound's-tongue, viper's bugloss, bladder campion, wild mignonette and cotton thistle; and a broad range of low-growing plants which can withstand heavy grazing e.g. hop trefoil, mouse-ear-hawkweed, dove's-foot crane's-bill, smooth hawk's-beard, common stork's-bill, sheep's sorrel, common cat's-ear and biting stonecrop. The Nationally Scarce smooth cat's-ear was found in two areas: one small paddock in B/12 (Target Note 6) and in the very large field at the southern end of B/17 (Target Note 5). The south field also supports sand spurrey, which was not found elsewhere.

#### Scrub

Scrub is an important habitat within the site, occurring as young scattered bushes, more mature, isolated stands, and in dense, continuous belts such as hedgerows. The CWS along Chalk Road in the north-west is a species rich hedge, comprising hawthorn, wild rose, common hop, purging buckthorn, spindle, elm, ivy, wild privet and a number of mature bushes of the now-scarce wild barberry (Target Note 9). Hedge trees include oak, ash and sycamore. North of the hedge, between two arable fields, is a 40m wide, mature, scrubby belt of native shrubs and trees. This feature is very varied in structure, providing a wide range of habitats, and is buffered by a wide strip of semi-improved acid grassland. Woody species include rose, bramble, purging buckthorn, mature ivy, hawthorn and blackthorn, with oak, ash and apple trees. There is also plenty of deadwood habitat. Other scrubby habitats are mainly found in the south of the site, where large clearings in the woodland have been colonized by large stands of spindle, hawthorn, scattered birch and rowan. Gorse forms scattered stands in the horse-grazed field in the extreme south and in the north alongside Sandy Drove and on either side of Smallfen Lane. The scrub takes the form either of sprawling hedging or copse-like growth, and in both areas is composed mainly of elm and mature ivy, with elder and hawthorn.

#### Fen vegetation

Dense, tall vegetation lines the bank of the river at the north-east end of the site. Along with nettle and

cleavers are species such as reed sweet-grass, hemlock and reed canary-grass. Almond and white willow scrub and trees are interspersed.

#### Avifauna:

The extensive, undisturbed and varied habitats make this site important for a wide range of bird species. Of particular value for this group are the significant and varied tree cover, areas of well-developed scrub often with berry-bearing species, very large areas of open, tall grassland providing excellent foraging areas for raptors such as barn and tawny owl and insectivorous species such as swift, swallow, flycatcher, martins and others. A swallow was recorded hawking over the grassland at Foord Farm and a number of skylarks were singing and visiting nests on the grassland directly south of the river. Other birds either seen or heard during the surveys include rook, robin, blackbird, wren, chaffinch, cuckoo, swift, buzzard, dunnock, reed bunting and green woodpecker. 22 Priority bird species were recorded during the breeding and wintering bird surveys undertaken to support the current planning application for the site (Barton Willmore LLP, 2015).

#### **Invertebrates:**

The site is also very important for invertebrates, with extensive areas of undisturbed habitat including grasslands, scrub, deadwood, leaf and grass litter, woodland canopies and bare soil. The CWS barberry hedge has the potential to support the Barberry Carpet moth, a Nationally Scarce and Priority species also listed in Schedule 5 of the Wildlife and Countryside Act (1981) (as amended). Previous moth trap records from the very edge of the site at Brandon Hall list over fifty Priority moth species. In addition, a number of invertebrates were recorded during the survey including various ant nests, including a yellow meadow-anthill, six-spot burnet moth, skipper and several meadow brown butterflies, numerous banded demoiselles, a cluster of celery-leaf beetles on hogweed, bird-cherry ermine moth and a range of grasshoppers. Roman snails, apparently very abundant in the tall grassland adjacent to the school, were also seen in some number in the edge of the woodland to its south. Surveys for the current planning application at the site recorded 1,079 invertebrate species, of which 21 were Red Data Book species, 88 were Nationally Scarce and two were of 'Near Threatened' status (Barton Willmore LLP, 2015).

The following areas are considered to be of the greatest potential importance for invertebrates:

- The large areas of tall open grassland these usually have varied structure with good basking spots on lower, sheltered patches, flowering plants, litter layers which provide valuable overwintering and egg laying habitat, and sheltering woodlands to the north, south and west.
- The scrubby habitats provided by the barberry hedge and shelter belt in the north and in the more open parts of the woodland. The variation in scrub age and species and shelter provided by surrounding woodland make these areas valuable for a wide range of species.
- Deadwood and bare ground habitats, providing nesting and overwintering sites, and a food source for saproxylic species.

The site is likely to be particularly rich in groups such as grasshoppers and crickets; moths and butterflies; spiders; ground beetles, bugs and weevils; bees, wasps and hoverflies.

#### Herpetofauna:

Grass snake has been recorded in B/12, and has also apparently been seen in the grassland at Foord Farm, which has direct connectivity with the river corridor to the north. The grassland immediately south of the river bank in the north-east is also likely to support this species. Common toad has also been recorded in the site, close to the pond in B/12. Grass snake and common lizard were recorded on the site during surveys to support the current planning application (Barton Willmore LLP, 2015). Slow

worm and adder are also likely to use the site, although none were recorded during the planning application reptile surveys.

#### **Mammals:**

The site is likely to be well-used by a wide range of mammal species. There are bat boxes in some areas and activity from nine species was recorded during surveys to support the current planning application (Barton Willmore LLP, 2015). The open grasslands, wayleaves and clearings in the woodland to the south provide excellent foraging habitat for bats, with abundant potential roosts throughout the woodland. Roe deer were both seen and heard barking in the central woodland and in the grassland in B/12. A fox earth was noted in the main area of woodland west of Brandon Hall and molehills were frequent in many parts of the site. There is a hedgehog record for the south part and a wide range of small mammals will use most areas of the site.

A water vole survey was conducted along the stretch of river bank. No field signs were seen, mainly due to undercutting and erosion of the bank at this point caused partly by an outfall in this stretch and by fluctuating flows during the wet spring. However, it is very likely that water voles do use nearby parts of the bank as there is ample vegetation cover and some areas of slower-flowing water. Otters may also occasionally stray into the site although no signs were noted. Otter was recorded during the surveys to support the current planning application (Barton Willmore LLP, 2015).

#### **Comments and recommendations:**

Despite its lack of designation, the site is of high ecological importance due to the range and size of established habitats and excellent connectivity to neighbouring areas of habitat and the river corridor. The site is known to support a range of protected and Priority species including bats, common lizard, grass snake, Roman snail and 22 species of bird. It is also likely to be used by other protected and Priority species such as adder and slow-worm and range of bird and invertebrate species, particularly moths. Water vole may also be present along neighbouring stretches of river bank. The Nationally Scarce smooth cat's-ear has also been found in at least two locations and may be present elsewhere.

## For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar and 1,500m of parts of the SPA designated for supporting stone curlew and therefore requires a HRA prior to the determination of any planning application.

## For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

#### **References:**

Barton Willmore LLP (May 2015) Environmental Statement – Land West of Brandon

# Site name B/18 Land South of Little Ouse & West of High Street

FHDC Ref: B/18

**Site status:** No wildlife designation, but adjacent to Brandon Memorial Playing

Fields CWS

Grid ref: TL 78112 86635
Area: 5.02 hectares
Date: 3 September 2015

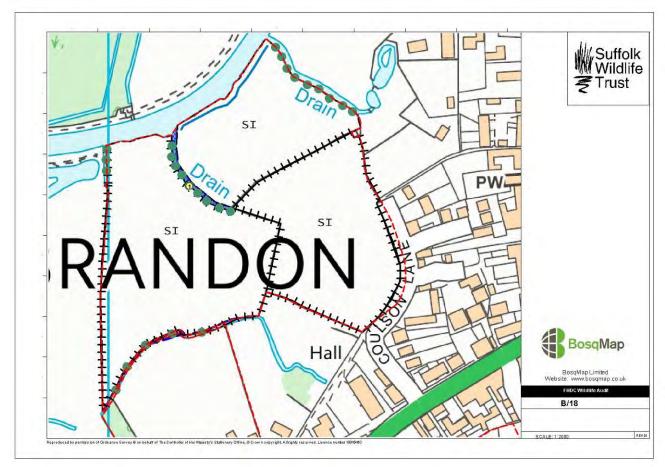
**Recorder:** A Looser

Weather conditions: Overcast and cool

Ranking: 4

**Biodiversity value:** Medium

# Map:



# **Photos:**



View across horse grazed paddocks



Heavy poaching along river Little Ouse



Large willow with bat potential (Target N otel)

# **Habitat type(s):**

Poor semi-improved grassland, tree-lined water-filled drains, river

# **Subsidiary habitats:**

-

## **Site description:**

This site represents three large fenced paddocks currently grazed by horses. The grassland is species-poor with paches of dock and nettle. In several places there was evidence of heavy grazing and poaching, such as along the river bank. A water-filled drain, lined with willow and alder runs from the river into the centre of the site. Some of these trees are large and at least one of these had potential for roosting bats.

# Protected species seen or known:

-

# **Protected species potential:**

Water vole, otter, bats, grass snake

## **Priority habitats present:**

River (northern boundary)

# **Priority species seen or known:**

-

#### **Priority species potential:**

Water vole, otter, bats, grass snake

### **Connectivity:**

The river provides an excellent wildlife corridor along the northern boundary and links with the central drain. In addition, Brandon Millennium Playing fields CWS is adjacent to the site on the western boundary.

# **Structural diversity:**

Structural diversity is relatively poor, with the exception of the tree lined central drain and the boundaries.

#### Flora:

The paddocks are species-poor, being dominated by perennial ryegrass and Yorkshire fog with a number of common herbs including common nettle, broad-leaf dock, spear thistle, Canadian fleabane, wild mignonette, hogweed, ground elder, common mallow, yarrow, dove's-foot crane's-bill, white bryony, white dead nettle, white clover, greater plantain, black horehound, knotgrass, tansy, common ragwort and fat-hen.

The ditch contained water at the time of survey and there was a variety of marginal species associated with the ditch including floating sweet-grass, creeping buttercup, forget-me-not spp, water mint, bittersweet and brooklime. Along the river, where there was less poaching, the margins are fringed with common reed and sedge spp.

There were some very large willow (Target Note 1) and alder along the drain as well as some ash and hawthorn.

### Avifauna:

The site is sub-optimal for birds although common species will forage on site. The river will also support a variety of species including kingfisher. Mallard and wood pigeon were seen during the visit.

#### **Invertebrates:**

The site is sub-optimal for invertebrates although common species will be present. The river corridor provides good habitat for species such as dragonflies. Red admiral butterflies were seen.

## Herpetofauna:

Although the majority of the site is unsuitable habitat for reptiles there is likely to be grass snake along the river corridor, particularly in the marginal vegetation where the banks are less poached.

#### **Mammals:**

The river Little Ouse runs along the north eastern boundary of the site. Where the vegetation has not been poached by the horses there is good habitat for water voles. The habitat along the river is also highly suitable for otters and they are known to be present.

There are some large willow trees along the ditch close to the river which provide good potential

roosting sites for bats (Target Note 1)..

Mole hills were seen and other common mammals such as fox, squirrel and deer are likely to be present.

#### **Comments and recommendations:**

The location of this site next to the river and adjacent flood-plain habitats increases the wildlife potential of this site. Prior to any development proposal on this site, further surveys should be undertaken for otter, water vole, bats and reptiles. No vegetation clearance or tree felling or cutting back should take until the surveys are complete and mitigation undertaken as appropriate.

The river Little Ouse should be buffered from any potential development, particularly the effects of noise disturbance and light spillage. Future development proposals should include the re-instatement of a semi-natural fringe of riparian habitat adjacent to the river.

# For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and therefore requires a HRA prior to the determination of any planning application.

## For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/19 Land South Railway Line Including Lignacite Site

**FHDC Ref:** B/19

**Site status:** No wildlife designation

Grid ref:
Area:
Date:

Recorder:

Veather conditions:

TL 78630 87110

9.28 hectares

8 September 2015

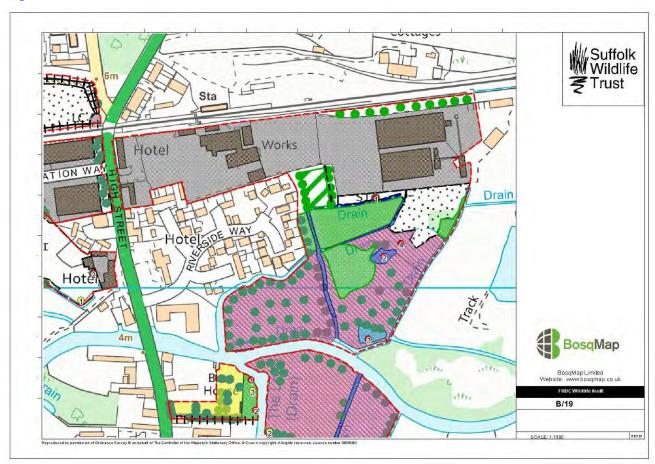
A Looser & S Bullion

Overcast and cool

**Ranking:** 3 (semi-natural areas only)

**Biodiversity value:** Medium

# Map:



# **Photos:**



Mature oak tree with bat potential (Target N ote 1)



Wet woodland dominated by alder



Area of open water (Target Note 2) within the flood-plain fen habitat



Area of flood-plain fen habitat with cricket bat willow planting



Shaded ditches



Slightly drier area (Target Note 4)



Small areas of swamp (Target Note 3)



Large piles of deadwood are good for invertebrates

# **Habitat type(s):**

Flood-plain fen, wet woodland, swamp, scrub

# **Subsidiary habitats:**

Scattered trees, standing water, poor semi-improved grassland

# **Site description:**

The northern part of the site is occupied by the Lignacite factory with a railway line along the northern boundary, but the southern and central sections represent a complex habitat mosaic including flood-

plain fen and wet woodland. It is likely that when there are high water levels in the river, this site will be inundated and this will influence the habitat types. As well as extensive areas dominated by alder and open areas of fen, there are smaller patches of swamp habitat (Target Note 3) and several areas of open water are also present, as well as occasional drier areas within the fen (Target Note 4). Areas of open water include a pond (Target Note 2) in a central location and several shaded drains running through the site. The river Little Ouse runs along the southern boundary. A mown path runs southwards towards the river, through the centre of these semi-natural areas and this path is bordered by patches of scrub. Cricket bat willows have been planted across much of the fen. An area on the eastern side of the site was being used for stone and rubble crushing and was heavily disturbed. A small band of wet woodland lies on the eastern boundary, adjacent to this disturbed area. There are several belts of leylandii associated with the smaller block of woodland closest to the factory. Due to the presence of tall vegetation, this was a difficult site to access fully.

#### Protected species seen or known:

-

### **Protected species potential:**

Grass snake, bats, otter, water vole

# **Priority habitats present:**

Wet woodland, Fens

# **Priority species seen or known:**

-

#### **Priority species potential:**

Harvest mouse, water shrew, common toad

### **Connectivity:**

The site lies to the north of the river Little Ouse and is part of a wider mosaic of similar habitats, so connectivity is excellent.

## **Structural diversity:**

The habitat mosaic of wet woodland and flood-plain fen, along with areas of swamp and open water provides excellent structural diversity within the semi-natural areas of the site.

#### Flora:

The woodland areas were wet, being dominated by alder and willow with some hawthorn, elder, guelder rose and cherry. The understorey was dominated by common nettle with ground ivy, soft rush and valerian spp.

Some cricket bat willows had been planted.

The open areas of fen vegetation included reed sweet-grass, reed canary grass, common reed, comfrey, hemlock, wood avens, water chickweed, water mint, square-stalked St John's-wort, hemp nettle and occasional common reedmace. Around the central area of open water was hard rush, soft rush, common reedmace, reed sweet-grass, reed canary grass and water mint.

North of the pond there was a drier area dominated by wood small reed, as well as false oat-grass and

cock's-foot grasses with mugwort, creeping thistle and golden rod (garden escape) but this was not sufficiently distinct enough to separate as a different habitat.

Nearer the hardstanding were areas of poor semi-improved grassland containing species such as red fescue, Yorkshire fog, common nettle, tansy, colt's-foot, tufted vetch, kidney vetch, black medick, wild carrot, common poppy, yellow melilot and upright hedge-parsley.

The scattered trees along the railway line on the northern boundary were dominated by poplar, oak, sycamore and Leylandii.

#### **Avifauna:**

The survey was undertaken at a sub-optimal time for this group but the site offers very good habitat opportunities for birds. Blue tit, long tailed tit and carrion crow were recorded, but it is likely that migrant species such as warblers will also be present.

#### **Invertebrates:**

This is a very good site for invertebrates and there were particularly high numbers of spiders, such as marbled orb-weaver spider which was numerous across the fen. Bees sp, speckled wood butterfly, silver y moth, and the migrant hummingbird hawkmoth were recorded during the survey.

### Herpetofauna:

The proximity of the site to the river, combined with the size and habitat mosaic means that it is highly suitable for grass snake. Amphibians such as frog and common toad are also highly likely to be present.

#### **Mammals:**

The presence of muntjac deer, roe deer, fox and mole were recorded. It is highly likely that bats will forage over the site and occasional large trees provide roosting potential (Target Note 1). There are numerous records of otter along the river corridor and the undisturbed nature of the site means there are good opportunities for this species to lie up. Trees on the riverbank were not investigated for the presence of any holts, but there is a possibility a holt could be present. Wet fen sites such as this will support Priority species such as harvest mouse and water shrew (Suffolk Character Species). Water vole may also be present.

#### **Comments and recommendations:**

Prior to any development proposal further surveys are required. These should include a detailed spring plant survey and bat, breeding bird, otter, water vole and reptile surveys should also be undertaken as part of the suite of surveys. No vegetation clearance should take place until the surveys have been undertaken and a mitigation plan drawn up and implemented as appropriate.

Notwithstanding the outcome of any surveys, any removal of scrub and trees should avoid the bird nesting season (March to August inclusive).

# For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km

grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar and therefore requires a HRA prior to the determination of any planning application.

### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/20 Land at Brandon Cottage, Bury Road

FHDC Ref: B/20

Site status:

Grid ref:

Area:

Date:

No wildlife designation
TL 78580 85720
0.93 hectares
10 June 2015
Recorder:

A Walmsley

**Weather conditions:** Overcast, breezy, 14°C

Ranking: 4

**Biodiversity value:** Medium

# Map:



## **Photos:**



Tall canopy woodland with a mainly exotic understorey occupies much of the site (Target Note 3)



Piles of dead leaves and brash provide excellent habitat for species such as hedgehog (Target Note 5)



Large piles of grass cuttings which retain warmth are excellent habitat for species such as grass snake (Target Note 5)



Grassland under trees at the west end of the site

# **Habitat type(s):**

Mixed plantation woodland, amenity grassland

# **Subsidiary habitats:**

Habitat piles, deadwood, scrub

#### **Site description:**

The site is part of a larger private garden on the southern edge of Brandon town. It is enclosed by walls and a fence, with dense housing on its north and west sides, and is adjacent on its east side to the main B1106 into Brandon. The property is directly adjacent to the Breckland SPA and Breckland Forest SSSI and Thetford Forest Park County Wildlife Site to the south.

The site consists mainly of tall, planted trees, some of them (including some fine beeches – Target Note 4) dating to when the house was built approximately 200 years ago. There are a number of exotic species, particularly pines, as well as some native trees including beech, oak and birch (Target Note 2). The understorey is largely of exotics, primarily mature bamboo, laurel and rhododendron (Target Note 3). In the north-west, below the trees, are extensive areas of bare leaf litter and large piles of grass clippings, dead leaves and woody debris (Target Note 5). There are two areas of grassland within the site, of which one is an open, closely mown and species-poor lawn (Target Note 1) and the other a patch of largely shaded grass with a slightly longer, more uneven sward. Outside of the wooded areas there are several mature shrubs of both horticultural and native species.

#### **Protected species seen or known:**

Bats – pipistrelle (known roost in house)

#### **Protected species potential:**

Bats, slow worm, adder, grass snake (both previously recorded at nearby Brandon Country Park, 2011)

#### **Priority habitats present:**

-

#### **Priority species seen or known:**

\_

## **Priority species potential:**

Hedgehog, song thrush, starling, house sparrow, marsh tit

## **Connectivity:**

Although contiguous with the Breckland SPA; Breckland Forest SSSI and Thetford Forest Park CWS on its south side, the property is completely enclosed with walls and fencing, and lies adjacent to a busy main road, all factors which reduce its connectivity to wider habitat. However, for small mammals, airborne species and potentially reptiles, the site has good connectivity on its south side.

#### **Structural diversity:**

There is relatively good structural diversity within the site, provided by extensive areas of leaf and needle litter; piles of garden waste including dead leaves, hedge clippings and deadwood; mature shrubs including some native species; and both short grass and patches of longer vegetation at the

woodland edge and below some shrubs. Some of the trees, including a large redwood, have creviced bark providing niches for bat roosts and overwintering sites and shelter for invertebrates. Other trees support mature ivy which also provides excellent shelter and nesting/roosting sites.

#### Flora:

Floristic diversity within the site is fairly low due to its small size and lack of habitat variation. Within the wooded areas, the main canopy species are beech including two veteran specimens (Target Note 4), and a range of exotics including redwood and copper maple (Target Note 2), together with oak, birch and sycamore. The understorey is composed mainly of large bushes of rhododendron, with bamboo and laurel (Target Note 3); and occasional hawthorn, holly and regenerating beech. The garden species, Oregon grape, occurs at the woodland edge. The ground flora is extremely patchy, with occasional wood false-brome, foxglove and sycamore seedlings. At the edges of the woodland is a narrow range of taller grasses and herbs including rough meadow grass, garlic mustard, barren brome and wood false-brome. Mature laurel and hawthorn shrubs and a small amount of broom edge the lawn on the north and west sides.

There are two small areas of grassland. One of these forms part of the formal lawns, and is closely mown with a fine, grass-dominated sward (Target Note 1). There are few herbs here apart from very occasional dove's-foot crane's-bill and yarrow, along with rare hairy sedge. The second area of grassland is a small, largely shaded clearing at the western edge of the site, connected to the formal lawn via a broad, shaded grassy path. In the clearing the sward is more patchy and the height more varied, with some slightly longer areas. There are a few more plant species in this area, including sweet vernal grass, ground ivy, occasional meadow buttercup, hop trefoil and germander speedwell.

#### Avifauna:

The site provides plenty of shelter and some potential nesting habitat. It is highly likely to be used by a wide range of bird species passing through the site from the woodland on the south side. A rook and pigeon were recorded during the survey.

#### **Invertebrates:**

The site is largely enclosed and well-shaded, with relatively few nectar and pollen-producing species, so may not be widely used by groups such as bees, butterflies etc. However, the shelter it affords and the wide range of deadwood/leaf habitats suggest it is likely to be very well-used by ground dwelling and saproxylic species which feed on decaying vegetation. Among such groups would be a wide range of genera including beetles, spiders, bugs, weevils, etc. The maturity of some of the native trees, especially the beech trees, also suggests that an assemblage of specialist invertebrates wholly or partly dependent on these species might have become established at the site over the years.

# Herpetofauna:

The piles of garden waste (Target Note 5), particularly grass clippings, provide suitable habitat for species such as slow worm, adder and grass snake. Although the garden is effectively cut off from the large area of woodland to the south, there are small gaps in the fence and the habitat piles, particularly of grass, which provide a valuable resource that may be under-represented or absent in the larger woodland area. The wooded area of the site also appears to be relatively little disturbed. Grass snake and adder have both been recorded (2011) in the vicinity of this site.

### **Mammals:**

A pipistrelle bat roost is known to be present in the property associated with the site. A wide range of small mammals are likely to use the site which offers shelter, protection from larger species such as fox

and excellent nesting habitat. In particular, the site provides ideal habitat for hedgehog, with its abundance of leaf litter, good food supply and lack of disturbance. The site is also largely protected from the neighbouring road by a wall. A grey squirrel was recorded during the survey.

#### **Comments and recommendations:**

Although small and with limited connectivity, the site offers excellent habitat for a range of small mammals, particularly hedgehog, as well as for invertebrates. It may also provide important habitat for species such as slow worm and grass snake. The extent of bat usage within the site is unknown, although it is known that pipistrelles use the loft space of the house and many of the trees provide potential roosts for bats.

Further surveys are needed to establish the extent of usage by important, protected and Priority groups, in particular bats, reptiles and hedgehog. Whatever the future use of the site, it is recommended that the older beech trees be retained and covered by a Tree Protection Order if not already included in the existing TPO on the site.

# For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar and therefore requires a HRA prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/21 Land North of Gas House Drove (Small Block)

FHDC Ref: B/21

**Site status:** No wildlife designation

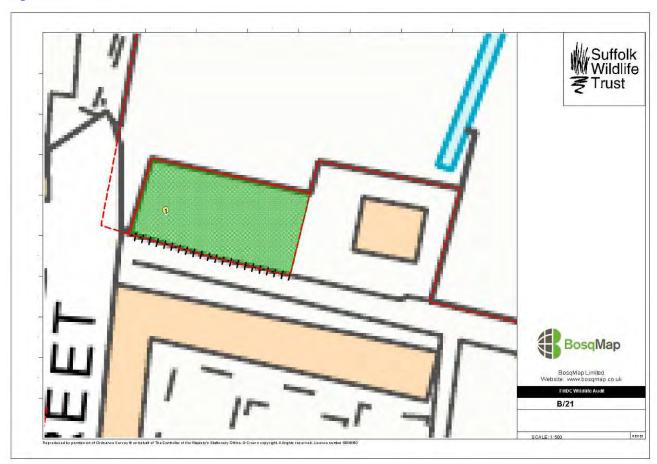
Grid ref: TL 78518 86693
Area: 0.07 hectares
Date: 3 September 2015

**Recorder:** A Looser

Weather conditions: Overcast and cool

**Ranking:** 5 **Biodiversity value:** Low

# Map:



# **Photos:**



View of site looking east from Gas House Drove



Large willow tree with bat potential (Target Note 1)

# **Habitat type(s):**

Semi-natural broad leaved woodland

# **Subsidiary habitats:**

Dead wood

#### **Site description:**

This is a very small wooded site to the north of Gas House Drove. The northern boundary adjoins site B/11. Access was difficult so the site was viewed from the boundary.

# **Protected species seen or known:**

•

## **Protected species potential:**

Bats, grass snake,

#### **Priority habitats present:**

### **Priority species seen or known:**

-

#### **Priority species potential:**

Common toad

# **Connectivity:**

## **Structural diversity:**

Structural diversity is limited due to the small size of the habitat type, but the woodland complements habitats in the wider area, including those of B/11 to the north.

#### Flora:

The woodland is dominated by willow and sallow with ash, occasional oak and elder. Many of the trees are ivy covered. Hops represent another climber. The understorey is dominated by nettle with ground ivy, white dead-nettle and greater celandine.

#### Avifauna:

This site provides some roosting, nesting and foraging opportunities for a range of bird species.

#### **Invertebrates:**

Common species of invertebrates are likely to be present.

## Herpetofauna:

The habitat is sub-optimal for reptiles, although grass snake may pass through the site as it is known from the adjacent site (B/11). Toads may be present in the woodland and may hibernate there.

#### **Mammals:**

Common species of mammal such as fox, deer and grey squirrel are likely to use this site. There are also likely to be reasonable numbers of small mammals. Some of the trees have potential to support a bat roost, particularly the very large willow tree (Target Note 1).

#### **Comments and recommendations:**

Any development proposals on this site should be preceded by a bat survey. The impacts of clearance upon grass snake and toad should also be evaluated. Notwithstanding the above, no vegetation clearance should take place during bird nesting season, March to August inclusive.

# For sites within zones defined in Core Strategy Policy CS2 (Natural Environment)

Forest Heath District Council Core Strategy Development Plan Document Policy CS2 (Natural Environment) requires that development proposals on sites within 1,500m of parts of the Breckland Special Protection Area (SPA) designated for supporting stone curlew; sites within 1,500m of any 1km grid square which has supported 5 or more stone curlew nesting attempts since 1995 and sites within 400m of parts of the Breckland SPA designated for supporting woodlark and nightjar are subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. Development proposals involving new or upgraded roads within 200m of the Breckland Special Area of Conservation (SAC) must also be subject to a Habitats Regulations Assessment (HRA) prior to the determination of any planning application. This is to assess whether the proposal would result in a likely significant effect on sites designated for their European nature conservation importance, either alone or in-combination with other plans or projects.

This site is within 1,500m of parts of the SPA designated for supporting stone curlew and therefore requires a HRA prior to the determination of any planning application.

#### For sites within 7.5km of the Breckland SPA

A study undertaken by Footprint Ecology on behalf of Forest Heath DC and St Edmundsbury BC identified that over half of visitors to Breckland SPA locations within the districts lived within 7.5km of the SPA. It is therefore considered that new residential development within 7.5km of the SPA will result in increased numbers of visitors accessing the SPA; this could in turn result in significant impacts on the features for which the SPA is designated. Prior to granting planning consent for residential development at this site the proposed development should be assessed under the requirements of the Conservation of Habitats and Species Regulations (2010) (as amended) to determine whether it is likely to result in a likely significant effect on the SPA, either alone or in-combination with other plans or projects.

# Site name B/23 Land off Bury Road

FHDC Ref: B/23

Site status: Within Breckland Forest SSSI and Breckland SPA

and Thetford Forest Park CWS

Grid ref: TL 78080 85730
Area: 9.94 hectares
Date: 10 June 2015
Recorder: A Walmsley

**Weather conditions:** Sunny, some cloud, light breeze, 15°C

**Ranking:** 1 **Biodiversity value:** High

# Map:



## **Photos:**



View of wayleave at north end of site, with mature broom scrub lining the grassy verge



The site contains some veteran beech trees, possibly remnants of parkland associated with Brandon Hall



Standing dead beech, important habitat for an array of invertebrates and birds such as woodpecker



Another older beech tree, this time coppiced



The site contains two separate rings of veteran beech trees (Target Note 1), planted for unknown purpose but potentially originally associated with Brandon Hall - a similar feature appears in nearby Site B/27



The verge along the south track contains heather plants which have regenerated from the buried seed bank



A view of the acid grassland/developing heath verge alongside the south track, looking east

# **Habitat type(s):**

Conifer plantation, lowland deciduous woodland, acid grassland, lowland heath

### **Subsidiary habitats:**

Scrub, deadwood, bare ground, leaf litter

#### **Site description:**

The site lies to the south of Brandon, immediately adjacent to extensive areas of dense housing. It falls within the Breckland SPA; Breckland Forest SSSI and Thetford Forest Park County Wildlife Site. It is contiguous on its east side with Site B/24.

The SSSI is notified for its assemblage of Nationally Rare and nationally scarce vascular plants, including five species which are listed on Schedule 8 of the Wildlife and Countryside Act (1981); and for its exceptionally rich invertebrate fauna. The SPA designation is for its woodlark and nightjar populations. The CWS designation recognises the importance of the site for its plant assemblage, as well as its diversity of reptile, invertebrate and bird species.

The site is broadly divided between mature beech woods in the west; young Scot's pine plantation in the centre and east; and mixed woodland in the southern apex. An open ride and wayleave closely follows the north-east and north-west boundaries and there are numerous informal paths through the beech and mixed woodland. The beech woods contain some specimens which appear to be several hundred years old and there are two rings of veteran beech trees (Target Note 1) which stand out as relics of the site's former history, perhaps as part of the Brandon Hall estate. There are also a number of standing dead trees and many-branched veterans which appear to have grown in more open conditions, perhaps in a parkland setting. The young plantation in the centre and east of the site is largely dense and impenetrable, growing with silver birch of the same age. There is little understorey below the beech and mixed wood, but stands of quite dense scrub, mostly in the form of mature broom, line the wayleave and north-eastern ride. Following the south perimeter of the site is a broad sandy track with wide grassy verges. The loose dry sandy substrate supports a sparse sward interspersed with regenerating heather plants.

The belt of mixed trees along the north-east and north-western edge of the site is dominated by a mix of predominantly broadleaved species, again with little understorey.

The site is open to the public and appears well-used.

## Protected species seen or known:

-

## **Protected species potential:**

Adder, common lizard, grass snake, slow worm (all previously recorded nearby to the south), bats

#### **Priority habitats present:**

Lowland deciduous woodland, acid grassland, lowland heathland

### **Priority species seen or known:**

-

# **Priority species potential:**

Swift, barn owl, hedgehog

# **Connectivity:**

The site has excellent connectivity on its south-west, south-east and south sides, forming an integral part of the habitat which surrounds it. To the north-west and north-east lies Brandon town centre, with dense housing immediately adjacent to these boundaries.

#### **Structural diversity:**

The site has good structural diversity. The largest area of the site is occupied by mature woodland, both broadleaved and mixed, with younger plantation accounting for less than half of the area. Dense scrub and tall vegetation line the path on the north-east and north-west sides, contrasting with the short sparse swards along the southern verge. Deadwood is frequent in places and there are occasional standing dead trees.

#### Flora:

The site supports several different habitats, but much of the woodland is relatively low in species diversity. The beech-dominated woodlands on the west side contain some notable specimens, particularly along the western edge, many of them potentially once associated either with the hall to the north, or Brandon Park House to the south. Of particular note are two circular rings of mature beech trees (Target Note 1), planted at some distance from each other in the centre and south-west part of the wood. The trees here are old and characterful, often leaning at angles in the sandy substrate. Their original purpose is unclear, but they may originally have had some cultural significance or may have been planted as shelter for grazing animals when the site was more open, perhaps as parkland. Other canopy species within these woods include oak, birch and Scot's pine, all usually tall and spindly. The high canopy casts deep shade and the understorey is frequently sparse, consisting of regenerating beech, hawthorn, mature ivy, holly, honeysuckle and occasional stands of cotoneaster. The ground vegetation is limited to very occasional grasses and honeysuckle seedlings, with most areas covered with bare leaf and needle litter. Deadwood is quite frequent.

The broad verge along the south edge of the site is very dry, on loose sandy soil, and heather plants of different ages are relatively frequent along this stretch. Sand sedge is the dominant species, but there is a good diversity of herbs including tormentil, yarrow, field woodrush, common mouse-ear, smooth hawk's-beard, sheep's sorrel, wood sage, germander speedwell, lady's bedstraw, autumn hawkbit, common cat's-ear, common ragwort, lesser trefoil, bird's-foot, mouse-ear-hawkweed and ribwort plantain. Grasses include wavy hair-grass, sheep's fescue, Yorkshire fog, cock's-foot, sweet vernal grass and smaller cat's-tail. There are developing oak and broom seedlings and young hawthorn scrub in places.

The wooded belt along the north-eastern and north-western edges of the site is largely composed of spindly oak, beech and birch, with frequent mature ivy and a variable understorey of hawthorn, honeysuckle and holly below. The ground flora is mainly composed of nettle with tall grasses and leaf litter. Deadwood is frequent here. Along the broad, grassy but rather rank verges below the wayleave, mature broom scrub is often abundant and frequently dense and continuous, growing over nettle, with other coarse species including Yorkshire fog, rough and annual meadow grass, cleavers, perennial ryegrass, and occasional foxglove.

In the southern apex of the site, the woodland contains a high proportion of Scot's pine, growing with beech and birch, and occasional sycamore and sweet chestnut. Oak is uncommon in this area.

The young plantation, constituting about one third of the site overall, is dense and scrubby, forming impenetrable stands with silver birch of a similar age. There is little or no growth below the canopy in this area.

#### Avifauna:

The site is likely to support a very wide range of bird species and the open rides in the north and west with flowering broom may make the site a useful foraging site for insectivorous species. The well-developed understorey along the northern edge provides good nesting habitat and the density and lack of disturbance in the young plantation areas may also provide nesting habitat for a range of smaller birds. The site also forms part of the Breckland SPA, designated for its woodlark and nightjar interest.

#### **Invertebrates:**

The site provides valuable habitats for potentially a broad array of invertebrate species. Habitats include standing and fallen deadwood; leaf and needle litter; open, sunny, sheltered rides and corridors with nectar/pollen producing plants including broom; and many mature and veteran native trees with an associated specialist invertebrate fauna. The site forms part of the Breckland Forest SSSI and Thetford Forest Park County Wildlife Site, both of which are recognised for their rich invertebrate diversity. A hornet was recorded on the site during the survey, but there are no other invertebrate records from within the site. However, moth traps in the Brandon Hall area have recorded over 50 Priority moth species. It seems likely that this area will support a similarly diverse spectrum of species as the habitats are comparable with those around the hall.

### Herpetofauna:

The excellent connectivity between this site and extensive areas of habitat to the south and west mean that it is probable that species such as adder and common lizard, as well as slow worm, use the site. The deep litter layers offer shelter and nesting opportunities and sheltered open trackways and verges provide excellent basking areas for this group.

#### **Mammals:**

The site is likely to be used by a variety of mammals, including fox, deer species, hedgehog, as well a wide array of smaller species. It is likely to be of particular importance for a range of bat species, providing excellent foraging corridors along the trackways and potential roosting sites within the older trees in the wood. Pipistrelle and brown-long-eared bat have previously been recorded very close by and it is likely that these and other bat species use the wood.

## **Comments and recommendations:**

This site is of high ecological value and contains historically important features in the form of rings of mature beech trees and occasional trees which may be remnant parkland specimens. It is recommended that these tree groups should be covered by a Tree Protection Order, if not already protected.

The site forms part of the Breckland SPA; Breckland Forest SSSI and Thetford Forest Park CWS. It therefore must be assumed that it is potentially as important for many of the species for which the sites are designated. In particular, it provides valuable habitat for invertebrates and reptiles and further surveys of these groups, as well as for bats, should be carried out if the site is subject to any development proposals.

As the site lies within the Breckland SPA there is a presumption against any development, however should any proposals be put forward they must be subject to a Habitats Regulations Assessment.

# Site name B/24 Land West of Bury Road

FHDC Ref: B/24

Site status: Within Breckland Forest SSSI and Breckland SPA

and Thetford Forest Park CWS

Grid ref: TL 78330 85730
Area: 3.93 hectares
Date: 10 June 2015
Recorder: A Walmsley

**Weather conditions:** Sunny, some cloud, light breeze, 15°C

**Ranking:** 1 **Biodiversity value:** High

# Map:



## **Photos:**



View of the track along the south boundary, showing acid grassland with regenerating heather



A narrow 'ride' through the impenetrable birch/pine plantation, overgrown by bracken with dense litter below



A narrow, mixed woodland belt along the north and east edges of the site with deadwood below



Arid conditions prevail along the south verge producing a sparse, short sward

# **Habitat type(s):**

Conifer plantation, acid grassland, lowland heath

### **Subsidiary habitats:**

Deadwood, bracken litter, bare ground

# **Site description:**

The site lies to the south of Brandon, immediately adjacent to extensive areas of dense housing. It falls within the Breckland SPA; Breckland Forest SSSI and Thetford Forest Park County Wildlife Site. It is contiguous on its west side with Site B/23, forming a continuous block of identical habitat.

The SSSI is notified for its assemblage of Nationally Rare and nationally scarce vascular plants, including five species which are listed on Schedule 8 of the Wildlife and Countryside Act (1981); and for its exceptionally rich invertebrate fauna. The SPA designation is for its woodlark and nightjar populations. The CWS designation recognizes the importance of the site for its plant assemblage, as well as its diversity of reptile, invertebrate and bird species.

The majority of the site is occupied by young Scot's pine plantation, growing in dense, impenetrable stands with silver birch of the same age. There are few rides through the plantation and the narrow passages that do exist are overgrown with tall bracken and deep bracken litter, making access through them difficult. Along the south side of the site is a broad sandy track with wide grassy verges. On the very loose dry sand the vegetation is short and sparse, dominated with sand sedge and a narrow range of grasses and herbs. Heather plants are regenerating from the seedbank along this stretch. Another broad track with wide verges passes around the north side of the site from the south-east corner, separated from the site boundary by a broad belt of mature pine and broadleaved trees. The verges here are a little less arid and support a slightly more robust vegetation and a wider array of plant species, including patches of bracken. There is no heather on these stretches.

The belt of mixed trees along the northern and eastern edges of the site is much older than the plantation itself and is littered with deadwood. The understorey and ground flora are largely absent. At the western end of the belt is an area of mature broom growing along the edges of a wayleave which diverts to the west, into Site B/23.

The site is open to the public and the tracks are well-used. Access to the interior of the plantation is difficult because of the density of the young vegetation and these areas are undisturbed.

## Protected species seen or known:

-

## **Protected species potential:**

Adder, common lizard, slow worm (all previously recorded nearby to the south), bats

## **Priority habitats present:**

Lowland deciduous woodland, acid grassland, lowland heathland

#### **Priority species seen or known:**

-

# **Priority species potential:**

Swift, barn owl, hedgehog

# **Connectivity:**

The site has excellent connectivity on its west and south sides, forming an integral part of the habitat which surrounds it on these edges, with no barriers to movement of species. To the north and north-east are dense housing developments creating a significant barrier to any habitats other than gardens in this direction.

#### **Structural diversity:**

The site has relatively good structural diversity. The largest area of the site is occupied by young, evenaged plantation with no understorey or ground flora, although there are narrow breaks in the planting with lower-growing, bracken-dominated vegetation and very deep bracken litter, an important habitat in its own right. Short grass verges and large areas of bare ground are present in abundance along all but the western edge of the site and there are tall mature trees along the northern and eastern sides, with a layer of needle and leaf litter below. Woody debris, often bryophyte-covered, is also abundant. Scrub is infrequent in the site, although there are some tall mature broom shrubs in the north-west corner. Bramble and broom also grow in patches along the edges of the north/east track and small regenerating oak, birch, gorse and broom scrub is present along the south side.

#### Flora:

The site supports several different habitat types, but the most botanically diverse areas are confined to the broad, grassy verges which line the two tracks. Along the south side, where conditions are the most arid, the sward is starting to revert in places to heathland, with young heather seedlings growing alongside other typical heathland species including sheep's sorrel, field woodrush, wavy hair-grass and heath bedstraw. The most dominant species along this verge, however, is sand sedge, growing with common cat's-ear, occasional Yorkshire fog, sweet vernal grass and cock's-foot, with lesser trefoil, ribwort plantain, bird's-foot and occasional wood sage. Along the verges bordering the north/east track there is a broader array of herbs and grasses, with a more variable sward height and a number of taller species. Plants here include rough meadow grass, Yorkshire fog, soft brome, nettle, wall barley, wavy-hair-grass, common ragwort, sand sedge, wood sage, common cat's-ear and small-flowered geranium. Scrub and bracken are more frequent in these areas and there are stands of broom and regenerating bramble. Rosebay willowherb grows in profusion in the area where sites B/23 and B/24 meet.

The wooded belt along the north and eastern edges of the site is largely composed of mature trees, with little or no understorey and a poor ground vegetation mainly of small patches of nettle. The main canopy species are Scot's pine, beech and oak, with frequent mature ivy. The deadwood which is generally abundant throughout the site often supports a narrow range of bryophytes. At the far western end of the belt of woodland, at the edge of a wayleave, is some tall mature broom scrub.

#### Avifauna:

As part of a much larger block of habitat, the site is likely to support a wide range of bird species which pass through the area. During the survey a pair of magpies and a robin were recorded. Species such as barn owl, swallows and swifts might use the corridors created by the tracks as hunting grounds, and the density and lack of disturbance in the plantation areas may provide suitable nesting habitat for a range of smaller birds. The site also forms part of the Breckland SPA, designated for its woodlark and nightjar interest.

#### **Invertebrates:**

The site forms part of the Breckland Forest SSSI and Thetford Forest Park County Wildlife Site, both

of which are recognised for their rich invertebrate diversity. There are no specific records from within the site for invertebrate species, but moth traps in the Brandon Hall area of the town, to the north-west of the site, have recorded over 50 species of Priority moth species and it seems probable that this site with its direct connection to larger areas of forest will support a similarly diverse assemblage. The site's main value for invertebrates is likely to be in the quantities of dead wood, litter layers below the trees and bracken, which offer excellent shelter, nesting and overwintering habitat particularly for ground dwelling and saproxylic species which are associated with deadwood and vegetation. The two tracks also offer shelter belts and sunny spots for basking and foraging for groups such as butterflies and moths, bees and hoverflies. A hornet was recorded in the north-west corner of the site, close to the broom scrub. This is an important nectar and pollen source for a range of invertebrates.

## Herpetofauna:

The excellent connectivity between this site and extensive areas of habitat to the south and west suggest that it is highly likely that species such as adder and common lizard, as well as slow worm, will use the site. The deep litter layers offer shelter and nesting opportunities and sheltered but open trackways and verges provide excellent basking areas for these species, although the relative high usage of the site by walkers, often with dogs, may limit usage.

#### **Mammals:**

The site is likely to be used by a very wide array of small mammals, including hedgehog, and larger species using the habitat around, such as deer and fox may also use the site. Bats are likely to use the trackways and verges for foraging and may roost in older trees along the north/east woodland belt.

#### **Comments and recommendations:**

Despite its small size, the site provides a range of different habitat types and is of high ecological value, probably particularly so for groups such as invertebrates, reptiles and bats. The site forms part of the Breckland SPA; Breckland Forest SSSI and Thetford Forest Park CWS and is contiguous with these larger areas of habitat. It should therefore be assumed that it has the potential to support some of the species for which the sites are designated. In particular, it provides valuable habitat for invertebrates and reptiles and further surveys of these groups, as well as for bats, should be carried out if the site is subject to any development proposals.

As the site lies within the Breckland SPA there is a presumption against any development, however should any proposals be put forward they must be subject to a Habitats Regulations Assessment.

# Site name B/27 Land off London Road

**FHDC Ref:** B/27

Site status: Within Breckland Forest SSSI and Breckland SPA

and Thetford Forest Park CWS

Grid ref: TL 77450 28516
Area: 7.6 hectares
Date: 10 June 2015
Recorder: A Walmsley

**Weather conditions:** Sunny, some cloud, light breeze, 17°C

Ranking: 1
Biodiversity value: High

# Map:



# **Photos:**



A typical shaded ride, looking south



Understorey is infrequent below the pine canopy but is found in places alongside the plantation blocks





Standing dead beech trunks provide valuable but rare habitat within the plantation. These features are important for an array of invertebrates and species such as woodpeckers



Much of the woodland has poor structure with little scrubby habitat and a poor ground flora



A broad verge along the south-east track is developing a lichen/bryophyte heathland flora, with patches of heather and wavy hair-grass



A view of the verges along the south track, looking east



A ring of beech trees, similar to those found in Site B/23, is a notable feature in the pine-dominated wood (Target Note 1)

# **Habitat type(s):**

Conifer plantation, acid grassland, lowland heath

### **Subsidiary habitats:**

Deadwood, bare ground, scrub

# **Site description:**

The site lies on the south side of Brandon, along the southern edge of a large industrial estate. It falls within the Breckland SPA, Breckland Forest SSSI and almost entirely within the Thetford Forest Park County Wildlife Site, with the exception of a fenced area of plantation woodland at the western end.

The SSSI is notified for its assemblage of Nationally Rare and nationally scarce vascular plants, including five species which are listed on Schedule 8 of the Wildlife and Countryside Act (1981); and for its exceptionally rich invertebrate fauna. The SPA designation is for its woodlark and nightjar populations. The CWS designation recognises the importance of the site for its plant assemblage, as well as its diversity of reptile, invertebrate and bird species.

The site is broadly divided between mature pine plantation, which occupies the majority of the total area and a broad sandy track to the south and south-east with wide, open verges on the south side and a broad verge along the western edge of the track on the south-eastern boundary. The woodland canopy is composed almost entirely of Scot's pine, with some broadleaves in the variable but usually sparse understorey. The ground flora is dominated by a narrow range of herbs and grasses, although species diversity improves along the north edge of the site, alongside the main woodland ride, where there is better light penetration. There is a notable feature near the south boundary of the wood in the form of a circular ring of well-spaced, older beech trees (Target Note 1). This feature, similar to two others found in site B/23 a little way to the east of this site, is of unknown origin but is thought possibly to be a relic of the former estate belonging to the hall on the south side of Brandon. A few of the trees may be up to 200 years old, but the others are younger, perhaps early replacements. There are one or two other beech trees dotted through the wood, but these are rare. Some take the form of standing dead trunks.

The track along the south and south-east boundary of the site is of compacted aggregate sand, but the verges on either side to the south support acid grassland. The verge on the south-east side is developing into a lichen/bryophyte-type heathland with numerous small plants of regenerating heather along much of the stretch.

The site and all the surrounding area are open to the public and appear well-used.

## **Protected species seen or known:**

Brown long-eared (2006, 2013), pipistrelle (2005, 2013), noctule and Leisler's (both 2006) bats all previously recorded from bat boxes in the south of the site

## **Protected species potential:**

Adder, common lizard, slow worm (all previously recorded nearby to the south), other bat species

## **Priority habitats present:**

Acid grassland, lowland heathland

#### **Priority species seen or known:**

-

# **Priority species potential:**

Tree pipit, marsh tit (both recorded nearby, 2012), barn owl, hedgehog, small heath (recorded nearby, 2003), grey dagger moth (recorded nearby, 2001)

### **Connectivity:**

The site has excellent connectivity on its west, south and east sides, forming an integral part of the habitat which surrounds it. To the north lies Brandon town centre, with industrial units adjacent to these boundaries. The A1065 lies a short distance to the west.

# **Structural diversity:**

The majority of the site is occupied by tall conifer with a poor or absent understorey, resulting in fairly low structural diversity over a large area. However, in some parts of the woodland, notably along the north track, there is a better-developed shrub layer with a range of native plant species and a greater diversity of grass and herb species in the ground layer. Deadwood is relatively frequent within the site, with some excellent standing dead trunks providing valuable habitat and structure. Sunlit bare ground and herb-rich grassland along the south side of the site provide additional variation in structure.

#### Flora:

The main part of the site supports a rather narrow range of species, because of the dense shade and acid conditions below the predominantly pine canopy. Other canopy species are rare, but include beech, birch and oak. Of especial note is the ring of mature beech trees located close to the south boundary (Target Note 1). The understorey is very sparse throughout much of the woodland but is sometimes better-developed at the edges of rides. As well as the regenerating broadleaved species, shrubs include hawthorn and holly with some dense patches of bramble and occasional rowan. The ground flora is patchy, consisting of grass species such as cock's-foot, rough meadow grass and creeping soft grass, with occasionally dense patches of nettle and bracken, and lower-growing herbs including wood sage and herb-Robert. Broad buckler-fern is also present but is not common.

The most botanically diverse areas of the site are the broad grassy verges along the south and southeast boundaries and in the sunnier areas along the generally shaded north ride. The verges on either side of the south track support acid grassland with a range of species including sand and prickly sedges, lady's bedstraw, wavy hair-grass, sweet vernal grass, downy oat-grass, crested hair-grass, meadow buttercup, wood small-reed, germander speedwell, perforate St John's-wort, locally frequent bracken, meadow foxtail, soft broom, wood sage, ribwort and yarrow. Along the south-east boundary, the western verge has a poorer, patchier sward akin to lichen/bryophyte heathland. Here the main grass species is wavy hair-grass, with abundant bryophytes and herbs such as heath bedstraw, perforate St John's-wort, wood sage, common cat's-ear, mouse-ear-hawkweed, sand sedge and field woodrush. There are numerous small plants of regenerating heather and gorse. Along the more open areas of the north ride, where nutrient levels are a little higher, species include meadow and creeping buttercup, wood avens, herb-Robert, self-heal, common stork's-bill, common cat's-ear, creeping cinquefoil, ribwort plantain and dove's-foot crane's-bill. Grasses include rough meadow grass, soft brome and Yorkshire fog.

#### Avifauna:

The site's connectivity to more extensive habitat to its south and east mean it is likely to be used by a range of bird species, although nesting opportunities are infrequent. A buzzard was recorded overhead during the survey. The site also forms part of the Breckland SPA, designated for its woodlark and nightjar interest.

#### **Invertebrates:**

The site has a range of habitats of value to invertebrates, including deadwood habitats, leaf and needle litter and open, sunny, sheltered corridors. The site forms part of the Breckland Forest SSSI and Thetford Forest Park County Wildlife Site, both of which are recognised for their rich invertebrate diversity. It also contains occasional veteran native trees with an associated specialist invertebrate fauna.

## Herpetofauna:

The excellent connectivity between this site and extensive areas of habitat to the south and west suggest that it is highly likely that species such as adder and common lizard, as well as slow worm, will use the site. The deep litter layers offer shelter and nesting opportunities and sheltered open trackways and verges provide excellent basking areas for these species.

#### **Mammals:**

The site is likely to be used by a range of small and larger mammals, given its proximity to other large areas of habitat adjacent. It is likely to be of importance for a range of bat species, providing foraging corridors along the trackways.

#### **Comments and recommendations:**

This site is of high ecological interest although it is structurally less varied and of lower species diversity than other similar sites along the south edge of Brandon. It is likely to be of importance for a range of bat species and also provides valuable habitat for reptiles and invertebrates along the sheltered, sunny south track and broad verges. The site also contains a ring of mature beech trees which appear to be of some historical and/or cultural significance.

As the site forms part of the Breckland SPA, Breckland Forest SSSI and Thetford Forest Park CWS, and is contiguous with these larger areas of habitat, it should be assumed that it is potentially important for many of the species for which the sites are designated. If the site is the subject of any future development proposals it is therefore recommended that further bat, reptile and invertebrate surveys are carried out to ascertain which species are using the site and to ensure that appropriate mitigation is undertaken.

As the site lies within the Breckland SPA there is a presumption against any development, however should any proposals be put forward they must be subject to a Habitats Regulations Assessment.