

IPSWICH WILDLIFE AUDIT 2019

<i>Project no.</i>	<i>Report</i>	<i>Date</i>
030/19	Final	06/09/2019
<i>Prepared by</i>	<i>Checked by</i>	
Alison Looser BSc. Hons & Jill Crighton BSc. Hons	Simone Bullion BSc. Hons. PhD. MCIEEM	



Prepared by:
SWT Trading Ltd
Brooke House
Ashbocking
Ipswich
IP6 9JY

Prepared for:
Ipswich Borough Council

1.0 INTRODUCTION

SWT Trading Ltd: Ecological Consultants, the wholly owned company of Suffolk Wildlife Trust (SWT), was commissioned by Ipswich Borough Council on 24th July 2019 to carry out ecological audits of 79 sites around Ipswich as part of a review of the Local Plan. Following the UK Government's mandate for net gain in 2019, the brief also included providing advice on how this could be achieved on each site.

Surveys were undertaken between July and September 2019. 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 Priority habitats and species and 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 District was assessed. 23 of the sites were subject to Phase 1 Habitat Survey through the 2012 Wildlife Audit, so these reports were updated to reflect current conditions. Recommendations were provided for further survey work if required and the provision of 'net gain' for every site.

Natural England provides the following explanation of net gain:

"Net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand. Net gain is an umbrella term for both biodiversity net gain and wider environmental net gain."

2.0 OBJECTIVES

The aim of the surveys was:

- To undertake an Extended Phase 1 habitat survey for all the identified sites
- 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, Priority 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;
- To provide recommendations for net gain for each survey site.

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 Biodiversity Information Service and from 1:10,000 maps and aerial photographs.
- Each site was surveyed and a record made of its conservation value.
- 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.
- Management and net gain recommendations 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 management work was recommended where relevant. Opportunities for net gain were described;
- **References:** these were included when it was appropriate to reference other surveys.

Priority species and habitats: Section 40 of the Natural Environment and Rural Communities (NERC) Act (2006) states that 'Every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. UK priority species as listed under Section 41 of the Act are normally taken as a good benchmark for demonstrating biodiversity duty. These were formerly known as 'BAP' habitats and species.

The UK Biodiversity Action Plan (UK BAP, 1994) was the UK Government response to the 1992 International Convention on Biological Diversity. The UK BAP listed a range of habitats, plus a number of birds and species from other taxa of conservation interest. National targets and priorities were set in order to address the particular needs of those habitats and species. There is no longer a UK Biodiversity Action Plan; this has been replaced by the UK Post-2010 Biodiversity Framework (2012). The England Biodiversity Strategy has been replaced by *Biodiversity 2020: A strategy for England's wildlife and ecosystem services* (2011). The result of these changes is that the BAP process has been devolved to local level with each county deciding its own way forward. Suffolk made the decision in June 2013 to continue to support the Suffolk Biodiversity Action Plan, particularly because the BAP is still enshrined in law through the Natural Environment and Rural Communities Act (2006) and also in planning policy through the National Planning Policy Framework and National Policy Statements.

Protected species: species protected by law under the Wildlife and Countryside Act (1981) (as amended), The Conservation of Habitats and Species Regulations (2017) (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).

- 1 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.
- 3 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.

- 5 No designation but has some natural capital: is in character with the area (e.g. mature trees forming part of the street scene), 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 Information Service (SBIS) website: <http://www.suffolkbis.org.uk/suffolk-sites/cws>.

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.
- Diversity and presence of indicator species. 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. This may include Red and Amber listed Birds of Conservation Concern (BoCC) which may or may not also be Priority species.
- Potential value. 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.
- Size. 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.
- Scrub. 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. Freshwater. 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.

- Created habitats. 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. In a highly built up area this could also include individual mature trees.

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 High conservation value: 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 Medium conservation value: These are undesignated sites which have a known wildlife value and contribute to the overall ecological network.
- 5-6 Low conservation value: 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.

3.4 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.

Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make rapid initial assessment of the potential risks posed by development proposals to: Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. Many of these sites fall within Natural England's SSSI IRZs where the nature of the proposal requires that Natural England is consulted regarding such planning applications.

4 Notes to accompany Appendix 1

Sites previously surveyed in the 2012 Wildlife Audit are marked with their original Site Reference number and * in Appendix 1.

Access was limited/not permitted or was limited at several sites and consequently they could not be fully assessed (Site Reference marked with # in Appendix 1). In these instances, our observations have been supplemented with local records, other available survey information and publicly available imagery in order to complete the reports (referenced within individual reports).

In Appendix 1, where the Ranking value is accompanied by '+', this indicates that the value will likely be higher following detailed surveys.

Appendix 1 Catalogue of surveyed sites

Site Name	Site Reference	Ranking	Biodiversity Value
Waste tip and employment area north of Sir Alf Ramsey Way (Site 49)*	IP003	5	Low
Co-op Depot Felixstowe Road (Site 27)*	IP010a#	5	Low
Felixstowe Road (Site 27)*	IP010b	5	Low
Lower Orwell Street (formerly Smart Street/ Foundation Street)	IP011a	5	Low
Smart Street / Foundation Street	IP011b	6	Low
Peter's Ice Cream	IP012	6	Low
Hope Church	IP014	6	Low
West End Road Surface car park	IP015	5	Low
Island adj to Jewsons, Greyfriars Road	IP028a	5	Low
Jewsons, Greyfriars Road	IP028b	6	Low
Land Opposite 674-734 Bramford Road (Site 41)*	IP029	3+	Medium
Burrell Road	IP031	5	Low
King George V Field, Old Norwich Road (Site36)*	IP032	5	Low
Land at Bramford Road (Stocks Site) (Site 47)*	IP033#	4	Medium
Key Street / Star Lane / Burtons Site	IP035	4	Medium
The Island Site	IP037	5	Low
Land between Gower Street & Great Whip Street	IP039a	6	Low
Civic Centre Area / Civic Drive	IP040	6	Low
Former Police Station, Civic Drive	IP041	6	Low
Land between Cliff Quay and Landseer Road (Table 2)	IP042#	6	Low
Commercial Buildings and Jewish Burial Ground , Star Lane	IP043	6	Low
Holywells Road West	IP045	6	Low
Commercial Road	IP047	5	Low
Mint Quarter / Cox Lane East	IP048a	6	Low
Cox Lane West Regeneration Area	IP048b	6	Low
Land between Old Cattle Market and Star Lane	IP054b	6	Low
School Site, Lavenham Road (Site 45)*	IP061	5	Low
Land between Holywells Road and Holywells Park	IP064a	6	Low
JJ Wilson, White Elm Street (part covered by Site 35)*	IP066	6	Low
Former British Energy Site (Site 31)*	IP067a#	4	Medium
Former British Energy Site (Site 31)*	IP067b#	4	Medium
Church and land at Upper Orwell Street	IP074	6	Low
240 Wherstead Road	IP080	5	Low
Banks of river upriver from Princes Street (Site24)*	IP083	4	Medium
Waterworks Street	IP089	5	Low
Car Park Handford Road	IP096	5	Low
Transco south of Patteson Road	IP098#	6	Low
Depot, Beaconsfield Road	IP105	6	Low
Jupiter Road/Reading Road	IP109	4	Medium
Land east of West End Road	IP119	5	Low

Land west of West End Road	IP120b	5	Low
Milton Street	IP131	6	Low
Land South of Felaw Street	IP133	5	Low
112-116 Bramford Road	IP135	6	Low
Land at Futura Park, Nacton Road (formerly the Cranes site) (site frontage Futura Park)	IP141a(1)#	3	Medium
Land at Futura Park, Nacton Road (formerly the Cranes site) – employment site behind Waitrose	IP141a(3)#	4	Medium
Land at Duke Street	IP142	5	Low
Former Norsk Hydro, Sandy Lane (Site 32)*	IP143#	4	Medium
Areas U, V & W, south of Ravenswood	IP150 (a)	4	Medium
Land south of Ravenswood west (Sports Park) (Site 46)*, (Site 50)*	IP150 (b)	3+	Medium
Land south of Ravenswood east (fronting Nacton Road) (Site 46)*, (Site 50)*	IP150 (c)	3+	Medium
Land south of Ravenswood west (fronting Alnesbourn Crescent) (Site 46)*, (Site 50)*	IP150 (d)	3+	Medium
Land south of Ravenswood east (fronting Alnesbourn Crescent) (Site 46)*, (Site 50)*	IP150 (e)	3+	Medium
Airport Farm Kennels (Site 23)*	IP152	4	Medium
Webster's Saleyard Site, Dock Street	IP188#	6	Low
Griffin Wharf, Bath Street	IP200#	5	Low
The Flying Horse PH, 4 Waterford Road	IP221	4	Medium
Former British Telecom Office, Bibb Way	IP279#	6	Low
Grimwade Street, Student Union Clib and adjacent car park, Rope Walk	IP283	5	Low
Prince of Wales Drive	IP307	5	Low
68A Austin Street	IP309	4	Medium
Suffolk Retail Park	IP346	6	Low
79 Hutland Road/Sidegate Lane	IP356	4/5	Medium/Low
Confidential sites			
Land North of Whitton Lane (Site 39)*	IP140	4	Medium
Land north of Millennium Cemetery (Site 149)*	IP183	5	Low
Land opposite 383 to 447 Humber Doucy Lane (KC Ltd) (Site 150)*	IP184a®	5	Low
Land opposite 367 to 383 Humber Doucy Lane (Site 150)*	IP184b	4	Medium
Land opposite 341 to 365 Humber Doucy Lane (KC Ltd) (part covered by site 150)*	IP184c®	4	Medium
Westerfield House, Humber Doucy Lane	IP280	5	Low
East corner Humber Doucy Ln/Tuddenham Rd (KC Ltd)	IP303®	5	Low
Land north of 447 and fronting Humber Doucy Lane	IP344®	5	Low
West corner of Humber Doucy Lane/Tuddenham Road	IP350®	4	Medium
Humber Doucy Lane (opposite 97 to 123)	IP030a	5	Low
Humber Doucy Lane (opposite 37 to 97)	IP030b	5	Low
Land at Rushmere (Ramsey, area inside IBC)	IP302	4	Medium

Survey incomplete due to access issues / * Site updated from 2012 Wildlife Audit report
































® These sites are now combined to form site allocation ISPA4.

Key to Phase 1 Maps



Extended Phase 1 habitat survey - key to habitats

Contract no: Ipswich Wildlife Audit 2019

	Broadleaved woodland - semi-natural		Intact hedge - native species-rich
	Broadleaved woodland - plantation		Intact hedge - species-poor
	Scrub - dense/continuous		Defunct hedge - native species-rich
	Improved grassland		Defunct hedge - species-poor
	Poor semi-improved grassland		Hedge with trees - native species-rich
	Neutral grassland - semi-improved		Hedge with trees - species-poor
	Cultivated/disturbed land - amenity grassland		Fence
	Cultivated/disturbed land - arable		Earth bank
	Cultivated/disturbed land - ephemeral/short perennial		Dry ditch
	Introduced shrub		Wall
	Other tall herb and fern - ruderal		Broadleaved Parkland/scattered trees
	Marginal and inundation - inundation vegetation		Coniferous Parkland/scattered trees
	Bracken - continuous		Scrub - scattered
	Standing water		Cultivated/disturbed land - ephemeral/short perennial
	Buildings		
	Bare ground		
	Hardstanding		

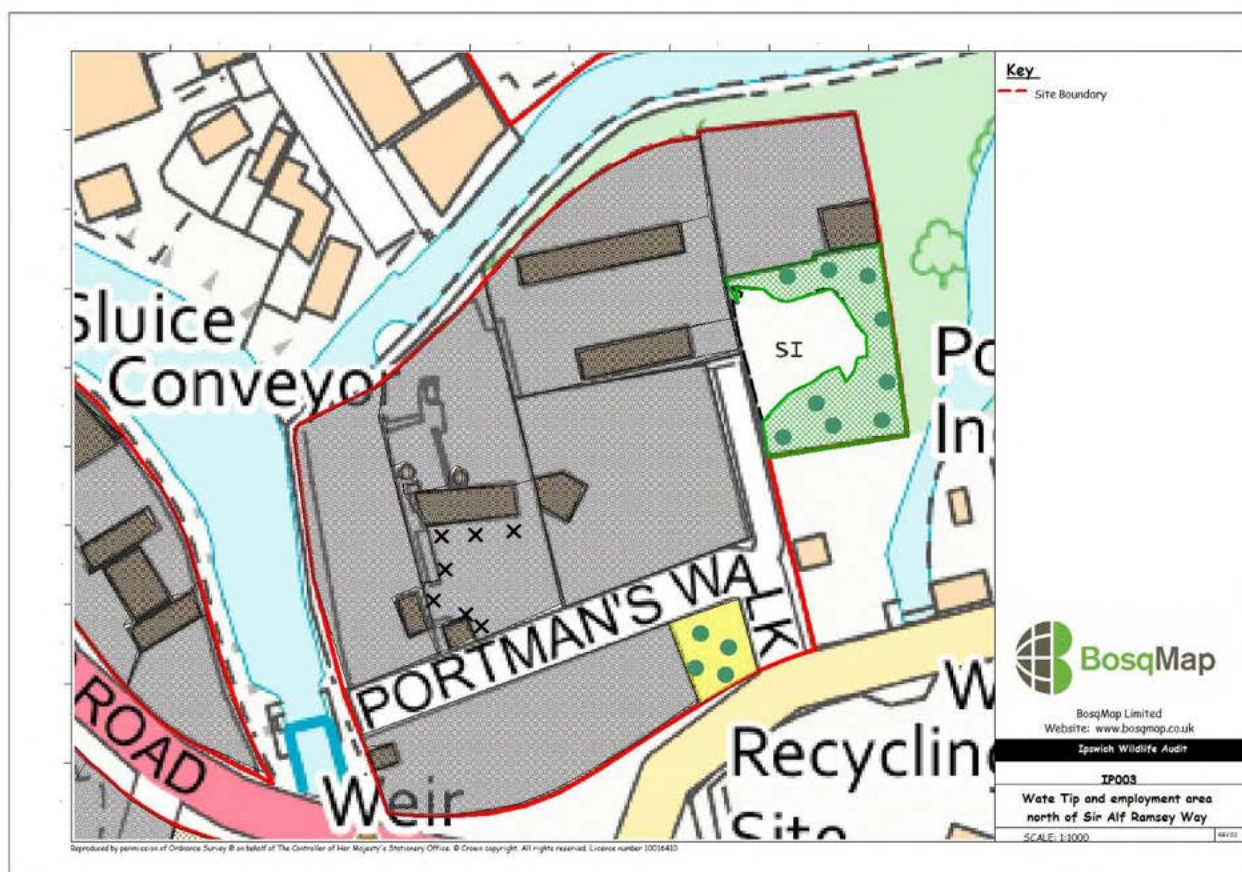
Site Reference	Address	Batch No.
IP003	Waste Tip and Employment Area North of Sir Alf Ramsey Way	1
IP010a & b	Co-Op Depot Felixstowe Road	1
IP011a & b	Lower Orwell Street (formerly Smart St/ Foundation Street)	1
IP012	Peter's Ice Cream	1
IP014	Hope Church	2
IP015	West End Road, Surface Car Park	2
IP028b	Island adj to Jewsons, Greyfriars Road	2
IP029	Opposite 674 – 734 Bramford Road	2
IP030 a & b	Humber Doucy Lane (opposite 37 to 123)	3
IP031	Burrell Road	3
IP032	King George V Field, Old Norwich Road	3
IP033	Land at Bramford Road (Stocks Site)	3
IP035	Key Street/Star Lane/Burtons Site	4
IP037	The Island Site	4
IP039a	Land between Gower Street and Great Whip Street	4
IP040	River Orwell (2 reports)	4
IP041	Former Police Station, Civic Drive	5
IP042	Land between Cliff Quay and Landseer Road	5
IP043	Commercial Buildings and Jewish Burial Ground, Star Lane	5
IP045	Holywells Road West	5
IP047	Commercial Road	6
IP048 a & b	Mint Quarter/ Cox Lane West Regeneration Area	6
IP054b	Land between Old Cattle Market and Star Lane	6
IP061	School Site, Lavenham Road	6
IP064a	Land between Holywells Road and Holywells Park	7
IP066	JJ Wilson, White Elm Street	7
IP067a & b	Former British Energy Site	7
IP074	Reeves Yard and The Black Barn, Upper Orwell Street	7
IP080	240 Wherstead Road	8
IP083	Banks of River upriver from Princes Street	8
IP089	Waterworks Street	8
IP096	Car Park Handford Road	8
IP098	Transco south of Patteson Road	9
IP105	Depot, Beaconsfield Road	9
IP109	Jupiter Road/ Reading Road	9
IP119	Land east of West End Road	9
IP120b	Land west of West End Road	10
IP131	Milton Street	10
IP133	Land south of Felaw Street	10
IP135	112 – 116 Bramford Road	10
IP140	Land North of Whitton Lane	11
IP141a 1 & 3	Land at Futura Park, Nacton Road (formerly the Cranes Site)	11
IP142	Land at Duke Street	11
IP143	Former Norsk Hydro, Sandy Lane	11
IP150	Land south of Ravenswood East and West	12
IP152	Airport Farm Kennels	12
IP183	Land north of Millennium Cemetery	12
IP184 a, b & c	Land Opposite 341 to 447 Humber Doucy Lane	12
IP188	Webster's Saleyard Site, Dock Street	13
IP200	Griffin Wharf, Bath Street	13
IP221	The Flying Horse Public House, 4 Waterford	

	Road	13
IP279	Former British Telecom Office, Bibb Way	13
IP280	Westerfield House, Humber Doucy Lane	14
IP283	Grimwade Street, Student Union Club and adjacent car park, Rope Walk	14
IP302	Land at Rushmere (Ramsey, area inside IBC)	14
IP303	East corner of Humber Doucy Lane/ Tuddenham Road	14
IP307	Prince of Wales Drive	15
IP309	68A Austin Street	15
IP344	Land north of 447 and fronting Humber Doucy Lane	15
IP346	Suffolk Retail Park	15
IP350	West corner of Humber Doucy Lane/ Tuddenham Road	15
IP356	79 Hutland Road/ Sidegate Lane	15

Site name: Waste Tip and Employment Area North of Sir Alf Ramsey Way

Site ref: IP003
Site status: No wildlife designation
Grid ref: TM 15321 44336
Area: 1.45 hectares
Date: 25th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View west along Portman's Walk towards Alderman Canal



Area of dry grassland in north-east of site

Habitat type(s):

Hard standing, buildings, amenity grassland, poor semi-improved grassland, ephemeral short perennial, dense continuous scrub, scattered trees

Subsidiary habitats:

-

Site description:

The majority of the site is hard standing and buildings and is currently being used for waste recycling, car parking, light industry and sand and gravel distribution. In the south-west of the site Portman's Walk, a dead-end road, runs towards the river. A small rectangle of grass with 5 sycamore trees lies on the corner of Portman's Walk. The Alderman Canal County Wildlife Site (CWS) borders the site on three sides, with Sir Alf Ramsey Way forming the bulk of the southern boundary. Continuous scrub borders the canal, forming a valuable corridor. The scrub is particularly thick along the eastern boundary. Within the site there is limited scrub bordering the service road running north from Portman's Walk and a line of sycamore trees. There is an area of dry grassland surrounded by scrub and trees on the eastern boundary which was fenced off and only viewed from the boundaries. In a previous Wildlife Audit site visit in 2012 this part of the site was largely bare ground.

Protected species seen or known:

Species in the area includes:

Otter

Water vole

Badger

Common pipistrelle bat

Soprano pipistrelle bat

Daubentons bat

Natterers bat

Noctule bat

Grass snake
Slow worm

Protected species potential:

Common lizard

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Hedgehog
Common toad
Stag beetle

BoCC Red List species including herring gull, house sparrow, starling, song thrush

BoCC Amber List species including dunnock, reed bunting and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is well connected via the Alderman Canal to the River Gipping which provides an important wildlife corridor.

Structural diversity:

The margins of the site adjacent to the Alderman Canal provides moderate structural diversity. The small section of grassland, scrub and trees provides good structural diversity.

Flora:

The area north of the garden, was fenced off and inaccessible, but from the boundary it appeared to be dry grassland with species including false oat grass with ragwort, creeping thistle, melilot spp, sedge spp, bristly ox tongue, St john's wort spp, rosebay willowherb and mugwort. The scrub around the margins was dominated by bramble and dog rose, with ash and sycamore trees further back.

The majority of the site is hard standing and therefore the flora is limited. Ivy and buddleia occasionally occur within the site itself as well as prickly lettuce, Canadian fleabane, petty spurge and pellitory-of-the-wall, otherwise all plants are associated with the margins. The boundaries of the Alderman Canal are colonised by bramble and hops, but along the canal path there has been some additional planting of hawthorn, field maple, hazel and dogwood.

The small rectangle of amenity grassland has species typical of this habitat including dandelion, daisy, white clover, selfheal, smooth hawk's-beard and yarrow.

Avifauna:

The margins of the site provide some foraging and nesting opportunities for common bird species and blackbird was seen during the visit.

Invertebrates:

The margins of this site, as well as the grassland, provide good opportunities for this group and small white, large white and gatekeeper butterflies were recorded during the visit. The ivy around the canal margins provides a good nectar source with lots of hoverflies and bees seen. The clumps of buddleia also provide good nectar sources for invertebrates. The trees around the margins and in the eastern part of the site provide good habitat for stag beetles (Priority species).

Herpetofauna:

Although previously unsuitable habitat in 2012, the grassland in the eastern part of the site provides potential habitat for reptiles, particularly common lizard and grass snake. The proximity of the river corridor and adjacent park to this area increases the likelihood that reptiles have colonised this area. Toad could also be present in the grassland on the eastern side.

Mammals:

The majority of the site is sub-optimal for this group. Bats are likely to use the canal for commuting and foraging. Otter has been recorded in the Alderman Canal adjacent to this site. The scrub and grassland on the eastern side of the site provides good foraging and nesting habitat for hedgehogs, including for overwintering.

Comments and recommendations:

This site has been allocated for mixed use, primarily for residential at a high density on 90% of the site, with small scale retail and leisure and offices as a secondary allocation. This site is located adjacent to the Alderman Canal CWS. There is an opportunity to strengthen the local ecological network through retention and enhancement of on-site habitats adjacent to this feature, which could be in combination with any greenspace provision.

Prior to the site being developed, further surveys for reptiles and potentially bat activity surveys will be required and any lighting scheme should be designed to prevent light spillage into the river corridor. Scrub clearance should not be undertaken in the bird nesting season unless a suitably qualified ecologist has indicated that no active bird's nests are present.

Consideration should also be given during site clearance to the likely presence of hedgehog on the eastern part of the site. Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Japanese Knotweed has been recorded close to the site. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of this species is required to ensure it has not spread and colonised the site.

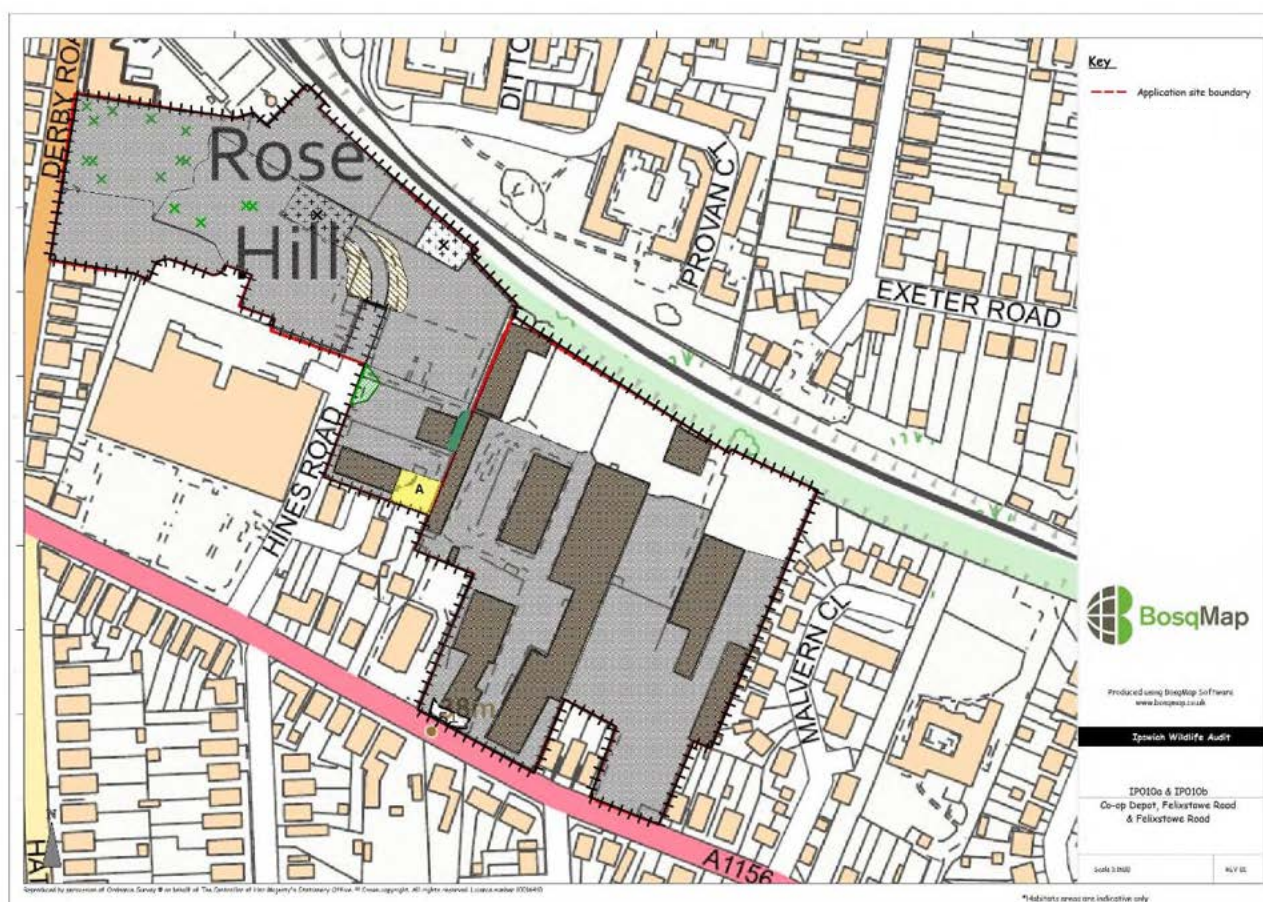
Planting of low-maintenance nectar and berry producing shrubs amongst the buildings will provide some small-scale benefit for birds and invertebrates.

Swifts are a fast-declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Co-Op Depot Felixstowe Road

Site ref: IP010a/IP010b
Site status: No wildlife designation
Grid ref: TM 18382 43701/TM 18544 43570
Area: 2.21 hectares/2.77 hectares
Date: 29th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 22°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View north-west across IP10a showing colonisation of vegetation



Old brick building in IP10b with bat potential

Habitat type(s):

Buildings, hard standing, ephemeral short perennial, tall ruderal, scattered scrub, scattered trees

Subsidiary habitats:

-

Site description:

This is a large site extending between Felixtowe Road and the Ipswich to Felixtowe railway line. Most of site IP10b is in retail/employment use and is largely occupied by buildings, whilst most of IP10a is currently hard standing which has been left for some time, so tall ruderal and perennial species have started to colonise. Site IP10a was securely fenced so was only viewed from the boundaries. The site was previously surveyed during the previous Wildlife Audit in 2012.

Protected species seen or known:

Records in the surrounding area include:

Badger

Common pipistrelle bat

Soprano pipistrelle bat

Brown long-eared bat

Serotine bat

Common lizard

Grass snake

Protected species potential:

Slow worm

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

BoCC Red List birds include herring gull, house sparrow and starling

BoCC Amber List birds include dunnock and swift (Suffolk Character Species)

Priority species potential:

Cinnabar moth

Connectivity:

The railway corridor provides good connectivity through this otherwise built up area of the Town.

Structural diversity:

The structural diversity of 10b is very poor, but 10a currently has some structural diversity.

Flora:

The flora is limited due to the nature of this site, however a good range of species are present including false oat, rough meadow grass, wall barley, rat-tailed fescue and fern grass with Canadian fleabane, prickly lettuce, bristly ox-tongue, dandelion, ragwort, common cat's-ear, groundsel, smooth sow thistle, goat's-beard, white melilot, wild carrot, rough chervil, ribwort plantain, greater plantain, ox-eye daisy, teasel, black medick, purple toadflax, rosebay willowherb and goldenrod (garden escape). Scrub is developing, particularly to the rear of the site with buddleia dominating as well as bramble and gorse. There are also occasional trees including poplar and horse chestnut.

Avifauna:

The visit took place at a sub-optimal time of year for recording this group, however there are a number of records of both Red and Amber list species present in the surrounding area. The developing scrub provides some nesting opportunities. The range of plants also provides good foraging, particularly for seed eating species such as finches.

Invertebrates:

Site IP10a provides good habitat for a range of invertebrates. Common species of butterfly including red admiral, small white and large white were noted during the survey as well as several species of bee and hoverfly. Some crickets and grasshoppers were also observed. Cinnabar moth caterpillars (Priority Species) feed exclusively on ragwort so they could be present. Site IP10b is currently sub-optimal for this group, although common species will be present.

Herpetofauna:

The habitat, especially closest to the railway line, is developing into suitable habitat for slow worm and common lizard. The low banks along parts of the site also provide good potential hibernation opportunities for this group.

Mammals:

Several of the buildings have the potential to support bat roosts and there are records of several

species from other buildings close to the site. Bats are also likely to commute and forage along the railway line. Badgers are known to be in the area and the railway line provides a good corridor for them to move. Other common mammal species are likely to be present.

Comments and recommendations:

Site IP010a is planned as a mixed-use site with its primary allocation being residential with 75 dwellings at 45dph on 75% of site. The secondary allocation is for a school extension covering approx. 25% of site.

Site IP010b has a primary allocation of residential properties with 62 dwellings planned at 45dph on 50% of site. The secondary allocation covers its current employment uses which are not planned to change.

Due to the presence of semi-natural habitats on site detailed and up-to-date surveys are required particularly for flora (including invasive species), reptiles, bats and badgers. A Tree Preservation Order is believed to relate either to a tree on this site or closeby.

If reptiles are present on site, mitigation for the impacts on the population will be required and ideally they should be retained on site adjacent to the railway line, in conjunction with additional habitat enhancement. In order to achieve this, log piles for basking reptiles sited over the top of a below-ground hibernacula should be incorporated into an undisturbed area. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with loose log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. These structures could also be used to provide stag beetle habitat.

Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. Consequently, new development should retain as much as possible of the existing habitat adjacent to the railway corridor and integrate it within a landscaping scheme. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. The residential lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

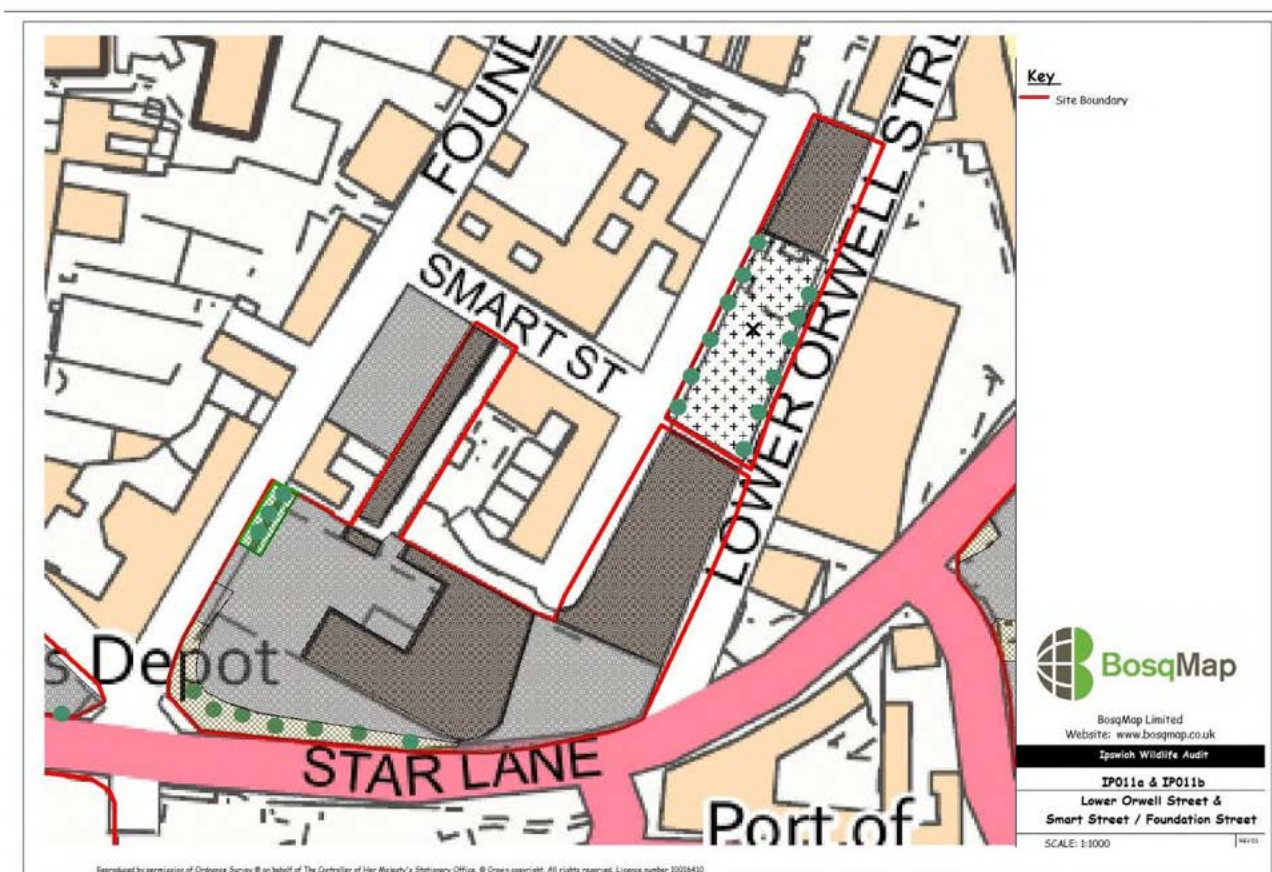
Careful planning and design can integrate the requirement for sustainable drainage systems with the retention of wildlife habitat. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity.

Holes in fences for hedgehog should be part of this new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Lower Orwell Street (formerly Smart St/Foundation St) and Smart Street/Foundation Street

Site ref: IP011a/IP011b
Site status: No wildlife designation
Grid ref: TM 16639 44240/TM 16535 44283
Area: 0.15 hectares/0.61 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 5
Biodiversity value: Low

Map:



IP011a is the smaller northern-most site, and IP011b is the larger southerly area.

Photos:



IP011a Open area with ephemeral short perennial vegetation



IP011a Disused gym



IP011b Bus depot



IP011b Gravel car park



IP011b Building with bat potential and swift nesting potential

Habitat type(s):

Buildings, hard standing, ephemeral short perennial, dense/continuous scrub, scattered broad-leaved trees, introduced shrub

Subsidiary habitats:

Wall surfaces, roof voids

Site description:

Site IP011a lies west of Lower Orwell Street adjacent to the Central Conservation area, in an area of archaeological importance. The site consists of a disused building formerly used as a gym in the northernmost section and directly south of the building is a fenced-off gravel car park which has overgrown with sparse vegetation. This car park is lined with London plane trees, (protected under TPOs) on the eastern and western boundaries. It also contains a scheduled monument. Directly west of the site is Tooley's Court and Smart's Almshouses grade II Listed building, which is currently used as sheltered housing for the elderly.

Directly south of IP011a is site IP011b, which has boundaries with Lower Orwell Street to the east, Star Lane to the south and Foundation Street to the west. The site is mainly industrial buildings with a Bus Depot and associated car park occupying the southernmost section. IP011b also lies within an area of archaeological importance, between the Central and Wet Dock Conservation areas, close to the grade II Listed St Mary at Quay Church. It contains two scheduled monuments. Also included in this site is a long narrow building with a pantile roof.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

These sites lie within a heavily built up area near the centre of Ipswich. The vegetation within the site is limited to mature trees and some scattered plants and scrub vegetation in unmanaged areas. This means that there is no connectivity between the sites and any semi-natural greenspace in the wider area.

Structural diversity:

Structural diversity is very limited being mostly buildings and hard standing. The walls and roofs could offer an alternative substrate for growth, however this potential niche habitat is currently bare.

Flora:

IP011a has several mature London plane trees on the boundaries of the car park. The gravel car park is relatively undisturbed and thus some ruderal vegetation has grown throughout, albeit sparsely. This includes Canadian fleabane, cow parsley, herb Robert and prickly sow thistle.

IP011b is a heavily used bus depot, but around the outskirts there are several mature and semi-mature trees including whitebeam, ash, lime and London plane. The verge beneath the tree canopy has historically been planted with ornamental species including tutsan and cotoneaster, but has been left relatively unmanaged so some areas have been colonised by patches of bramble and dog rose along with forbs typical of disturbed ground such as fat hen, nettle, black horehound, bristly ox-tongue, prickly lettuce, Canadian fleabane and mugwort, along with false oat, Yorkshire fog and barren brome grasses. Small areas contain fern grass, which can often be found in towns in artificial habitats such as walls or cracks in pavements.

A small area of scrub with trees is present along Foundation Street which contains hawthorn, ash, apple, sycamore, rowan, yew and holly with a ground flora of primrose, white clover, herb Robert, hedge mustard and stinking iris.

Avifauna:

Although none were observed during the survey, the pantiled roof of the brick building could support nesting swifts. However, it was a sub-optimal time of year for recording most other bird species. The mature trees and dense scrub offer some roosting opportunities for garden birds. Feral pigeons can be associated with industrial buildings and town centres. Gulls may also use the roofs of the buildings for perching and nesting.

Invertebrates:

There are currently limited opportunities for this group, although stag beetles have been recorded near to the site.

Herpetofauna:

There are no opportunities for this group within these two sites.

Mammals:

The long narrow brick and pantiled building adjacent to Foundation Street has the potential to support roosting bats with access routes including slipped tiles and damaged areas of roof.

Comments and recommendations:

Proposals for the sites include 18 dwellings on IP011a with a density of 110dph. IP011b is also allocated to residential with 56 dwellings at 90dph.

Although this site is currently of low wildlife value, the brick and pantile building could support bats and consequently further surveys are recommended.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check. The significant trees on this site are covered by a TPO. Nesting swifts are also protected under the same legislation as all nesting birds, so care should be taken to avoid work to this building during the bird breeding season, unless it can be confirmed by a suitably qualified ecologist that swifts are not nesting. Swifts are a rapidly declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes can be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

IP011b contains cotoneaster and members of this group are listed on Schedule 9 of the Wildlife & Countryside Act 1981, as amended, because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. If this plant is removed as part of a vegetation clearance programme then it should be disposed of in a way as not to contravene the legislation.

As this area will remain highly built-up the options for net gain are limited but should include utilising some of the potential space available. For example, on the employment areas green roofs and living walls could provide important stepping-stone habitats within this urban area.

Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedum species and in turn, these can benefit both foraging invertebrates and birds. Living walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. A simple solution could include climbers, such as ivy, which can be trained on wires or trellis, or for more complex schemes, adapted planters can be used for other species to create diverse green walls. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates.

Although a declining species, this area of the county is a stronghold for stag beetles which can often be found in relatively small garden habitats around Ipswich. A habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of greenspace to benefit this species. This greenspace should be landscaped to include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates, or alternatively integrated with a rain garden to deliver sustainable drainage

options. This feature requires free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive.

Site name: Peter's Ice Cream

Site ref: IP012

Site status: No wildlife designation

Grid ref: TM 168989 44291

Area: 0.32 hectares

Date: 2nd August 2019

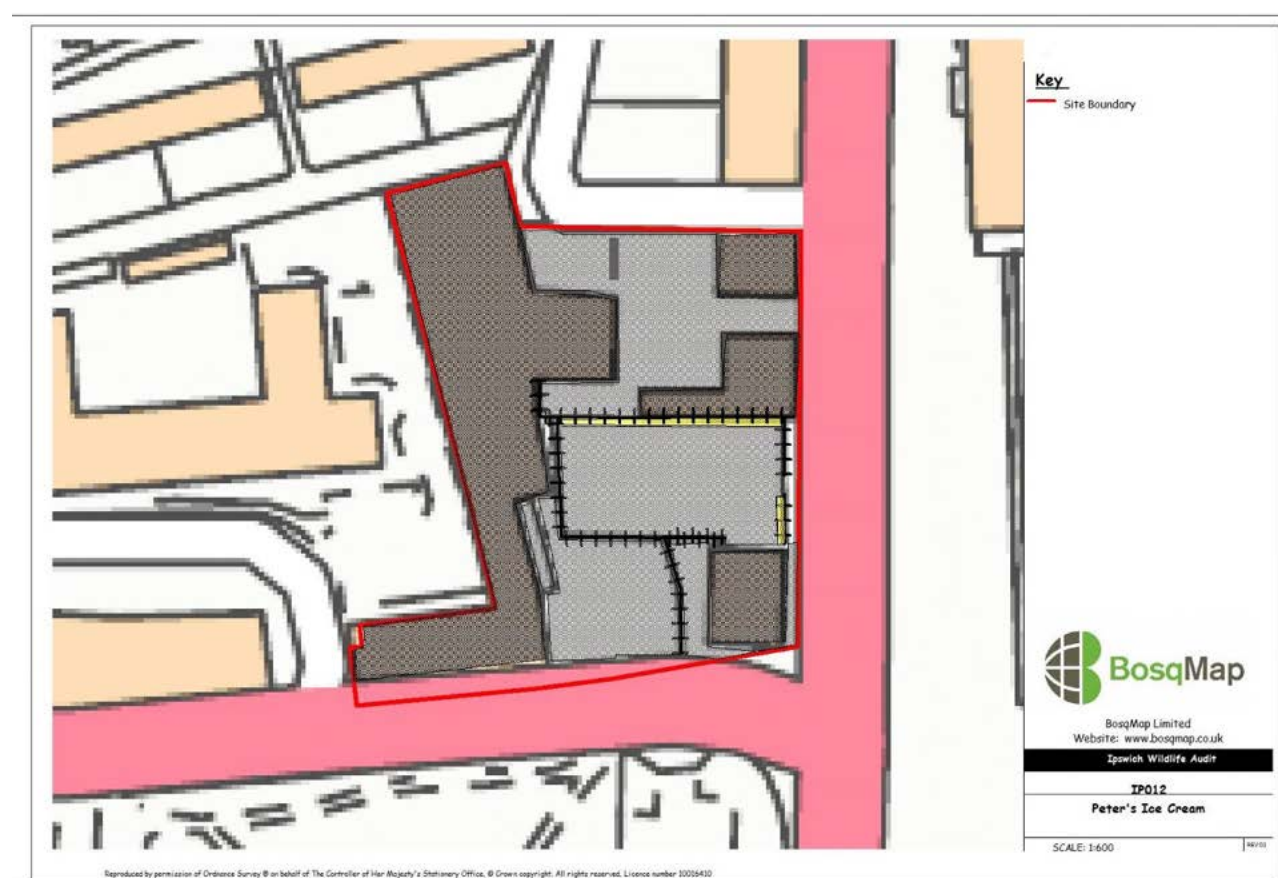
Recorder: J Crighton

Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C

Ranking: 6

Biodiversity value: Low

Map:



Photos:



Hard standing with cracks in paving



Gravel car park in south with sparse perimeter vegetation



Building to south west



Building to south east

Habitat type(s):

Buildings, hard standing, scattered scrub, ephemeral short perennial

Subsidiary habitats:

Wall surfaces

Site description:

This site lies at the corner of the junction between Grimwade Street and Star Lane, with its other boundaries being in residential and industrial use. It is adjacent to the Central Conservation Area and within the Anglo-Saxon and Medieval core in an Area of Archaeological Importance. The grade II Listed Church of St Clement's and its associated churchyard is located on the opposite side of Star Lane, directly south of the site. The site itself is largely hard standing and buildings, many of which are boarded up, but one is in current use as a hand car washing facility.

Protected species seen or known:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat
Badger

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Stag beetle
Hedgehog
Toad
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

Swift
House sparrow

Connectivity:

This site currently has relatively poor connectivity but has the potential to improve. The gardens to the north provide a degree of connectivity, as does the churchyard with mature trees to the south and the trees lining Grimwade Street to the west. However, improved stepping-stone habitat could be created through strategic landscaping, helping to link the site with Alexandra Park in the west.

Structural diversity:

Structural diversity is very limited being mostly buildings and hard standing. The walls and roofs could offer a substrate for growth, however this potential niche habitat is currently bare.

Flora:

The flora of this site is limited to the edges of car parks and cracks in paving and walls. Typical species of this type of habitat were noted, including nettle, Canadian fleabane, knotgrass, black horehound, rosebay willowherb, common mallow, petty spurge, bristly ox-tongue, herb Robert, groundsel, chickweed sp., white clover and the occasional common poppy. Grasses were rare but included wall barley, creeping bent and annual meadow grass. Some buddleia and Tutsan are growing over fences and walls on the perimeters and throughout the site.

Avifauna:

Although none were observed during the survey, some of the older buildings could support nesting swifts. However, it was a sub-optimal time of year for recording most other bird species. Common garden birds may use the perimeter of this site for foraging and it is likely that pigeons will nest in the disused buildings. The habitats on the immediate outskirts of the site (churchyard and mature trees) provide more suitable nesting and foraging habitat for birds in general.

Invertebrates:

The site is currently sub-optimal for this group but is likely to be visited by flying insects. Large white butterflies were seen feeding on the buddleia shrubs.

Herpetofauna:

Although common toad has been recorded nearby, there is currently no scope for habitat for amphibians or reptiles within this site.

Mammals:

The buildings in the south east and west of the site (as shown in above photographs) could provide roosting opportunities for bats so any development would need to be informed by a bat survey prior to works.

Comments and recommendations:

Proposals for this site is for 35 residential units at a density of 110dph.

Although this site is currently of low wildlife value some of the buildings in the could support bats and consequently further surveys are recommended.

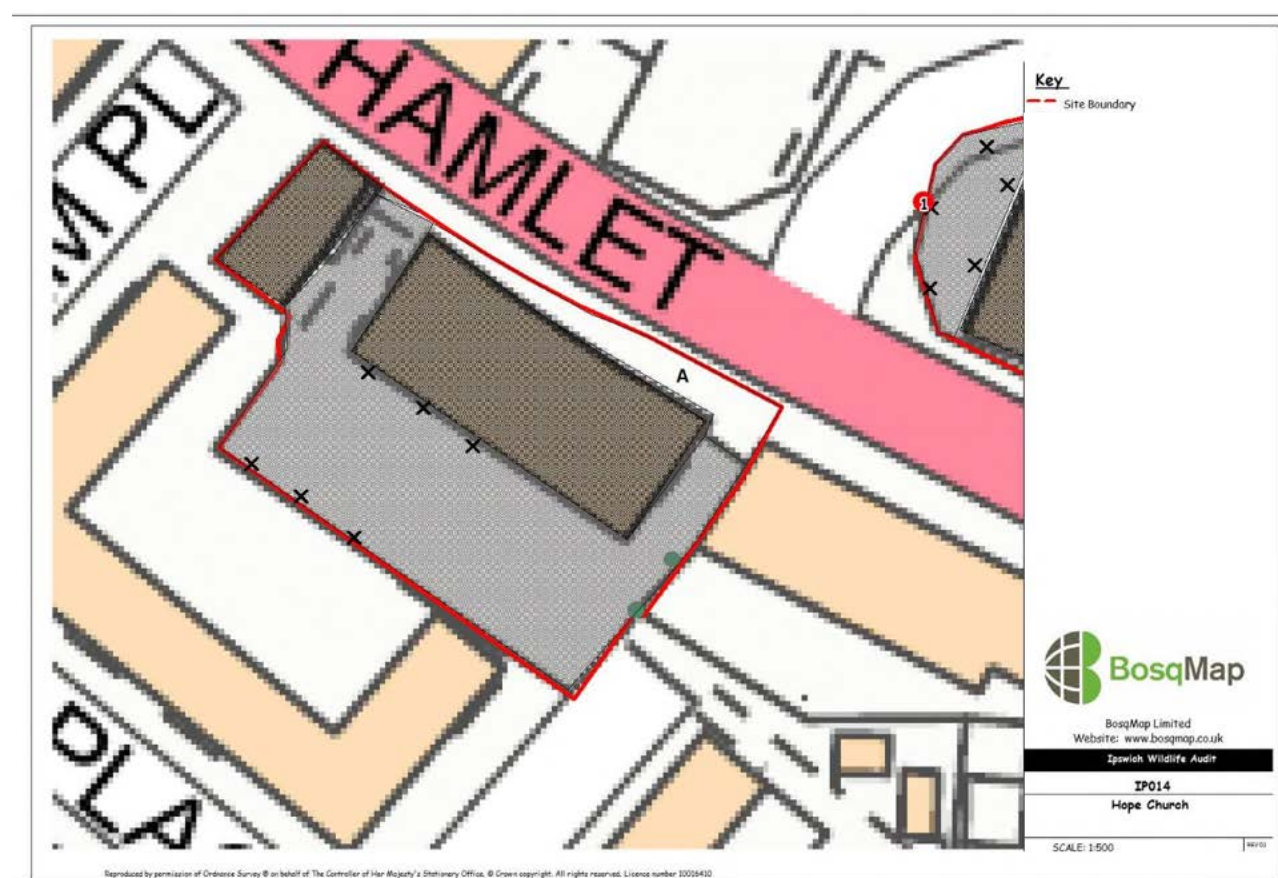
Nesting swifts are also protected under the same legislation as all nesting birds, so care should be taken to avoid demolition of the older buildings during the bird breeding season, unless it can be confirmed by a suitably qualified ecologist that swifts are not nesting. Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Although this site is small and in a built-up area of the Town, so opportunities for enhancement are limited. A perimeter landscaping scheme which includes low-maintenance nectar and berry producing shrubs and perennial plants would provide some benefit for birds and invertebrates. This should be in conjunction with sustainable drainage proposals to dispose of surface water.

Site name: Hope Church

Site ref: IP014
Site status: No wildlife designation
Grid ref: TM 17305 43904
Area: 0.21 hectares
Date: 28th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 28°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Car park behind Hope Church



Hope Church



Building adjacent to Hope Church with bat potential and swift nesting potential

Habitat type(s):

Buildings, hard standing, ephemeral short perennial, scattered trees

Subsidiary habitats:

-

Site description:

This site is located south of Fore Hamlet, to the east of Isham Place. It is currently a church dating from 20th Century with a car park to the rear. The older building adjacent to it is also included within the site boundary, which is currently a chair specialist shop. There are two mature London Plane trees at the eastern end of the car park.

Protected species seen or known:

Species recorded in the area include:

Badger
Common pipstrelle bat
Soprano pipistrelle bat
Brown long eared bat
Serotine bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog

BoCC Red List species including herring gull, house sparrow and starling

Priority species potential:

Swifts (Suffolk Character Species)

Connectivity:

This has very poor connectivity as it is a small site which is surrounded by roads and housing.

Structural diversity:

The structural diversity is very poor with only occasional short vegetation and trees.

Flora:

The flora is very sparse given the nature of this site. A few plants are growing up through cracks in the paving which are typical of these disturbed habitats including nipplewort, common chickweed, dandelion, perennial sow thistle, redshank, scarlet pimpernel, greater plantain, dove's-foot cranesbill, teasel and common centaury. There are also occasional buddleia bushes.

In front of the church is a small flower bed which had similar species plus poppy, marigold spp, and shepherd's cress.

Avifauna:

There is very limited habitat available for this group. The two London Planes provide some roosting and nesting opportunities for common species. The building which currently houses the chair specialist shop has the potential for house martins or swifts (Suffolk Character Species) to nest.

Invertebrates:

The site provides very limited opportunities for this group. Buddleia provides some nectar sources for common species.

Herpetofauna:

There is no suitable habitat for this group.

Mammals:

The habitat is sub-optimal for this group, although bats may roost in the building currently housing the chair specialist shop. The church is relatively modern and unlikely to be used by bats, albeit an internal inspection will be required to confirm this. Any development would need to be informed by a bat survey. There are records of hedgehog in the area and they may pass through the site to navigate between adjacent gardens.

Comments and recommendations:

This site is currently proposed for housing at a very high density. Although this site is currently of low wildlife value the buildings in the site could support bats and consequently further surveys are recommended.

Japanese Knotweed was recorded at a site on the opposite side of the road. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey, particularly due to the access issues, and further monitoring of this species is required to ensure it has not spread and colonised the site.

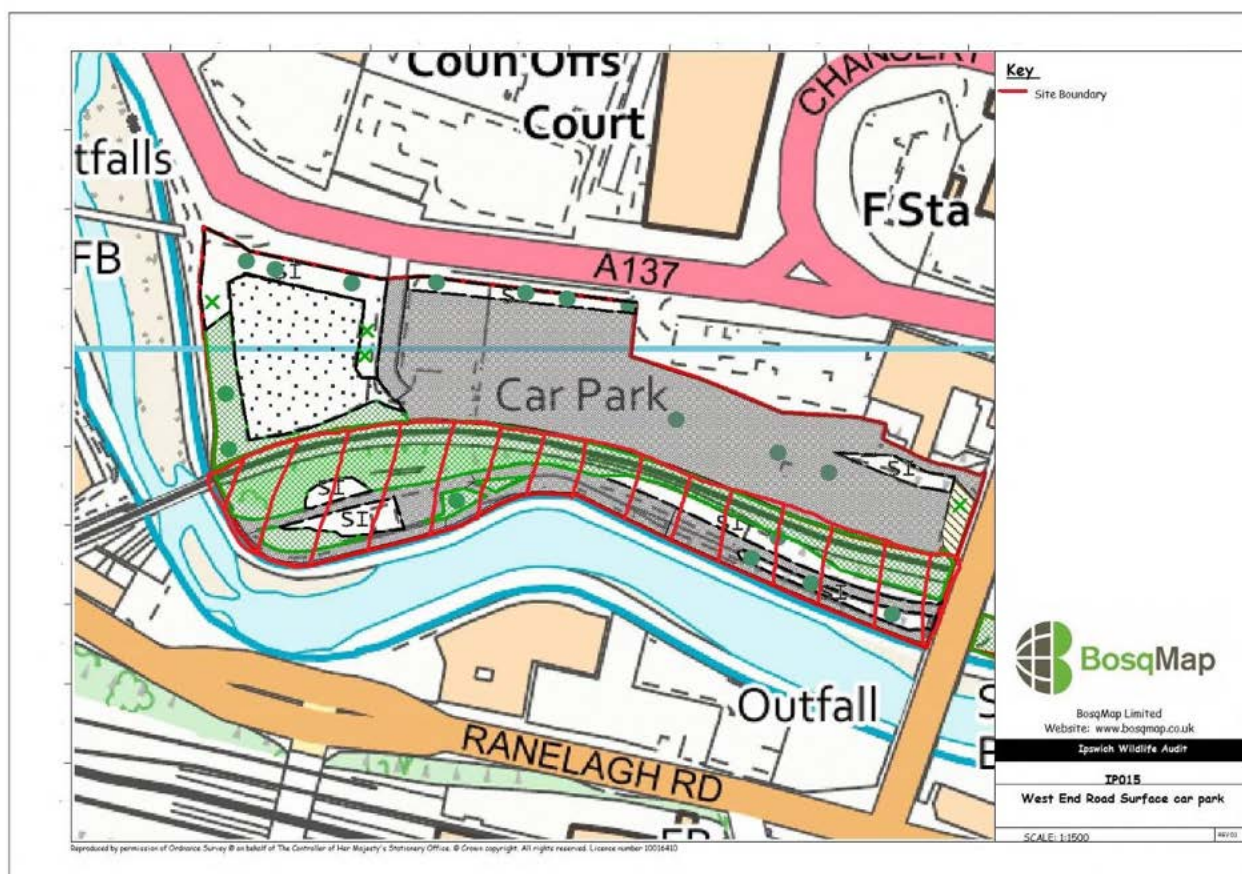
This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates. Rain gardens are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

Nesting swifts and house martins are also protected under the same legislation as all nesting birds, so care should be taken to avoid demolition of the older buildings during the bird breeding season, unless it can be confirmed by a suitably qualified ecologist that swifts are not nesting. Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: West End Road, Surface Car Park

Site ref: IP015
Site status: No wildlife designation
Grid ref: TM 15627 43984
Area: 1.21 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 30°C
Ranking: 5
Biodiversity value: Low

Map:



*Note the red lined section in the south, adjacent the river, does not form part of IP015.

Photos:



Dense scrub on the western boundary of the site, which continues along the southern boundary

Habitat type(s):

Hard standing, dense/continuous scrub, scattered scrub, broad-leaved scattered trees

Subsidiary habitats:

Bare ground

Site description:

The site is approximately 1.21 hectares and is currently used as a public car park. It lies within the centre of Ipswich town at TM 15598 43994, to the south of West End Road and north of the old railway sidings and the River Orwell. North of the site is the busy office, commercial and leisure area of Ipswich. The River Orwell lies to the south and the habitat in between the river and the site (listed as IP083) is primarily scrub and accessed by a public footpath.

The eastern section of the site is concrete hard-standing with the occasional semi-mature planted tree and the western section is laid to gravel. A narrow grass verge runs along the northern boundary between West End Car park and West End Road, which widens in the west and forms a raised bank.

Protected species seen or known:

Records in the surrounding area include:

Otter
Water vole
Badger
Slow worm
Grass snake
Great crested newt
Daubenton's bat
Natterer's bat
Noctule bat
Common pipistrelle bat
Soprano pipistrelle bat

Protected species potential:

-

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)

Associated with the river corridor, BoCC Red List birds include herring gull, curlew, common scoter, white-fronted goose and yellow wagtail, and BoCC Amber List include black-tailed godwit, black-throated diver, dark-bellied brent goose and little tern.

Associated with the scrub, Red List birds include house sparrow, starling, linnet and song thrush, and Amber List birds include dunnock.

Priority species potential:

-

Connectivity:

The car park itself has little connectivity or value, but the adjacent scrub and river offer good connectivity beyond the southern boundary. The Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar site, including the Orwell Estuary Site of Special Scientific Interest (SSSI) is situated 1.9km to the south east (2.8km via the river corridor).

Structural diversity:

There is very limited structural diversity within the site itself, with only the verge between the car park and the road and the bank at the western end of the site offering any structural value. However, the dense scrub directly adjacent to the south of the site offers good structural diversity.

Flora:

While the eastern section of the car park is dominated by concrete hard-standing with only a small number of planted trees, the western side is more semi-natural in the composition of species on the surrounding raised banks. The scrub contains some mature trees including silver birch, sycamore, ash, plum and hawthorn, but buddleia is the dominant species.

The raised bank contains a mix of short forbs typical of amenity grassland including buck's horn, ribwort and greater plantain species, field mouse-ear, creeping cinquefoil, yarrow, white clover and common cat's ear amongst Yorkshire fog and cock's foot grasses, and some taller vegetation commonly associated with disturbed ground such as wild parsnip, cow parsley, red deadnettle, ragwort, fennel, cleavers, green alkanet, rocket, teasel, wild mignonette, evening primrose, mugwort, perforate St John's wort and common mallow. A few small patches of dittander (Nationally scarce but locally common) and calamint sp. are also present.

Avifauna:

It was a sub-optimal time of year for recording this group. However, the main bird interest in this site is likely to be associated with the adjacent scrub and river habitats, which is discussed under the adjacent site (IP083). Directly associated with the car park, species such as feral pigeon, wood pigeon, house sparrow and starling are likely to forage, whilst nesting in the adjacent habitats.

Invertebrates:

This site could offer potential habitat for stag beetles (Priority Species) in the scrub habitats on the boundaries, if there is any subterranean deadwood suitable for supporting their larvae. The areas of dry bare ground on the banks could support ground burrowing bees and wasps and the adjacent river corridor could attract dragonflies and damselflies. Common butterflies and bees are also likely to be present on site, especially with the high numbers of flowering scrub species.

Herpetofauna:

There are records of slow worm and common lizard in Gippeswyk Park south of the River Orwell directly south of the site. There are several common lizard records from the allotments adjacent to Gippeswyk Park. Both common lizard and slow worm are often found along railway and riverine corridors and grass snake may also be associated with the River Orwell and River Gipping corridors.

The site contains vegetated banks and scrub, which could provide refuge, hibernation and foraging habitat for these reptiles.

Despite a record of great crested newt to the west of the site, it is unlikely to support any amphibians due to a lack of connectivity to suitable breeding habitats for this group.

Mammals:

Adjacent habitats to the site have high foraging and commuting potential for bats, with the river corridor and the scrub belt offering moderate value habitat. There are also records of bats associated with the building to the north west of the site (currently being renovated).

There is a record of otter to the south of the site, on the opposite bank of the River Orwell. Otters are highly mobile species, so the river corridor is likely to be regularly used for commuting and foraging. The scrub on the north bank of the River Orwell directly adjacent to the site provides habitat capable of supporting an otter holt or resting place. However, there was no evidence that otters were using this area at the time of the survey and a high volume of littering and human disturbance is likely to discourage use by otters, so any activity is likely to be transient.

There are records of hedgehog from various areas surrounding the site, and they are likely to use the scrub for refuge and hibernation.

Comments and recommendations:

This site has been allocated for primary use as a long-stay multi-storey car park, and secondary use as residential with 67 dwellings on 55% of the site, with a density of 100dph.

A reptile survey should be undertaken in the western section of the site, with particular attention paid to the vegetated banks.

Japanese knotweed and Japanese rose have been recorded close to the train station on the opposite side of the River Orwell and these species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of these species is required to ensure they have not spread and colonised the site.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

This site is located adjacent to the River Orwell wildlife corridor. There is an opportunity to strengthen the local ecological network by creation of new scrub and grassland habitat at the western end of the site as a continuation of the existing wildlife corridor. Any new habitat should use native planting local to the area. In addition, any lighting scheme should be designed to prevent light spillage into this area, or the scrub habitat along the river banks. Bats and otter can be sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

As this proposal is for a multi-storey car park, living walls can be created as part of sustainable drainage options. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates. Like green roofs, they can provide important stepping-stone habitat in urban areas.

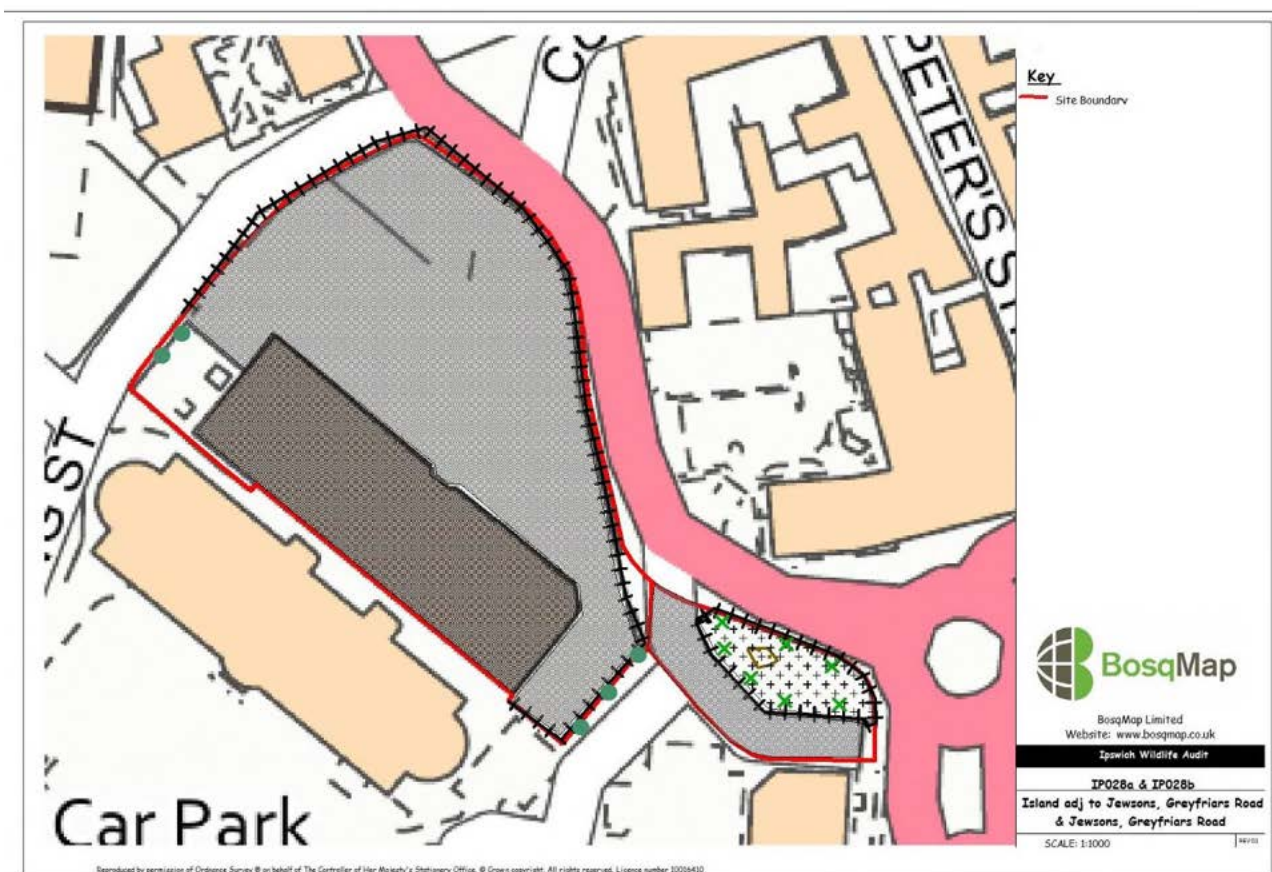
Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into new buildings using

'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'. Due to its height, a multi-storey car park is an ideal location for integrated swift boxes. Similarly, bat boxes can also be integrated into such buildings.

Site name: Island adj to Jewsons, Greyfriars Road/Jewsons, Greyfriars Road

Site ref: IP028b
Site status: No wildlife designation
Grid ref: TM 16234 44100/TM 16158 44153
Area: 0.13 hectares/0.9 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 5/6
Biodiversity value: Low

Map:



Photos:



IP028a looking east across site



IP028a bryophyte and stonecrop cover



IP028b Jewsons Yard

Habitat type(s):

Hard standing, scattered scrub, ephemeral short perennial

Subsidiary habitats:

Bare ground

Site description:

IP028a is the smaller of the two sites and is an isolated area of scrub and ruderal vegetation surrounding an area of hard standing now colonised by bryophytes. It is situated between the Greyfriars Road roundabout and Cardinal Park Leisure and Entertainment Park. Part of the site was previously excavated in the 1980s as part of an historic planning application. The larger site, IP028b, is currently used as a builder's merchant yard by Jewsons and lies to the west of IP028a. This site lies within the extent of the former town marshes.

Protected species seen or known:

Records in the surrounding area include:

- Great crested newt
- Brown long-eared bat
- Common pipistrelle bat
- Soprano pipistrelle bat
- Daubenton's bat
- Natterer's bat
- Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Swift (Suffolk Character Species)

Starling

Song thrush

House sparrow

Priority species potential:

-

Connectivity:

These two sites are quite isolated due to their location in a heavily built-up area and lack of surrounding vegetation. However, the River Orwell County Wildlife Site corridor lies within 150m to the south.

Structural diversity:

The structural diversity of IP028a is moderate with scrub, ruderal vegetation, bare ground and bryophyte cover offering a range of habitats, albeit in a small area. IP028b is entirely comprised of hard standing with only a small number of mature trees so structural diversity is very poor.

Flora:

The flora around the perimeter of IP028a comprises buddleia and some scrubby sycamore and ash. In the center of the site, there is an area of hard standing which is almost entirely covered with bryophytes, with the occasional patch of biting stonecrop. Surrounding this, and across the rest of the site, there is a mix of grasses including false oat, barren brome, cock's foot and Yorkshire fog and forbs such as wild parsnip, Canadian fleabane, yarrow, mugwort, smooth hawksbeard, nipplewort and herb Robert with the occasional poppy and purple toadflax.

IP028b is entirely hard standing, but a narrow raised-bed runs along the boundary, planted with laurel and cotoneaster amongst other garden varieties and colonized by pellitory-of-the-wall. Some mature trees including sycamore and cherry are present on the outskirts of the yard.

Avifauna:

It was a sub-optimal time of year for recording this group. However, the scrub and forbs within IP028a could support a small number of nesting birds although none were noted during the survey.

Invertebrates:

Site IP028a contains a range of habitats suitable for common invertebrate assemblages. Several crickets, grasshoppers and spiders were noted during the survey, along with a number of butterflies, including painted lady, peacock, large white and red admiral.

Herpetofauna:

Although there is a record of great crested newt from south of the site, the site is unlikely to support any reptiles or amphibians due to its isolated location and sub-optimal (IP028a) and unsuitable (IP028b) habitat.

Mammals:

The smaller site, IP028a has a structure suitable for common small mammals and hedgehogs, however, its isolated position is likely to have an influence on whether hedgehogs are present.

Comments and recommendations:

IP028b is identified as an Opportunity Site with potential for housing-led redevelopment. We have no information regarding proposals for site IP028a.

Given the nature of this site, an invasive plant species assessment should be included as part of any Preliminary Ecological Assessment to accompany a planning application for IP028a.

As this area will remain highly built-up the options for net gain are limited but should include utilising all available space. For example, for the office and leisure areas green roofs and living walls should be considered, as these can provide important stepping-stone habitats and offer aesthetically pleasing attributes to the area. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. Living walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. A simple solution could include climbers, such as ivy, which can be trained on wires or trellis, or for more complex schemes, adapted planters can be used for other species to create diverse green walls. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates.

For residential areas, rain gardens can slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. Planting of low-maintenance nectar and berry producing shrubs amongst the leisure and office buildings will provide some small-scale benefit for birds and invertebrates. These types of features can provide important stepping-stone habitat in urban areas.

In addition to this, action can be taken for individual species such as swifts, which are a fast declining, migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Opposite 674 – 734 Bramford Road

Site ref: IP029

Site status: No wildlife designation

Grid ref: TM 13380 45770

Area: 2.26 hectares

Date: 22nd July 2019

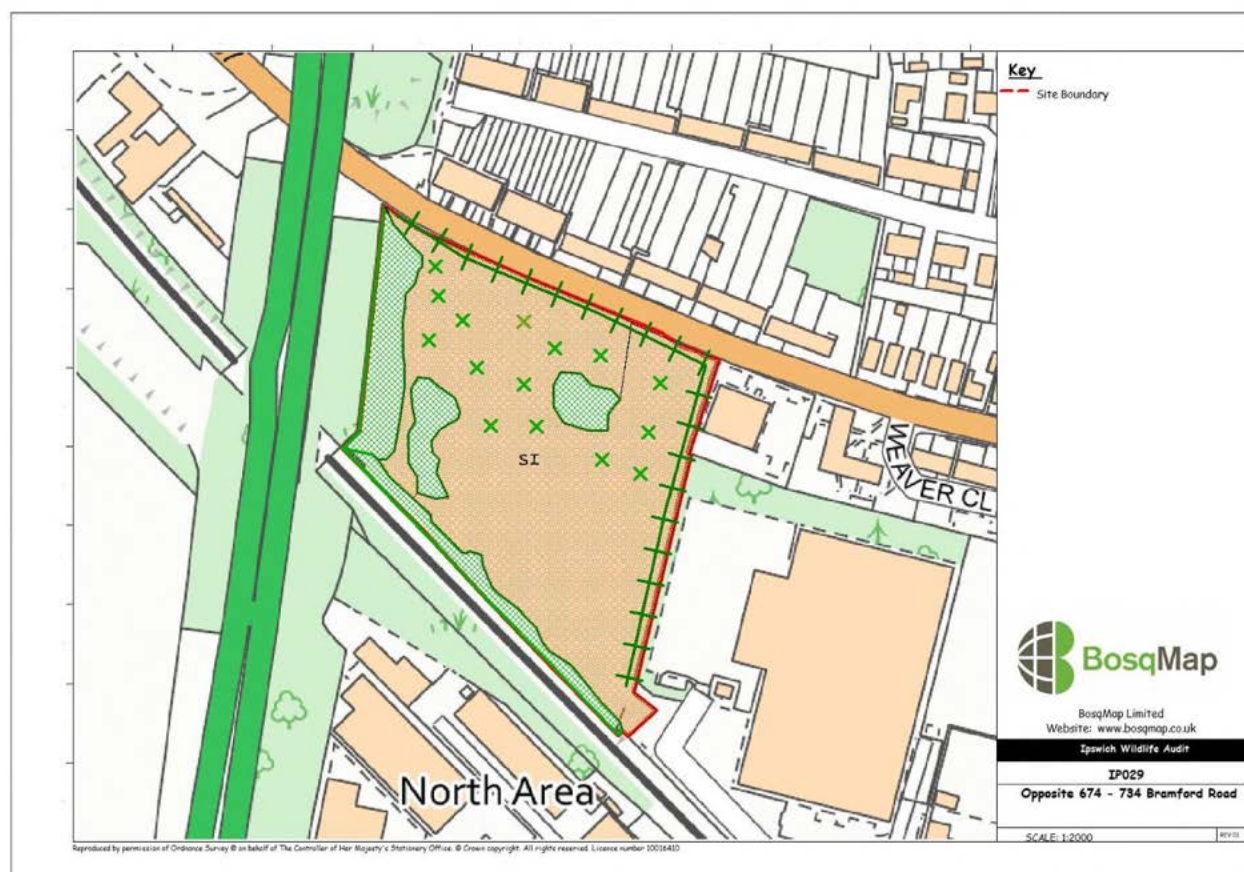
Recorder: A Looser

Weather conditions: Hot and sunny, light breeze 27°C

Ranking: 3 (likely to be higher following detailed surveys)

Biodiversity value: Medium - High

Map:



Photos:



Scrub grassland mosaic in northern part of site



Looking south-east towards railway line



Pyramidal Orchids

Habitat type(s):

Neutral grassland, scrub, species-poor hedgerow

Subsidiary habitats:

-

Site description:

The site lies to the south of the Bramford Road and is bordered on the western boundary by the A14 and to the south by the Ipswich to Norwich mainline railway. It is currently dry neutral to chalky grassland with a grassland scrub mosaic in the northern half of the site. There are species-poor hedgerows along the northern and eastern boundaries and a narrow belt of dense scrub along the railway line. The site has significantly improved ecologically over time from when the first Wildlife Audit carried out in 2000 described it as recently arable with developing ruderal flora. However, by the time of the 2012 Wildlife Audit the site had a well-established sward with a good variety of herb species and this species and structural diversity has continued to improve.

Protected species seen or known:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Daubentons bat
Natterers bat
Noctule bat
Slow worm
Grass snake
Great Crested Newt

Protected species potential:

Common lizard, badger, bats

Priority habitats present:

Hedgerows

Priority species seen or known:

Cinnabar moth caterpillar
Hedgehog
Common toad
Wall butterfly
BoCC Red List birds including cuckoo, house sparrow, starling, linnet, song thrush, skylark, yellowhammer
BoCC Amber List birds including barn owl, dunnock, reed bunting

Priority species potential:

White-letter hairstreak butterfly

Connectivity:

Connectivity is very good due to the proximity of the railway corridor and the A14 margins.

Structural diversity:

The structural diversity is currently very good with grassland and scrub as well as hedgerows/trees around the margins.

Flora:

The site has developed an interesting flora with a good diversity of species. The grasses include perennial rye, false oat, cock's-foot and smooth meadow grass. There is a good range of herbs many of which are typical of dry neutral to chalky grassland including false fox-sedge, ox-eye daisy, blue fleabane, Canadian fleabane, common fleabane, ploughman's spikenard, wild carrot, vipers bugloss, wild basil, toadflax, black knapweed, field scabious, red bartsia, common centaury, agrimony, black medick, hop trefoil, perforate St john's wort, prickly lettuce, bristly ox-tongue. There are also numerous pyramidal orchids. In addition, there were other more common species including creeping cinquefoil, poppy, red dead nettle, white campion, hemlock, mugwort, creeping thistle, spear thistle, curled dock, hogweed and ragwort.

Scrub is developing in the northern half of the site with woody species that include dogwood, field maple, sycamore, elm, hawthorn, blackthorn, dog rose, travelers joy and bramble.

The roadside hedge is dominated by elm with hawthorn, willow, cherry, field maple, sycamore and oak with traveler's joy and ivy also present. The eastern boundary is species poor being dominated by elm and hawthorn. Adjacent to the railway line is a scrubby band of suckering elm (some dead), elder, oak, dogwood, dog rose, traveler's joy and buddleia. The A14 margin is a tree belt (off site) dominated by poplar species.

Avifauna:

It was a sub-optimal time of year for recording this group. However, the dense scrub, hedgerows and grassland provide excellent nesting, roosting and foraging opportunities for a wide range of different bird species. This includes common species and summer migrants such as chiffchaff, whitethroat and blackcap.

Invertebrates:

The habitat is likely to support a wide range of invertebrate species. Numerous grasshoppers and crickets were seen in the grassland. Ant hills were also plentiful indicating that the grassland has been relatively undisturbed for some time. Meadow brown, gatekeeper, small skipper and small white butterflies were also recorded during the visit as well as cinnabar moth caterpillars (Priority species). Other butterfly and moth species are likely to be present during the year and the presence of elm in the hedgerows means white-letter hairstreak butterfly (Priority species) could be present. Stag beetle larvae are likely to be present if there is any subterranean dead wood associated with the hedgerows.

Herpetofauna:

Reptile refugia were noted on site which implies a survey is currently being undertaken. The habitat is good for reptiles and a slow worm was seen during the visit. It also has the potential to support common lizard and grass snake, particularly given its excellent connectivity via the A14 and the railway corridor. There is also the potential for toads. Appropriate reptile mitigation must be carried out before any vegetation removal on this site.

Mammals:

Due to its location next to the A14 and the railway line this site could be important for foraging and commuting bats. In addition, some of the trees within the hedgerows have cracks and crevices which have the potential to support roosting bats.

Hedgehogs (Priority species) are highly likely to be present on site and the dense scrub could provide a valuable hibernation resource for a significant proportion of the local population.

Common small mammal species such as mice, voles and shrews are likely to be present in good numbers. Fox scat and rabbits were noted during the visit and other common mammals such as deer are also likely to be present. Although no evidence of badger was observed during the visit, there are records of them in the area and the location of the site means they could utilize the site. Other small predatory species such as stoat could also be present.

Comments and recommendation:

This site has been allocated for employment.

This site is of at least a medium biodiversity value and detailed surveys could reveal that it has higher ecological significance. Further surveys should continue/be undertaken to assess the wildlife interest, particularly botanical, reptiles, bats, badgers and breeding birds. Consideration should also be given to the likely impact of vegetation clearance upon the local hedgehog population. Holes in fences for hedgehog should be part of this new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, in particular the hedgerows along the boundaries. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks, therefore the scheme must maintain some open space adjacent to both the A14 and railway line corridors. The lighting scheme should be designed to prevent light spillage into areas specifically retained for wildlife. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Careful planning and design can integrate the requirement for sustainable drainage systems with the retention of wildlife habitat. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity.

Mitigation for impacts on the reptile population will be required and ideally they should be retained on site in conjunction with additional habitat enhancement. In order to achieve this, log piles for basking reptiles sited over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. These structures could also be used to provide stag beetle habitat.

Although half the site is due to be retained, this area is proposed as an amenity area. Consequently, due to the nature of the existing habitats on this site, it is likely that further compensatory measures will be required to avoid a biodiversity loss and to deliver net gain. Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and

species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Site name: Humber Doucy Lane (opposite 37 to 123)

Site ref: IP030a/IP030b
Site status: No wildlife designation
Grid ref: TM 19631 45824/TM 19735 45657
Area: 0.96 hectares/1.51 hectares
Date: 24th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, ca. 32°C
Ranking: 5
Biodiversity value: Low

Map:



Of the three fields, IP030a is the northernmost section. IP030b are the central and southernmost sections

Photos:



IP030a Arable field from footpath in north of site



IP030a Hedgerow along Humber Doucy Lane



IP030b Field margin (Target Note 1)



IP030b Oak beyond northern boundary

Habitat type(s):

Arable field, species-rich intact hedgerow with trees, scattered broad-leaved trees

Subsidiary habitats:

Bare ground, field margins, stag-horned oak trees, knot holes

Site description:

IP030a lies to the east of Humber Doucy Lane, opposite numbers 97 to 123. Rushmere Street forms the northern boundary. The site is a small section of a larger arable field, currently sown with an oilseed-rape crop and fenced on the southern, north-western and western boundaries with rabbit-proof mesh. A species-rich hedgerow with several mature standard trees separates the site from the road, and a rough overgrown path runs between the hedgerow and the mesh fence around the perimeter of the field.

IP030b is directly south of IP030a, opposite numbers 37 to 97 Humber Doucy Lane. Beyond its southern boundary is the Humber Doucy Sports Centre and the Ipswich Wanderers Football Club. It

comprises two fields, the northern-most field in IP030b (central to the group) is enclosed by ancient species-rich hedgerows with mature trees. The hedgerow on the eastern boundary of this field lies outside of the site boundary.

To the south, the site is a section of a much larger field. The Humber Doucy Lane boundary is lined with hedgerow and mature standards. Both of the fields contained vegetable crop at the time of survey. These hedges are likely to be classed as 'important' under the Hedgerow Regulations 1997.

The eastern boundary of both IP030a and b is defined by the Rushmere St Andrew parish boundary, which passes through these fields without any visible physical feature demarcating it.

Protected species seen or known:

Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Serotine bat

Protected species potential:

Common lizard
Badger

Priority habitats present:

Hedgerow

Priority species seen or known:

Hedgehog
Stag beetle
White admiral butterfly
BoCC Red List birds include house sparrow, starling, yellowhammer, song thrush, linnet, herring gull and skylark
BoCC Amber List birds include dunnoek and swift (Suffolk Character Species)

Priority species potential:

Bullfinch

Connectivity:

These sites have moderate connectivity with similar habitats through a network of field boundaries and hedgerows.

Structural diversity:

The only features which offer structural diversity within these sites are the field margins, hedgerows and mature trees.

Flora:

Hedgerows surround much of these sites and contains a mix of blackthorn, hawthorn, elm, plum sp., elder, ivy, bramble and hop with some mature ash, sycamore and oak standards. The hedgerow

alongside IP030a is more dense than further south, with evidence of more recent management. A rough, overgrown footpath lies adjacent to this which has a mix of forbs typical of arable field margins such as petty spurge, creeping thistle, knotgrass, common mallow, ragwort, black horehound and prickly lettuce, as well as several grasses, dominated by false oat, but also some smaller cat's tail, Yorkshire fog, cock's foot, rough meadow grass and perennial rye.

The field margins in the northern field of IP030b are much wider (Target Note 1) and contain more forbs than grasses. The composition is similar to that of IP030a with the addition of scentless mayweed, fat hen and common poppy. They do not meet the criteria for the Priority habitat 'Arable Field Margins' but are notable for their width and potential. Several mature oaks are of note around the boundaries of these fields.

Avifauna:

It was a sub-optimal time of year for recording this group, and the prevailing hot weather meant there was little bird activity noted. However, the hedgerows provide good potential nesting and foraging sites with blackcap, house sparrow and wood pigeon seen or heard during the survey. The hedgerows also have the potential to support bullfinch and the fields offer open ground for breeding skylark.

Invertebrates:

Although the arable use of these sites provides sub-optimal habitat for invertebrates, the hedgerows, field margins and areas of bare, dry ground do offer opportunities for a range of species. In particular, the ancient hedgerows could support stag beetle larvae within subterranean deadwood. Oak trees can also support a high insect biomass. Large white and peacock butterflies were noted during the survey.

Herpetofauna:

There are limited opportunities for this group within these two sites, however the field margins and adjacent hedgerows may support common lizard.

Mammals:

The mature trees on the boundaries of these sites, most notably the oaks, contain cracks, crevices knot holes and stag-horned deadwood which offer potential roosting features for bats, which are also likely to commute and forage along the network of hedgerows.

No evidence of a badger sett was found but this did not constitute a detailed survey and a sett could be present within the hedgerows away from the road. Badgers are also likely to forage around the field boundaries.

A number of hedgehog records exist from Humber Doucy Lane and the associated residential areas, and they are likely to use the hedgerows and field margins for nesting and foraging.

Common species of mammal such as fox, rabbit and deer species are likely to forage on these sites. Mice, voles and shrews are also likely to be present in the field margins and hedgerows.

Comments and recommendations:

These sites were proposed for residential use, however, due to the proximity of Rushmere village, and the requirement to maintain its individual identity, the information provided indicates that the land is most likely to be maintained as countryside.

There are opportunities to enhance biodiversity on these two sites, potentially through providing land for off-site compensatory habitat for other developments. Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on some of the other sites, it is likely that future development at these locations will require off-site compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network. They should also be subject to long-term good habitat management practices.

The hedgerows should be retained and enhanced by additional planting along the line of the parish boundary with Rushmere St Andrew. Native woody species typical of the area should be used and protected from browsing mammals until they establish.

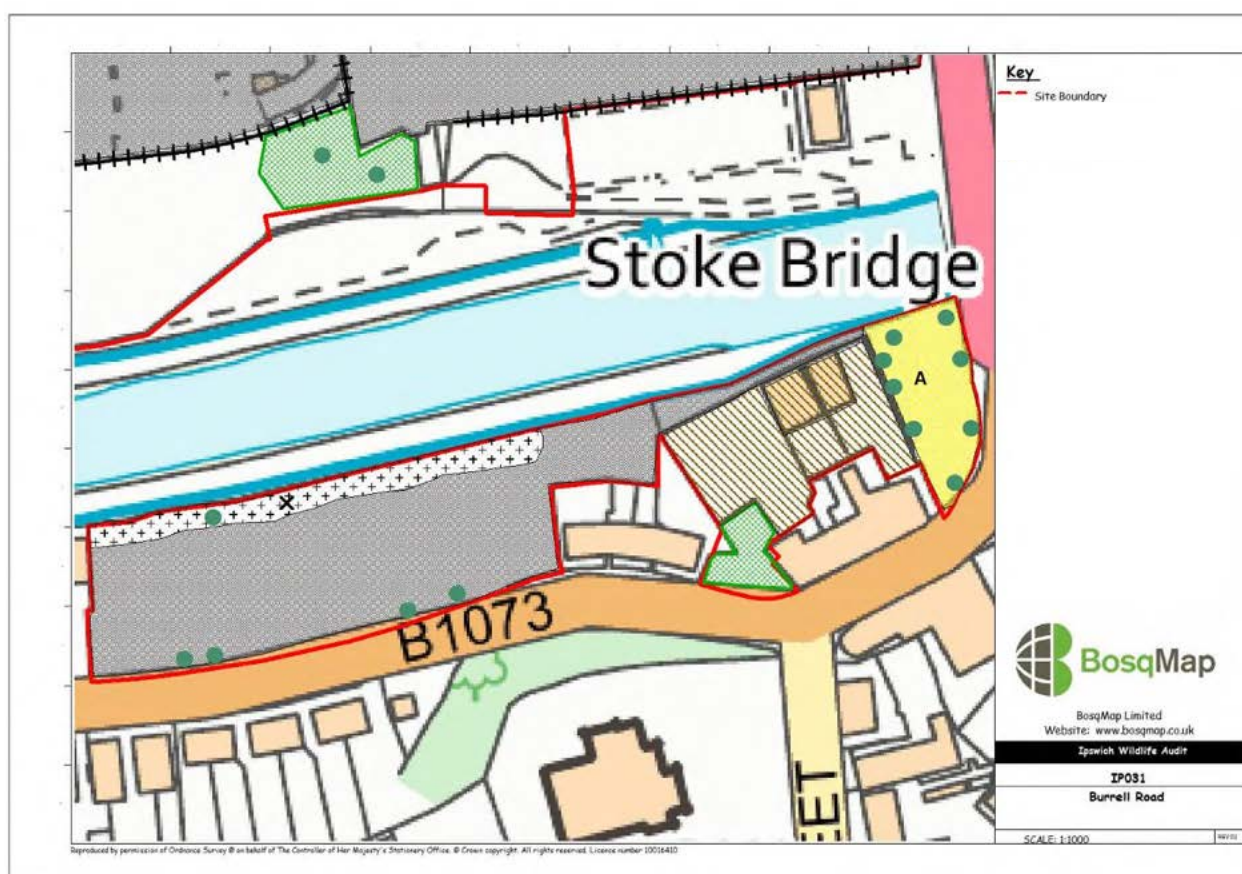
Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

If these sites were to be used as Public Open Space, interpretation panels should be used to showcase the presence of on-site habitats and species.

Site name: Burrell Road

Site ref: IP031a/IP031b
Site status: No wildlife designation
Grid ref: TM 16220 43886
Area: 0.44 hectares/0.18 hectares
Date: 5th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 28°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View along car park



Tall ruderal vegetation east of car park



Amenity grassland at eastern end

Habitat type(s):

Hard standing, ephemeral short perennial, tall ruderal, dense scrub, amenity grassland, scattered trees

Subsidiary habitats:

-

Site description:

The majority of this site is a car park, located to the north of Burrell Road. The River Orwell County Wildlife Site forms the northern boundary of the site. To the east of the car park, behind the houses is an area surrounded by fencing, which has been left unmanaged and has developed tall ruderal vegetation with scattered scrub. There is also a small area of dense scrub adjacent to the road. The site also encompasses a small area of amenity grassland with scattered trees, adjacent to Stoke Bridge.

Protected species seen or known:

Records in the surrounding area include:

Otter
Water vole
Badger
Slow worm
Grass snake
Great crested newt
Daubenton's bat
Natterer's bat
Noctule bat
Common pipistrelle bat
Soprano pipistrelle bat

Protected species potential:

-

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)

Associated with the river corridor, BoCC Red List birds include herring gull, curlew, common scoter, white-fronted goose and yellow wagtail, and BoCC Amber List include black-tailed godwit, black-throated diver, dark-bellied brent goose and little tern.

Priority species potential:

Cinnabar moth

Connectivity:

This site is isolated from other similar habitat types, although its proximity to the river corridor helps provide some connectivity.

Structural diversity:

The site has some structural diversity with hard standing, short mown grass, tall ruderal vegetation, scrub and trees.

Flora:

There is a good diversity of common plant species coming up along the edge of the river along the car park including wall barley, cock's-foot, barren brome and fern grass with a range of herbs including herb Robert, dove's-foot cranesbill, perennial sow thistle, bristly ox tongue, common cat's-ear, dandelion, ragwort, prickly lettuce, pineapple mayweed, scarlet pimpernel, ribwort plantain, greater plantain, comfrey, green alkanet, common mouse-ear, red dead nettle and common field speedwell.

An ash tree was present along the river and occasional buddleia shrubs have started to colonise.

The area of tall ruderal vegetation has similar species with the addition of false oat and rough meadow grass, creeping thistle, Canadian fleabane, mugwort, wild carrot and fennel with occasional dog rose and bramble scrub.

The amenity grassland at the eastern end has typical species for this habitat including rye grass with dandelion, daisy, yarrow and common field speedwell. This area had some scattered ornamental trees.

Avifauna:

The survey took place at a sub-optimal time of year for recording this group. The diversity of plants and its location adjacent to the river means that this site is good for birds, particularly seed eating species such as finches. The developing scrub and trees also provide some nesting opportunities.

Invertebrates:

The various plants provide a good nectar source for common invertebrates including bees and butterflies. Common carder bee and small white butterfly were both seen during the visit and others will be present during the year. Several crickets and grasshoppers were also noted in the tall ruderal area. The presence of ragwort means cinnabar moths (Priority Species) are likely to be present as their caterpillars feed exclusively on ragwort.

Herpetofauna:

The area of tall ruderal vegetation is currently suitable for this group, particularly grass snake which may access the site via the river corridor. The habitat is likely to continue to improve for this group if the site remains undeveloped.

Mammals:

The majority of the site is sub-optimal for this group. Bats are likely to forage along the river corridor. Otter has also been recorded along the river corridor although the current habitats on site means they are likely to be transient only. There are numerous hedgehog records in the area and the grassland and tall ruderal area provides good foraging habitat for them. Other common mammal species are likely to be present including small mammals.

Comments and recommendations:

IP031a is allocated for 20 dwellings, and IP031b for 18 dwellings.

A reptile survey should be undertaken, particularly in the eastern part of the site and mitigation for this group undertaken as required. Although currently there are only small amounts of woody vegetation, any clearance should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

Japanese knotweed and Japanese rose have been recorded close to the train station and these species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of these species is required to ensure they have not

spread and colonised the site.

This site is located adjacent to the River Orwell wildlife corridor. Any lighting scheme should be designed to prevent light spillage into this area, or the scrub habitat along the river banks. Bats can be sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks. There is an opportunity to strengthen the local ecological network by creation of new scrub and grassland habitat at the western end of the site as a continuation of the existing wildlife corridor. Any new habitat should use native planting local to the area.

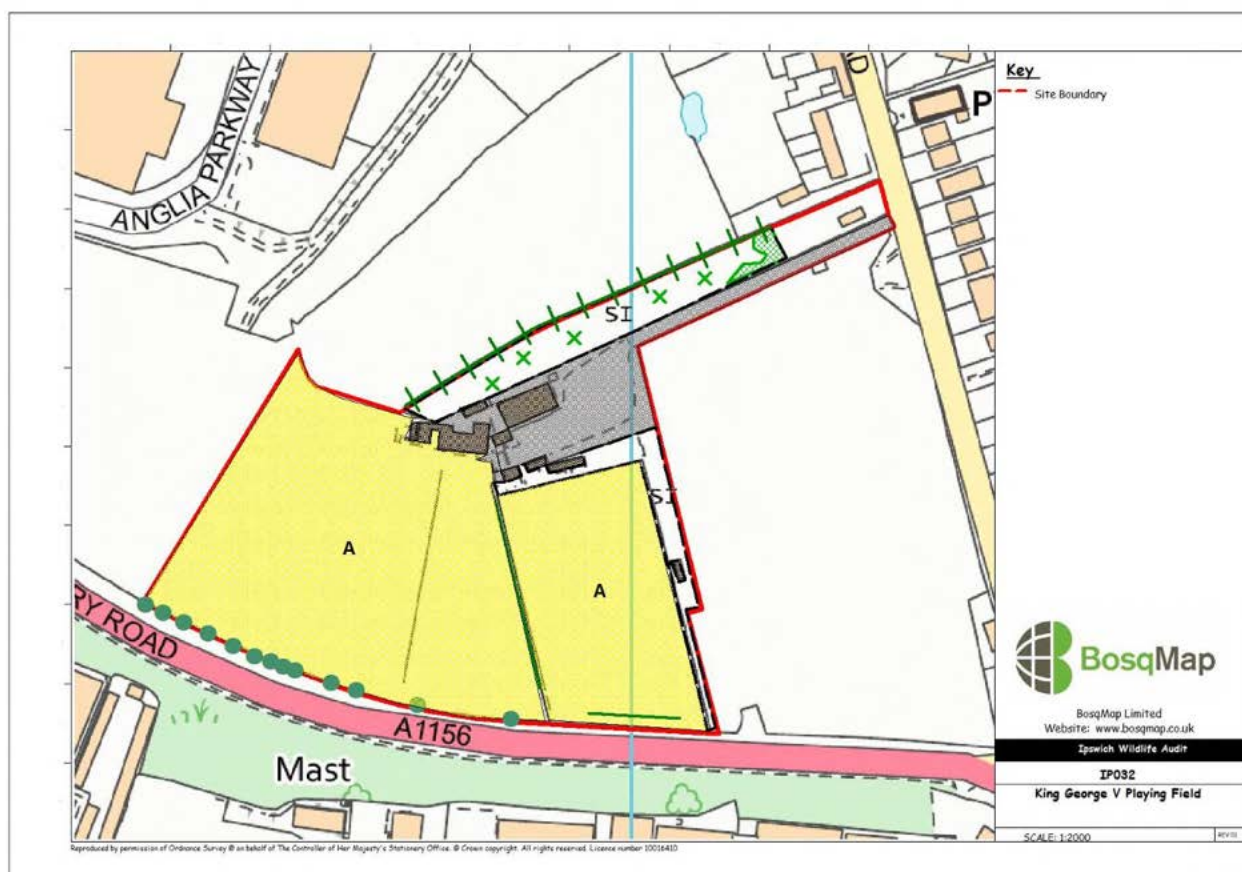
It is unknown if houses or flats are planned for this site. Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: King George V Field, Old Norwich Road

Site ref: IP032
Site status: No wildlife designation
Grid ref: TM 13850 47290
Area: 3.68 hectares
Date: 22nd July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 28°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View north across playing fields

Habitat type(s):

Amenity grassland, poor semi-improved grassland, species-poor hedgerow, dense scrub, scattered scrub, scattered trees

Subsidiary habitats:

Buildings, hard standing

Site description:

These playing fields are located to the north of the A1156 Bury Road, but are accessed from the Old Norwich Road via a narrow track. The dominant habitat is short mown amenity grassland, consistent with its use as a playing field. A linear strip of species-poor rough grassland with scattered scrub lies to the north of the pavilion with a hedgerow on its northern edge. Another hedge heads south from the pavilion and a third recently planted hedgerow runs along the south-eastern boundary. This site was assessed in a previous wildlife audit in 2012, as part of a larger site. A residential property is included in the current site boundary but this was not surveyed. The area east of the site, south of the access track, is currently being developed.

Protected species seen or known:

Records in the surrounding area include:

Badger

Common pipistrelle bat

Soprano pipistrelle bat

Serotine bat

Great Crested Newt

Grass snake (reported by local resident)

Protected species potential:

Slow worm on margins

Priority habitats present:

Hedgerows

Priority species seen or known:

Hedgehog

Common toad

Stag beetle

BoCC Red List birds including herring gull, skylark, house sparrow, starling and song thrush

BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

There is currently some connectivity to other semi-natural habitat to the north, although much of this is currently also proposed for development. Otherwise it is surrounded by roads, residential housing and an industrial estate.

Structural diversity:

With the exception of the hedgerows, structural diversity is poor.

Flora:

The grassland was dominated by rye grass with smooth meadow grass, common couch, meadow foxtail and Yorkshire fog. Interestingly a small patch of meadow barley was noted on the southern edge, which is normally found on old meadows and pastures. Along the playing field margins where the grass has been left unmown, the flora is more interesting. Wild carrot, black knapweed, smooth hawk's-beard, yarrow, common cat's-ear, bird's-foot trefoil, ox-eye daisy, red clover, creeping cinquefoil, bristly ox-tongue, prickly lettuce, poppy, white campion, spear thistle, selfheal, and ragwort are present.

The linear strip of grassland north of the pavilion is dominated by grasses including cock's-foot and Yorkshire fog with occasional common herbs including ribwort plantain, greater plantain, field bindweed, dandelion and creeping buttercup.

The hedgerow along the northern boundary of the linear strip of grassland is species-poor with hawthorn, blackthorn, field maple, elder and bramble. The hedgerow running south of the pavilion is dominated by leylandii, with occasional hawthorn, sycamore and travelers joy. The recently planted hedgerow along the southern boundary is composed mainly of hazel, dogwood and ash.

Scattered trees occur along the southern boundary including field maple, ash, cherry, dogwood, hawthorn, elder and sycamore.

Avifauna:

It was a sub-optimal time of year for surveying this group and only common, widespread species including blackbird, black headed gulls, carrion crow and magpie were observed during the visit. The trees and hedgerows provide some nesting and foraging opportunities for birds.

Invertebrates:

The hedgerows and rough margins provide some habitat for common invertebrate species. Red-tailed bumblebees were observed foraging on the margins. Meadow brown, gatekeeper, small white and peacock butterflies were also seen during the visit, as well as several crickets and grasshoppers along the margins. The hedgerows and mature trees along the boundary provide good habitat for stag beetles, whose larvae feed on subterranean dead wood.

Herpetofauna:

Although most of the site is short mown and therefore sub-optimal for this group, the margins provide some habitat for slow worm. One of the local residents reported regularly seeing a grass snake in the linear strip of grassland north of the access track. The habitat is sub-optimal for amphibians, although toad could be present around the northern margins especially as there is an offsite pond to the north.

Mammals:

The short mown grassland provides some foraging habitat for hedgehogs (Priority species) and there are records of them in the area in 2018. The hedgerows also provide some nesting and potentially hibernation habitat for them.

Other common species of mammal such as fox and deer are likely to utilize the site during the year.

Comments and recommendations:

This site is proposed for 80% housing development and 20% amenity open space.

Due to the presence of rough grassland around the margins a reptile survey should be carried out prior to any removal of vegetation. Any woody vegetation clearance must take place outside bird nesting season (March to the end of August inclusive) unless immediately preceded by a nesting bird check by a suitably qualified ecologist.

New development should retain as much of the higher value existing habitat as possible, for example the hedgerows, and integrate it within a landscaping scheme, to deliver locally accessible natural greenspace. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks so if possible any greenspace should be proposed to the north-east of the site adjacent to other semi-natural areas. New planting should seek to use native species typical of the local area for example hawthorn, blackthorn, field maple, dogwood and hazel.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can

also be integrated into landscaping schemes. Within the allocated greenspace there is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

As reptiles are highly likely to be present on the site, a log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with loose rubble (such as brick) and/or log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. These habitat piles can also support stag beetle larvae if logs are buried.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of this new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Site name: Land at Bramford Road (Stocks Site)

Site ref: IP033

Site status: No wildlife designation

Grid ref: TM 14076 45544

Area: 2.03 hectares

Date surveyed: 22nd July 2019

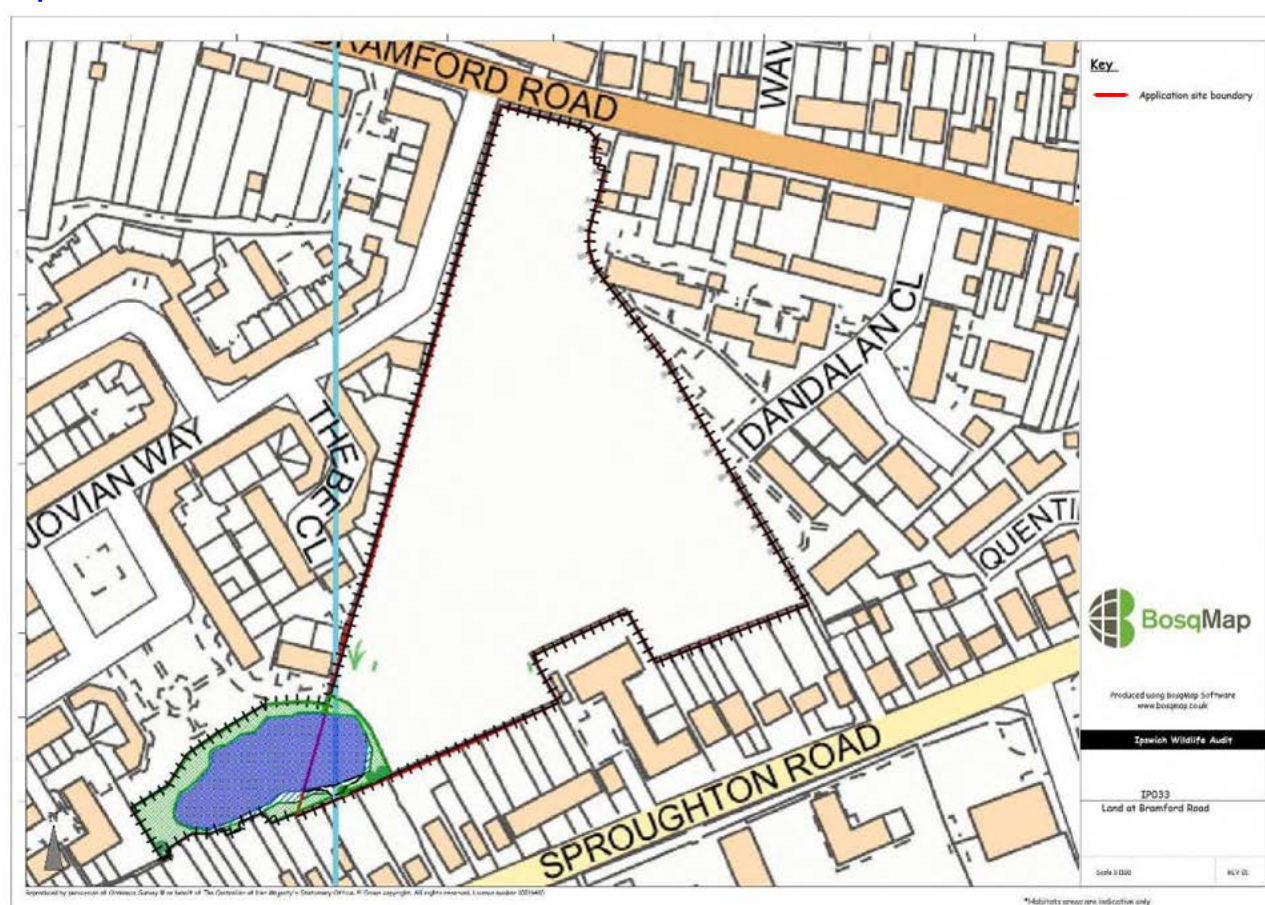
Recorder: Not Surveyed

Weather conditions: Warm and sunny with a slight breeze, 24°C

Ranking: 4

Biodiversity value: Medium

Map:



Photos:



View south from road



Pond in south-western corner

Habitat type(s):

Rough grassland, dense continuous scrub, broad-leaved scattered trees, pond

Subsidiary habitats:

-

Site description:

Due to fencing, this site could not be accessed and was viewed from the road only. The pond was also viewed from Jovian Way. This site was previously surveyed in the 2012 Audit and appears to be unchanged in terms of its habitat.

The site is roughly triangular in shape with boundaries on Bramford Road and housing off Dandalan Close to the north-east, Jovian Way and associated housing to the west and the gardens of dwellings off Sproughton Road to the south-east. It contains a mosaic of vegetation with long grassland, scrub and mature trees and there is a large pond in the south-west corner of the site. This pond lies at the perimeter of the green space in the Jovian Way housing development.

Protected species seen or known:

Records in the surrounding area include:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat
Great crested newt
Grass snake
Slow worm
Barn owl

Protected species potential:

Common lizard

Priority habitats present:

Pond

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Common toad

Five banded weevil wasp

BoCC Red List birds include house sparrow, song thrush, linnet and starling

BoCC Amber List birds include dunnoek, bullfinch, reed bunting and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is relatively isolated however the gardens to the east of the site offer a degree of connectivity towards the railway corridor to the south west of the site.

Structural diversity:

From available imagery, the site appears to have good structural diversity with a pond, tall grassland, dense scrub and mature trees offering a diverse range of habitats.

Flora:

Due to the access difficulties this was not fully assessed. Species seen from the boundaries include false oat, rough meadow grass and common couch grass with yarrow, ragwort, mugwort and hemlock. Plants visible associated with the pond includes common reed. Bramble and buddleia scrub is present, particularly adjacent to Jovian Way. An oak tree was also noted.

Avifauna:

The areas of dense scrub provide good foraging, nesting and roosting opportunities for a range of common bird species. Summer migrants such as whitethroat could also nest in the areas of dense bramble. The pond could also attract wildfowl such as mallard, coot and moorhen.

Invertebrates:

The diversity of habitats on site, including a number of native trees and scrub, should provide a high diversity of invertebrates, both terrestrial and aquatic within the pond and associated flora. Large white and small white butterflies were present and black tailed skimmer and brown hawker dragonflies were seen flying over the pond and other common species are likely to be present. If there is any subterranean deadwood suitable for supporting their larvae, stag beetle could be present.

Herpetofauna:

The long grass and patches of scrub provide a good habitat for reptiles and amphibians such as grass snake, common lizard, slow worm and common toad and can provide a good hibernation site if left uncut through the winter. The pond could also support smooth newts, frogs and toads, although it is unknown whether it has a high fish population. Further assessment would be required to assess suitability for great crested newt.

Mammals:

It is possible that some of the mature trees on site have features which may support roosting bats, including cracks, crevices and rot holes. The range of habitats, including the pond will also support a variety of insect life so there are likely to be bats foraging over this area.

There are a number of hedgehog records in the immediate area and the combination of grassland and scrub provides good foraging, refuge and hibernation opportunities for them.

Common species of mammal such as fox, rabbit and muntjac deer are likely to forage on this site. Mice, voles and shrews are also likely to be present in the rough grassland areas and scrub.

Comments and recommendations:

This site has been allocated for residential development with 55 dwellings at medium density (55dph) on 50% of the site. The other 50% of the site is proposed to be amenity green space.

A full preliminary ecological appraisal of this site should be undertaken prior to development, along with any species-specific surveys highlighted in the report. These are likely to include, but not be limited to, reptiles, breeding birds, great crested newt, bats and badgers.

All retained features should not be subjected to any light spillage so any lighting scheme should be designed to prevent this. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, to deliver locally accessible natural greenspace. In this instance, a habitat mosaic of grassland and scrub should be retained to buffer the pond and its associated features. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. New planting should seek to use native species typical of the local area. If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing soil conditions, eg. either sandy and free draining or if there are heavier soils. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on this site, it is likely that future development will require compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

In addition to this, action can be taken for individual species such as swifts, bats, reptiles and stag beetles.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

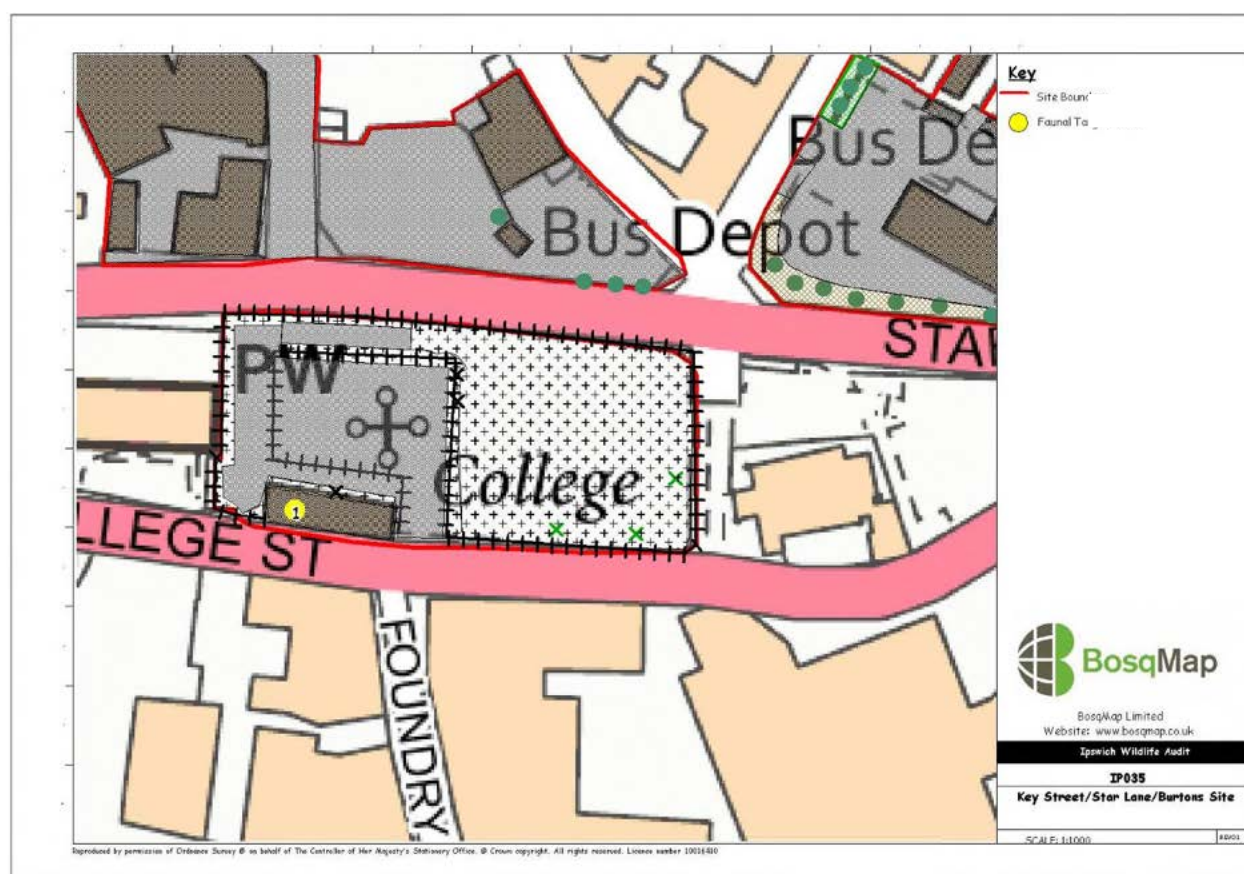
If reptiles are present, mitigation for impacts on the reptile population will be required and ideally populations should be retained on site in conjunction with additional habitat enhancement. In order to achieve this, log piles for basking reptiles sited over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with loose rubble (such as brick) and log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. This structure will also benefit amphibians and could also be used to provide stag beetle habitat if logs are buried to support their larvae.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

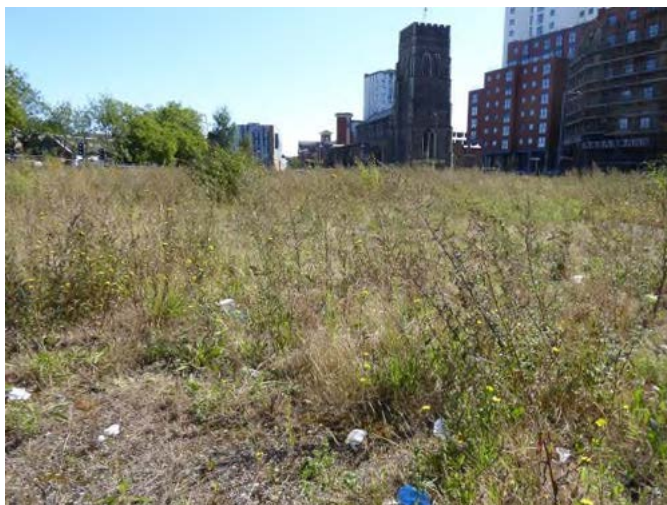
Site name: Key Street/Star Lane/Burtons Site

Site ref: IP035
Site status: No wildlife designation
Grid ref: TM 16432 44109
Area: 0.54 hectares
Date: 29th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 21°C
Ranking: 4
Biodiversity value: Medium

Map:



Photos:



Ephemeral short perennial



Disused building on southern part of site (Target Note 1)

Habitat type(s):

Ephemeral short perennial, building, hard standing, scattered scrub

Subsidiary habitats:

Bare ground

Site description:

This site lies between Star Lane and Key Street. Part of the site is currently being used as a public car park. There is a disused Grade 11 listed building with scaffolding around it in the southern part of the site (Target Note 1). The remainder of the site comprises hard standing which has been left undisturbed for some time and has been colonized by ephemeral short perennial vegetation which was found to contain a composition of species indicative of the Priority Habitat, Open Mosaic Habitats on Previously Developed Land (Brownfield).

Protected species seen or known:

Records in the surrounding area include:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Brown long-eared bat
Daubenton's bat
Natterer's bat
Noctule bat
Great crested newt
Common lizard
Slow worm

Protected species potential:

-

Priority habitats present:

Open Mosaic Habitats on Previously Developed Land (Brownfield)

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Red-shanked carder bee

Cinnabar moth

BoCC Red List birds include herring gull, house sparrow, song thrush and starling

BoCC Amber List birds include dunnock and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is fairly isolated by busy roads. Although the River Orwell CWS is located only 100m south of the site there is no direct connectivity.

Structural diversity:

The tall ruderal vegetation and scattered scrub provide good structural diversity with a diversity of sward heights and bare areas.

Flora:

This site currently supports a good diversity of flora typical of heavily disturbed sites. Grasses include common bent, Yorkshire fog, wall barley, rat tailed fescue, barren brome, cock's-foot and fern grass with a good diversity of herbs including creeping thistle, spear thistle, mugwort, mallow, dandelion, rough hawk's-beard, lesser hawkbit, prickly lettuce, ragwort, hedge mustard, bird's-foot trefoil, black medick, red clover, herb Robert, red dead-nettle, poppy, yarrow, weld, white melilot, stonecrop spp, Canadian fleabane, curled dock, black nightshade, scentless mayweed, tutsan, hedge bindweed, wild parsnip and rosebay willowherb.

Occasional buddleia bushes are also colonizing the site along with bramble, elder and ash on the margins.

Avifauna:

The nesting opportunities for this group are very limited, however the diversity of plants provides good foraging habitat. Pied wagtails were seen feeding during the visit. The boarded up building has potential for nesting swift, although the scaffolding currently prevents access.

Invertebrates:

Sites containing this type of habitat can support interesting invertebrate assemblages and the majority of the site currently provides good habitat for this group. Small white, red admiral and painted lady butterflies were noted as well as honey bees, buff tailed bees and hoverflies. A number of grasshoppers and crickets were also seen. Cinnabar moth caterpillars (Priority Species) were seen feeding on the ragwort.

Herpetofauna:

Due to the isolation of this site it is highly unlikely that any reptiles are present.

Mammals:

The disused building provides potential bat roosting features although this was not fully assessed on Health and Safety grounds. The isolation of this site reduces the risk of other mammal species being present, but hedgehog could visit to forage and potentially lie up in day nests.

Comments and recommendations:

This site is proposed for mixed development with the primary allocation for housing at very high density on 80% of the site, with a secondary allocation for small scale office, leisure or retail.

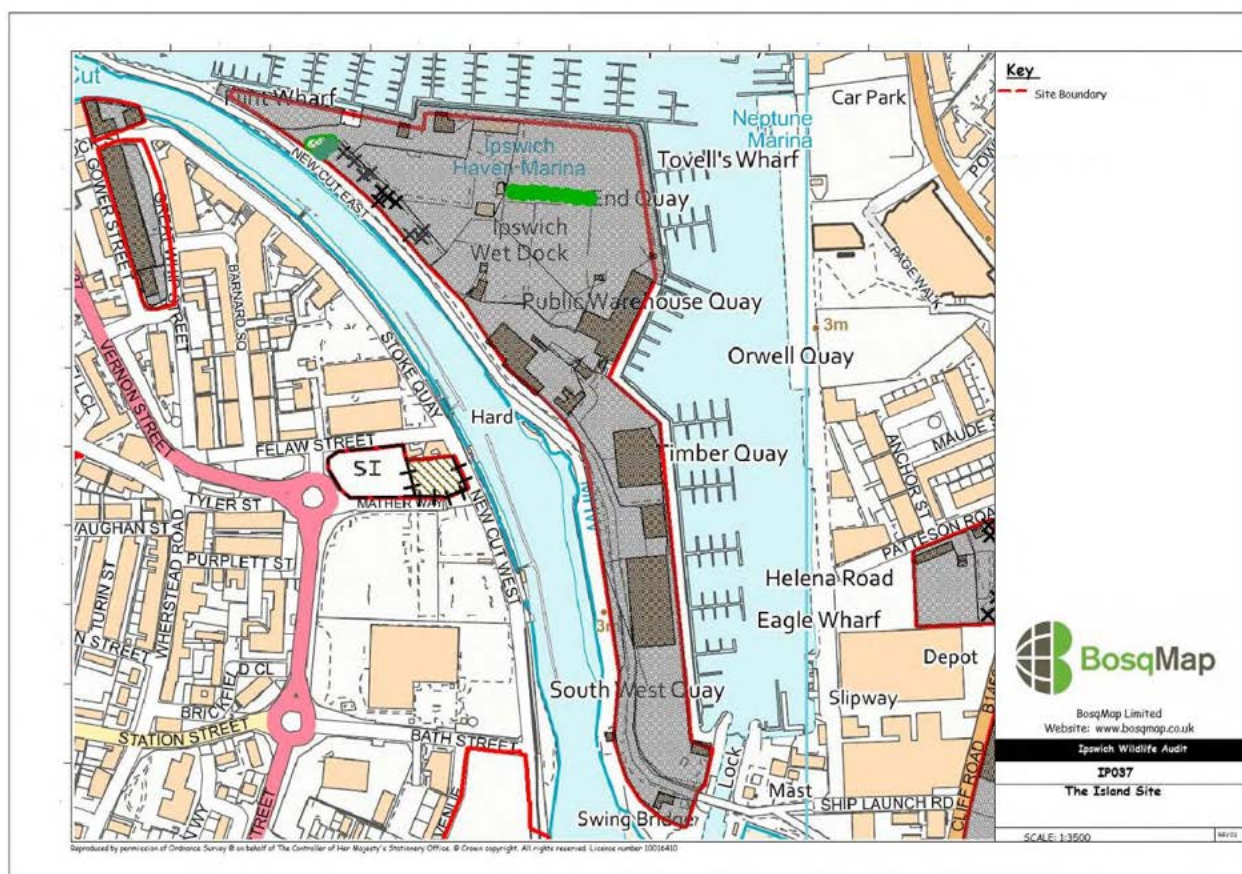
Further detailed bat surveys will be required on the building as well as potentially detailed invertebrate surveys. Nesting swifts are also protected under the same legislation as all nesting birds, so care should be taken to avoid demolition of buildings during the bird breeding season, unless it can be confirmed by a suitably qualified ecologist that swifts are not nesting. Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Although new development should retain as much of the existing habitat of interest as possible and integrate it within a landscaping scheme, this would be difficult given the current proposals. The Priority habitat which would be lost could potentially be replicated within the existing footprint through the provision of a green roof on an office, leisure or retail buildings. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds.

Site name: The Island Site

Site ref: IP037
Site status: No wildlife designation
Grid ref: TM 16924 34664
Area: 6 hectares
Date: 28th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Gravel being colonised by ephemeral short perennial vegetation



Building with bat and swift potential

Habitat type(s):

Hard standing, buildings, ephemeral short perennial, conifer trees, scattered broadleaved tree, dense scrub

Subsidiary habitats:

-

Site description:

This site is part of the Ipswich Haven Marina. It is situated on an island in the River Orwell County Wildlife Site (CWS) and is approx. 1.3km north of the Orwell Estuary Site of Special Scientific Interest (SSSI). The majority of the site is hard standing which is used for car parking and the storage of boats. There are also various buildings including a restaurant, boat sales and boat engineering. The western part of the site was fenced off and includes derelict buildings. This area was only viewed from a distance. There is limited vegetation except around the margins, apart from a tall *leylandii* hedge in the northern part of the site.

Protected species seen or known:

Species recorded in the area include:

Common seal

Common porpoise

Otter

Brown long-eared bat

Common pipistrelle bat

Soprano pipistrelle bat

Daubenton's bat

Natterer's bat

Noctule bat

Protected species potential:

-

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Species in the area include:

Cinnabar moth

Hedgehog

BoCC Red List birds include herring gull, house sparrow and starling

BoCC Amber List birds include swift (Suffolk Character Species)

Priority species potential:

Swifts (Suffolk Character Species)

Connectivity:

This site is very well connected via the river corridor.

Structural diversity:

This site has poor structural diversity being largely hard standing and buildings.

Flora:

The nature of the site means the flora is limited. However, where there are areas of bare ground around the margins there is a good diversity of plants typical of these habitats including wall barley, red fescue, rat tailed fescue, annual beard grass and fern grass which is often found in urban areas in artificial habitats such as cracks in walls or pavements. Other herbs include mugwort, Canadian fleabane, dove's-foot cranesbill, cut leaved cranesbill, common storksbill, scentless mayweed, groundsel, greater plantain, white clover, black medick, perennial sow thistle, bristly ox tongue, spear thistle, poppy, fat hen, petty spurge, prickly lettuce and common chickweed.

There is a small area of scrub including cotoneaster, some species of which can be invasive, with a couple of eucalyptus trees.

Avifauna:

Although the site has limited foraging and nesting opportunities for many bird species, the roofs of the buildings do support nesting gulls including herring gull (Priority Species) which was seen during the visit. Some of the buildings have the potential to support nesting swifts. This site also supports a population of feral pigeons which provide food for Peregrine Falcons nesting adjacent to the site. Other overwintering birds may utilize this site.

Invertebrates:

The majority of the site is sub-optimal for invertebrates, however the diversity of plant species around the margins provides good nectar sources for a range of common species. Large white and small white butterflies were seen during the visit and other common species will be present during the year.

Herpetofauna:

There is currently no suitable habitat for this group.

Mammals:

The majority of the site is sub-optimal for mammals, however some of the buildings have the potential to support bat roosts. Cetaceans including grey seal and common porpoise have been recorded adjacent to the site. Otters have been recorded close to the site, although there are currently high levels of disturbance.

Comments and recommendations:

This site has been allocated for mixed use development to include residential housing at a very high density on 70% of the site, amenity open space on at least 15% and the remainder to be existing and new leisure and employment relating to the marina.

The buildings should be assessed for their bat potential prior to any demolition.

Nesting swifts are also protected under the same legislation as all nesting birds, so care should be taken to avoid work to the buildings during the bird breeding season, unless it can be confirmed by a suitably qualified ecologist that swifts are not nesting. Swifts are a rapidly declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

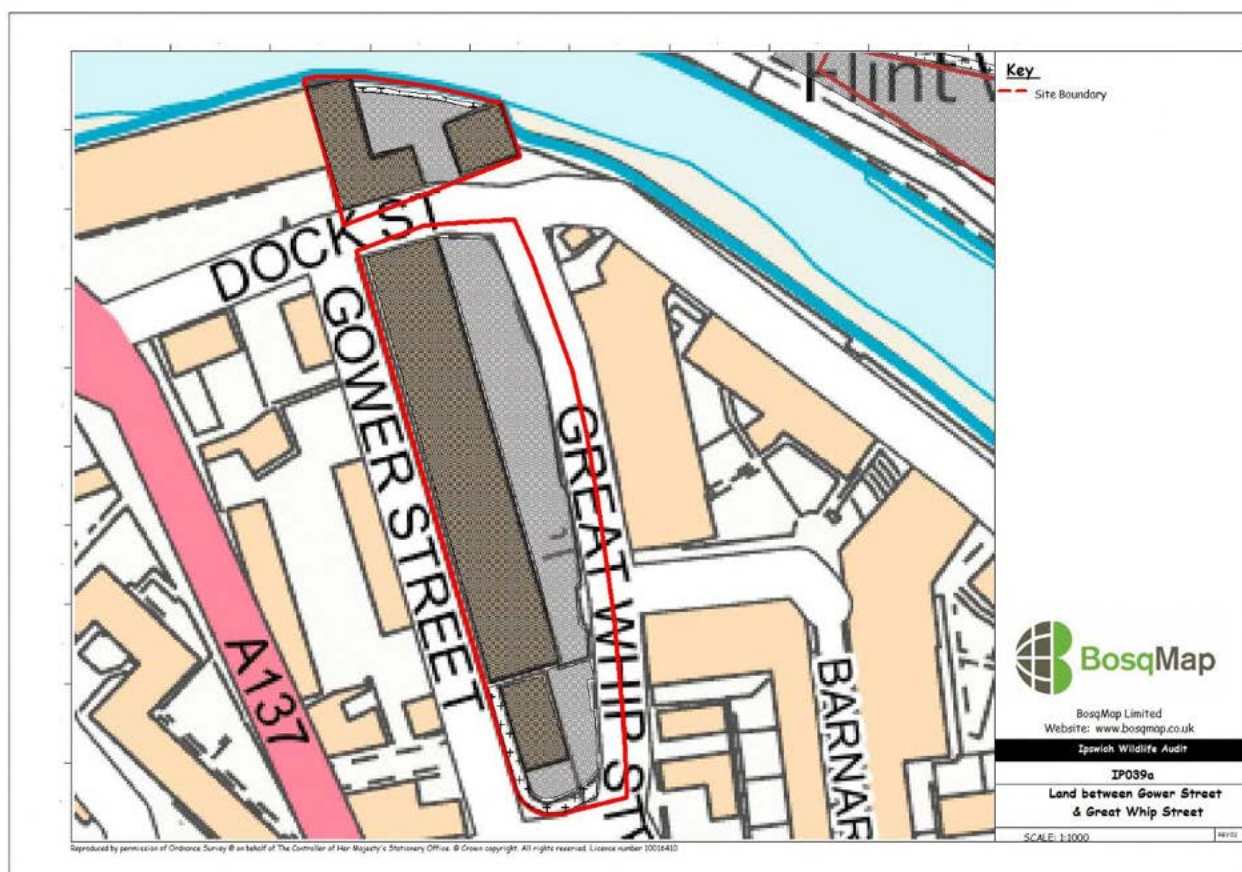
This site is located next to the River Orwell CWS and any lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

This site contains cotoneaster and members of this group are listed on Schedule 9 of the Wildlife & Countryside Act 1981, as amended, because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. If this plant is removed as part of a vegetation clearance programme then it should be disposed of in a way as not to contravene the legislation.

Site name: Land between Gower Street and Great Whip Street

Site ref: IP039a
Site status: No wildlife designation
Grid ref: TM 16461 43852
Area: 0.48 hectares
Date: 5th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 25°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Looking north along Great Whip Street

Habitat type(s):

Hard standing, buildings, amenity grassland, ephemeral short perennial

Subsidiary habitats:

-

Site description:

This is a long narrow site situated between Gower Street and Great Whip Street. It comprises industrial buildings with hard standing. The majority of the site is used for car workshops including repairs. There is a small strip of amenity grassland behind the buildings at the southern end of the site.

Protected species seen or known:

-

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

House sparrow

Priority species potential:

-

Connectivity:

The site is very isolated, being surrounded by roads, houses and other industrial units. The River Orwell CWS lies less than 50m from the site but there is currently no direct connectivity between them.

Structural diversity:

The structural diversity is very poor.

Flora:

The flora is limited to the margins of the site. A few common species were noted around the southern end of the site including rye grass and false oat with mallow, violet spp, dove's-foot cranesbill, dandelion, bristly ox-tongue, ribwort plantain, redshank, creeping thistle and nettle. Occasional buddleia bushes have started to colonise.

Avifauna:

The site is largely unsuitable for this group, however some house sparrows were seen during the visit (Priority Species). The roof of the building is likely to be used by gulls for nesting.

Invertebrates:

The habitat is sub-optimal for this group, although the buddleia provides nectar sources for common species.

Herpetofauna:

There is no suitable habitat for this group.

Mammals:

There is no suitable habitat for this group.

Comments and recommendations:

This site is proposed for housing at a high density.

Japanese Knotweed has been recorded adjacent to the site. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of this species is required to ensure it has not spread and colonised the site.

The northern end of the site is located next to the River Orwell CWS. There is an opportunity to create additional stepping-stone habitat by siting any greenspace provision adjacent to the river (north of Dock Street).

Rain gardens as a sustainable drainage option for residential areas are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping stone habitat in urban areas.

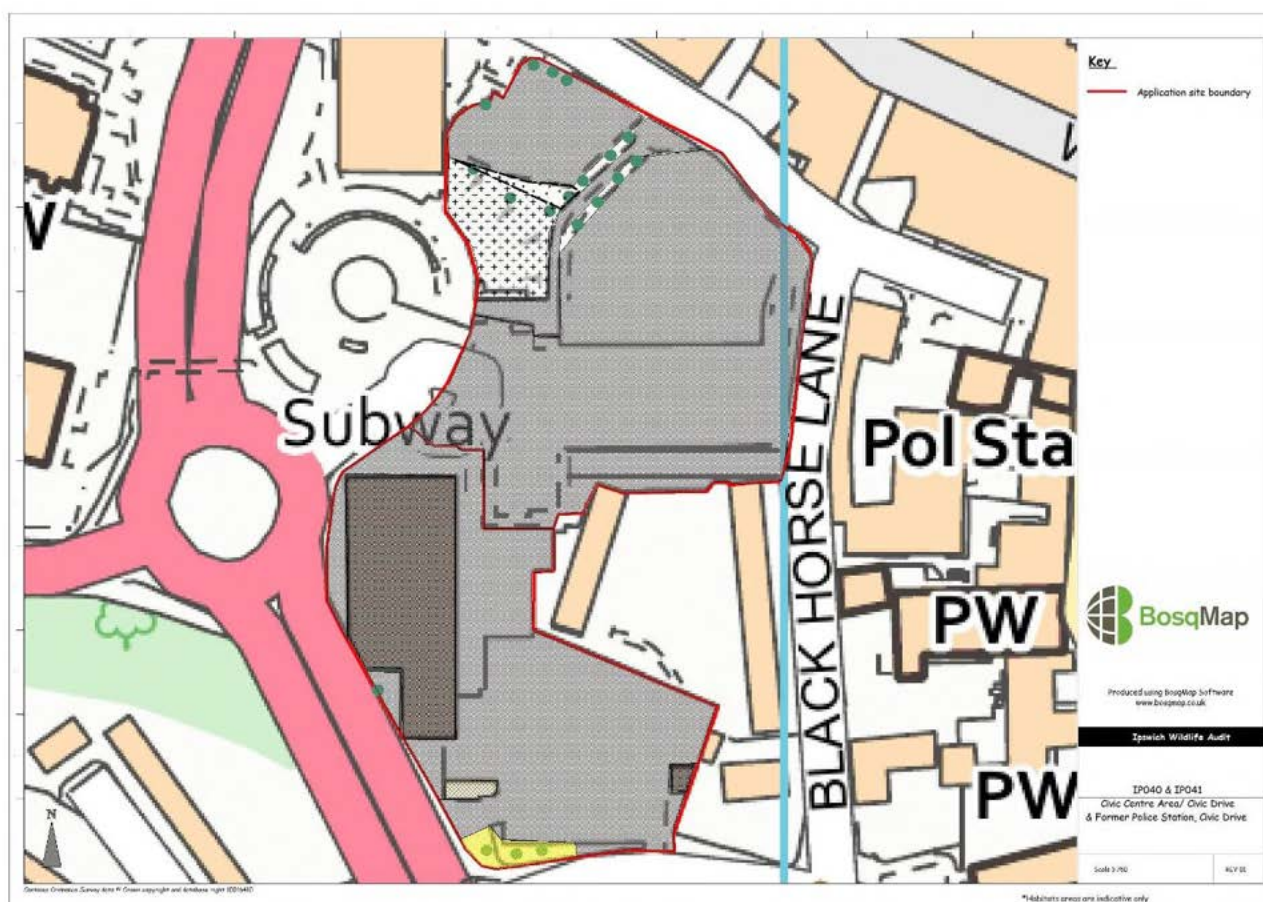
Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

It is unknown whether houses or flats are proposed for this site. Swifts are a fast declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes can be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Civic Centre Area/Civic Drive

Site ref: IP040
Site status: No wildlife designation
Grid ref: TM 15958 44683
Area: 0.76 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 30°C
Ranking: 5
Biodiversity value: Low

Map:



IP040 is the top site in the above map, the bottom site is IP041

Photos:



Corsican pine near the Wolsey Theatre



Avenue of sycamore

Habitat type(s):

Hard standing, broad-leaved scattered trees, coniferous scattered trees

Subsidiary habitats:

-

Site description:

This site lies between Black Horse Lane and Civic Drive and is currently split into three areas, on two different levels, used for car parking. The north of the site supports some mature trees and backs the Wolsey Theatre. It is within the Anglo-saxon and medieval core and the Area of Archaeological Importance and adjacent to the Central Conservation Area.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling

Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site has poor connectivity due to its isolated location in a built-up area.

Structural diversity:

This site generally has very poor structural diversity as the majority is hard standing. However, the mature trees and bank sloping down to the spiral carpark offer small-scale microhabitats.

Flora:

The flora on this site is very limited with an avenue of sycamore lining the public footpath leading to the lower-level car park, and some Coriscan pine and Italian alder around the northern boundary and within the car park adjacent to the Wolsey Theatre.

Avifauna:

It was a sub-optimal time of year for recording this group. It is possible that some birds may nest in the mature trees but in general the area is lacking in suitable habitat and is heavily disturbed by activity, noise and light.

Invertebrates:

There are currently very limited opportunities for this group.

Herpetofauna:

There are currently no opportunities for this group on this site.

Mammals:

Hedgehogs have been recorded in the locality but are unlikely to use this site due to a lack of suitable habitat.

Comments and recommendations:

This is a small site proposed to accommodate 59 dwellings at high density (90dph) on 90% of the site, with the remainder being used for retail, restaurant and theatre related uses. It is located in a built-up area of the Town, so the opportunities for enhancement are limited. However, a landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

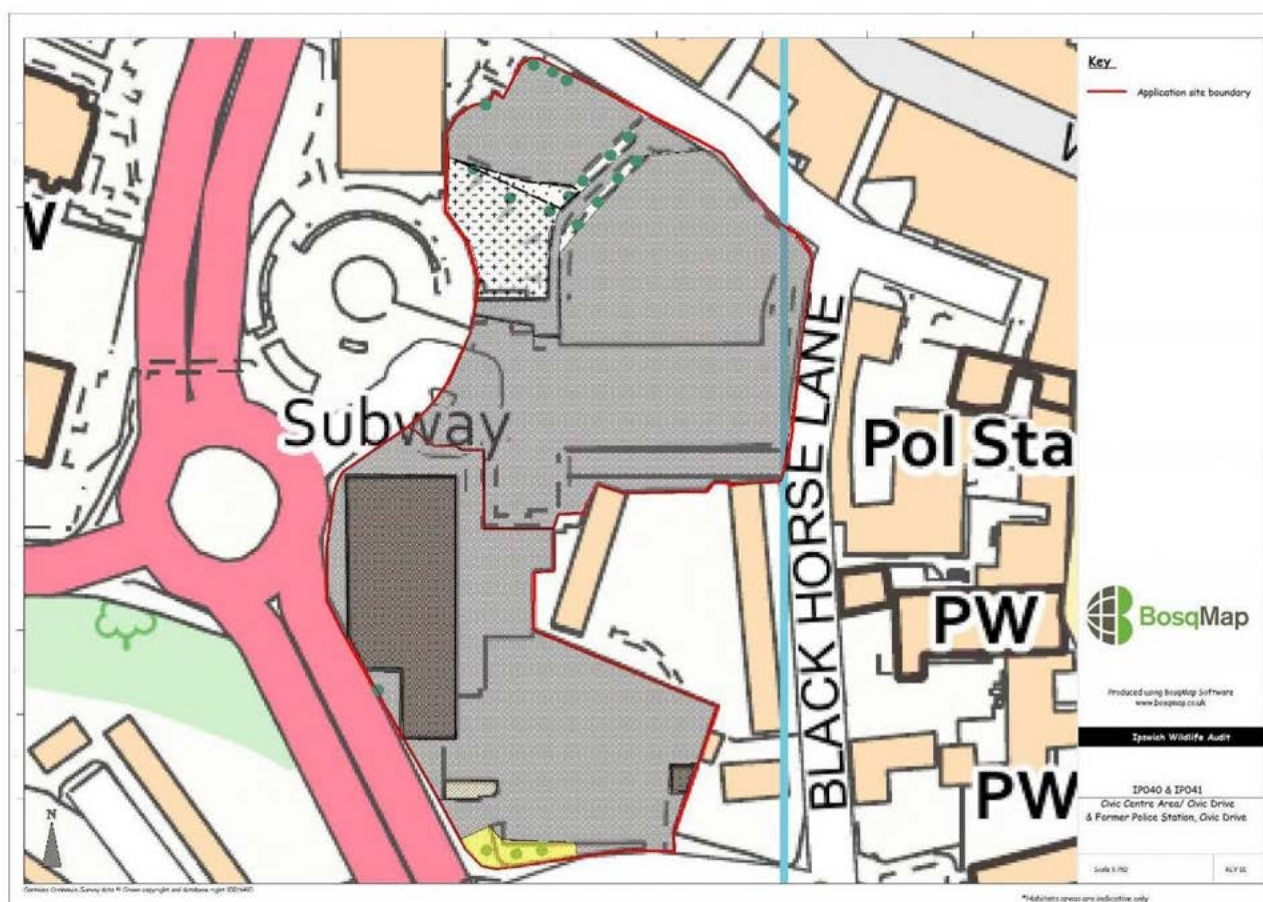
Rain gardens should also be incorporated into the landscape design as part of a sustainable drainage scheme. They are most effective when larger in size and slow down run-off from down-piped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not invasive. They can provide important stepping-stone habitat in urban areas.

There is also the opportunity to include swift boxes. Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'. Bat boxes can be also integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Site name: Former Police Station, Civic Drive

Site ref: IP041
Site status: No wildlife designation
Grid ref: TM 15936 44597
Area: 0.55 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 30°C
Ranking: 6
Biodiversity value: Low

Map:



IP041 is the bottom site in the above map, the top site is IP040

Photos:



IP041 Car park and former County Court

Habitat type(s):

Hard standing, broad-leaved scattered trees, raised beds with introduced shrub

Subsidiary habitats:

-

Site description:

This site lies east of Civic Drive, on the corner with Elm Road. It consists of the former County Court building and associated car park. The site is hard standing for the most part, but there are a few raised beds in the south western corner of the site with some ornamental planting and planted trees. It is within the Anglo-Saxon and medieval core and the Area of Archaeological Importance and adjacent to the Central Conservation Area.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site has poor connectivity due to its isolated location in a built-up area, and lack of vegetation.

Structural diversity:

This site has very poor structural diversity as there are very limited habitat opportunities.

Flora:

This site has very limited botanical interest with a mature ash in raised bed outside the former entrance to the County Court and some silver birch within a raised bed on the corner between Civic Drive and Elm Street. Some ornamental planting of non-native species is present in another raised bed and a wall in the north-eastern section of the car park has some ivy growth.

Avifauna:

It was a sub-optimal time of year for recording this group. It is possible that some birds may nest in the disused building but in general the area is lacking in suitable habitat and is heavily disturbed by activity, noise and light.

Invertebrates:

There are currently very limited opportunities for this group.

Herpetofauna:

There are currently no opportunities for this group on this site.

Mammals:

Hedgehogs have been recorded in the locality but are unlikely to use this site due to a lack of suitable habitat.

Comments and recommendations:

This is a small site proposed to accommodate 46 dwellings at high density (90dph) located in a built-up area of the Town, so the opportunities for enhancement are limited. However, a landscaping scheme could include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates. Rain gardens could also be incorporated into the landscape design as part of a sustainable drainage scheme. They are most effective when larger in size and slow down run-off from down-piped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they

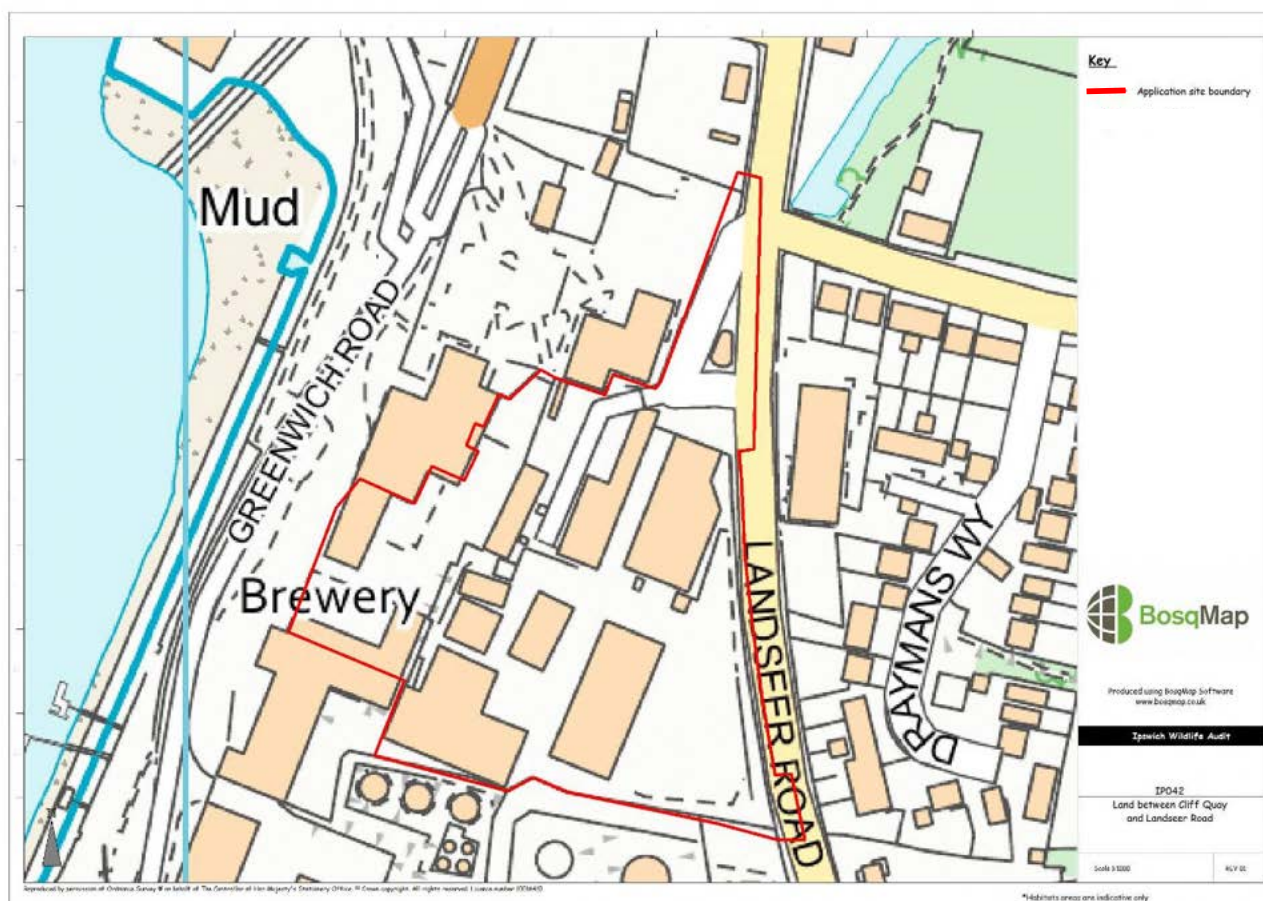
are not invasive. They can provide important stepping-stone habitat in urban areas.

There is also the opportunity to include swift and bat boxes. Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes can be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes should also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'. Bat boxes can be also integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Site name: Land between Cliff Quay and Landseer Road

Site ref: IP042
Site status: No wildlife designation
Grid ref: TM 17117 43139
Area: 1.77 hectares
Written by: J Crighton
Date written: 30th August 2019
Recorder: Not Surveyed
Weather conditions: N/A
Ranking: 6 (based on the available information)
Biodiversity value: Low

Map:



Habitat type(s):

Hard standing, buildings, mature trees/scrub

Subsidiary habitats:

-

Site description:

It was not possible to access this site, but a preliminary assessment has been made from known records and available imagery.

This site contains a number of vacant industrial buildings. It is located west of Landseer Road, with its eastern boundary being the docks access road along the River Orwell. Directly south of the site there is a water treatment works plant and to the north is the old Brewery Tap Freehouse and some other small business premises.

In the western-most section of the site, adjacent to The Brewery Tap, there appears to be a number of mature trees and scrub.

Protected species seen or known:

Records in the surrounding area include:

Badger
Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Noctule bat
Serotine bat
Common lizard
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Common toad
Stag beetle
BoCC Red List birds include herring gull, house sparrow, song thrush and starling
BoCC Amber List birds include dunnock and swift (Suffolk Character Species)

Priority species potential:

Swift nesting in building (Suffolk Character Species)

Connectivity:

This site is part of a wider number of buildings and has little biodiversity value. However, if improved for biodiversity, it could have some connectivity to habitats to the south via the water treatment plant.

Structural diversity:

From the information available this site has relatively poor structural diversity. However, the walls and roofs of the buildings within the site offer potential habitat for some niche botanical groups, birds and possibly bats.

Flora:

Unknown

Avifauna:

The Brewery Tap, as an older building, could support nesting swifts. It is likely that feral pigeons, often associated with industrial buildings and town centres, will nest in the buildings. Gulls may also use the roofs of the buildings for perching and nesting. The trees and scrub could also provide some nesting opportunities.

Invertebrates:

The site appears sub-optimal for this group.

Herpetofauna:

Although there are records within the surrounding area, there are currently no opportunities for this group within this site.

Mammals:

The buildings within the site and the surrounding area, particularly The Brewery Tap, which is an old brick building could support roosting bats. It is also possible that the trees in the west of the site contain features which could support roosting bats.

Comments and recommendations:

This site is primarily proposed for residential development with an indicative capacity of 222 dwellings. And the secondary use would be for commercial and employment purposes.

Although this site is currently of low wildlife value, there is a potential risk that buildings could support bats and consequently an internal inspection by a suitably qualified ecologist is recommended, which will also encompass nesting birds. Nesting swifts are also protected under the same legislation as all nesting birds, so care should be taken to avoid demolition of the older buildings during the bird breeding season, unless it can be confirmed by a suitably qualified ecologist that swifts are not nesting. An assessment of likely presence of invasive plant species should also be undertaken.

The site is located next to the River Orwell and any lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

This site is relatively small for the indicative housing capacity suggested, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

Careful planning and design should integrate the requirement for sustainable drainage systems with

the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. In the residential area this could include the provision of a rain garden, which are most effective when larger in size and slow down run-off from down-piped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

The commercial and employment buildings could offer the potential to include green roofs and/or living walls. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. And living walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates. Both of these options can provide important stepping-stone habitat in urban areas.

There is also the opportunity to provide enhancement for individual species:

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

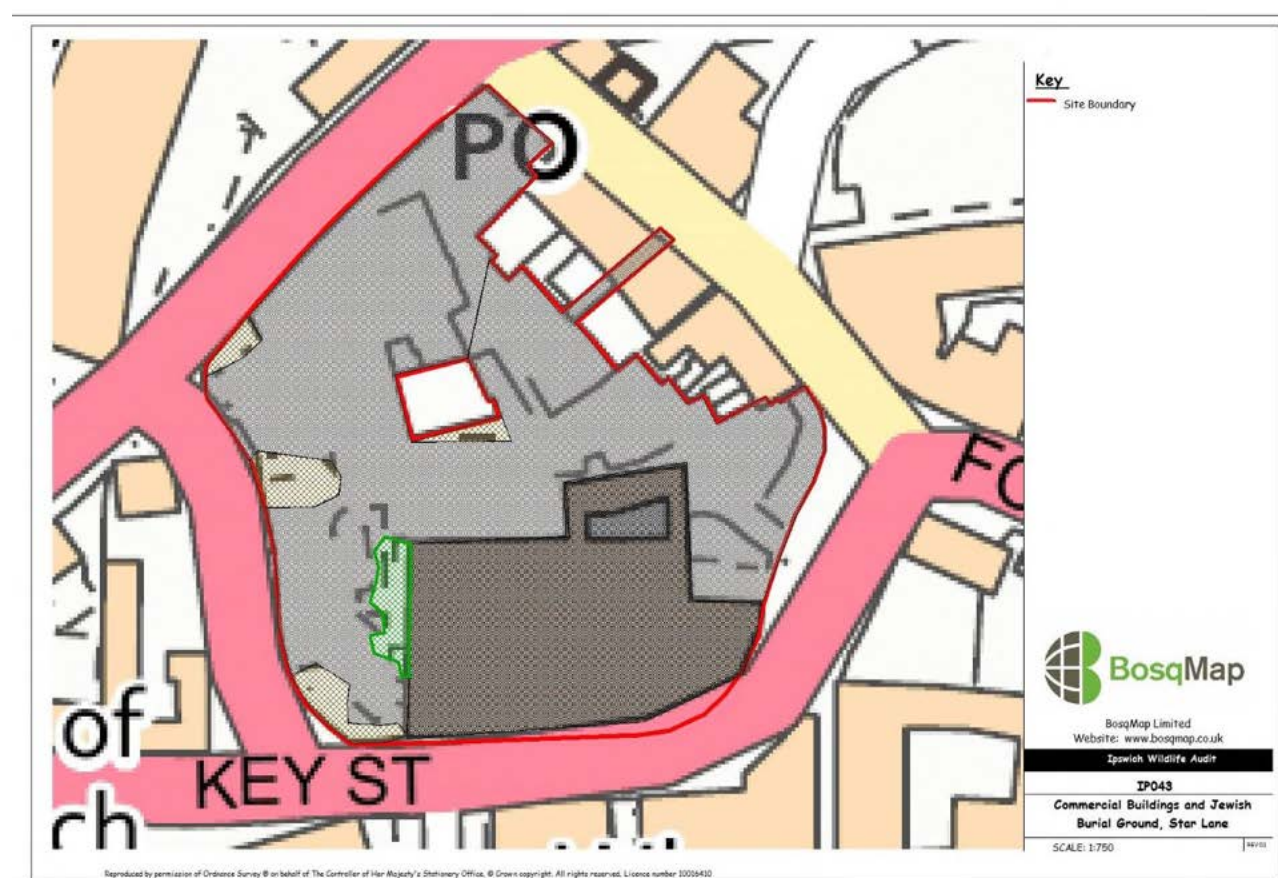
Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Commercial Buildings and Jewish Burial Ground, Star Lane

Site ref: IP043
Site status: No wildlife designation
Grid ref: TM 16734 44171
Area: 0.7 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



IP043 Car park



IP043 building in the south of the site

Habitat type(s):

Buildings, hard standing, introduced shrub, scattered scrub

Subsidiary habitats:

Wall surfaces

Site description:

This site is located on land between Key Street and Salhouse Street to the south, Slade Street to the west, Star Lane to the north and portions of Key Street to the east. It is currently used as a car park and car wash facility and is thus mainly laid with concrete and brick paving. A large boarded up brick building is present in the south of the site, adjacent to Key Street, with a smaller historic timber framed building to the rear of this building. The site is partly within the Central Conservation Area, contains Grade II listed buildings and adjoins others including Grade II 54-58 Fore Street to the north-east, the Grade II Old Custom House to the south-west and the complex of highly graded buildings at Isaac Lord to the south-east.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site is isolated being surrounded by busy roads within a heavily built-up area.

Structural diversity:

Structural diversity is limited being mostly buildings and hard standing. The small areas of introduced shrub and scattered scrub offer some height differences and the walls and roofs could offer an additional substrate for growth, however, nothing has currently colonised this niche habitat.

Flora:

The majority of the site is comprised of hard standing, however there are some areas with ornamental planting that have been left unmanaged and some forbs have colonised areas. Typical early coloniser species such as bristly ox-tongue, creeping thistle, hedge woundwort, green alkanet, Canadian fleabane, prickly lettuce and barren brome are present amongst the non-native species.

There are also a few areas of dense scrub with young ash, dogwood, elder, buddleia, cotoneaster and clematis with some ivy and bittersweet (indicating damp conditions).

Additionally, cracks in the paving and concrete have given rise to fern grass, lesser trefoil, petty spurge and knotgrass.

Avifauna:

It was a sub-optimal time of year for recording this group. However, common garden birds may use the vegetated areas of this site for foraging and it is likely that feral pigeons, often associated with industrial buildings and town centres, will nest in the buildings. Gulls may also use the roofs of the buildings for perching and nesting.

Invertebrates:

The site is currently sub-optimal for this group. However, some brash piles were noted on site and a common blue butterfly, associated with the buddleia was seen during the survey. Stag beetles have also been recorded nearby.

Herpetofauna:

There are no opportunities for this group within this site.

Mammals:

The presence of several listed buildings in the area, and older buildings within the site itself could indicate the potential for roosting bats.

The site may also be visited by hedgehogs and there are historical records in the area.

Comments and recommendations:

Proposals for the sites include 45 dwellings on 80% of the site with a high density of 95dph. The remainder of the site is proposed for employment use including offices, research and development and light industrial uses suitable for residential areas.

Although this site is currently of low wildlife value, the older buildings could support bats and consequently further surveys are recommended.

As this area will remain highly built-up the options for net gain are limited but could include utilising some of the available space such as by the installation of green roofs. These work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. They provide important stepping-stone habitat within urban areas.

In addition, any proposed landscaping should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

In addition to this, action can be taken for individual species such as swifts, bats and hedgehogs.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

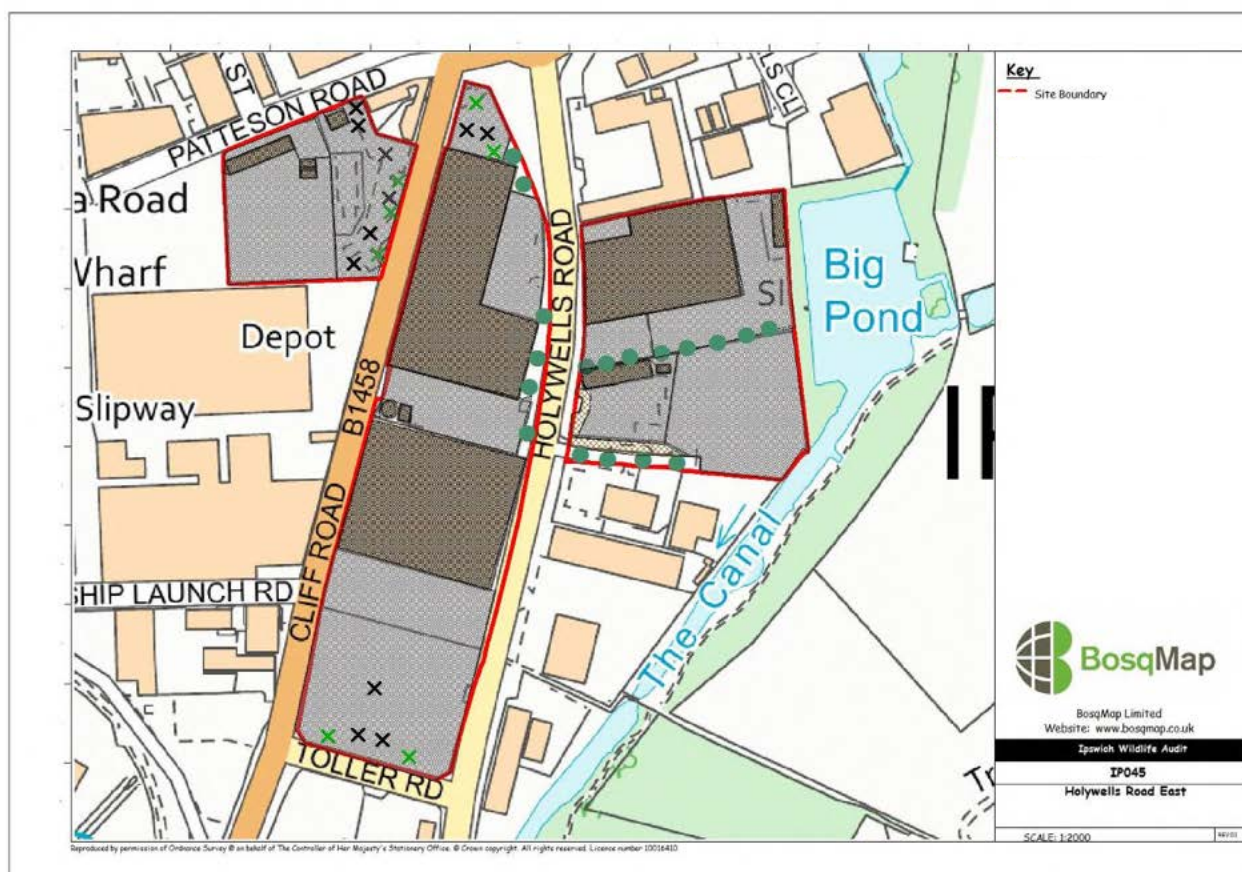
Bat boxes should also be integrated into new buildings, or durable boxes can be placed on trees or existing buildings where there is a low risk of interference.

Holes in fences for hedgehog should be part of any new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Holywells Road West

Site ref: IP045
Site status: No wildlife designation
Grid ref: TM 17178 43465
Area: 2.05 hectares
Date: 28th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



View north across site showing ephemeral short perennial vegetation coming up through cracks in the pavement

Habitat type(s):

Hard standing, buildings, ephemeral short perennial, scattered scrub

Subsidiary habitats:

-

Site description:

This site is located between Holywells Road and Cliff Lane. It is currently used by a freight forwarding service. The majority of the site is hard standing with industrial buildings. The area of hard standing at the northern end of the site is less well used and has been colonised by short vegetation and occasional buddleia bushes.

Protected species seen or known:

-

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

-

Priority species potential:

Herring gull

Connectivity:

This site is in a built-up area of the town and is surrounded by roads and other industrial buildings, therefore connectivity is very poor. Holywells Park CWS and the River Orwell CWS are both in close proximity to this site but there is no direct connectivity between them.

Structural diversity:

The structural diversity is poor.

Flora:

The nature of the site means that the flora is very limited. A few plants are coming up in the cracks in the hard standing with species typical of heavily disturbed ground including wall barley, Canadian fleabane, bristly ox-tongue and perennial sow thistle.

Avifauna:

There are very few opportunities for this group, however gulls may nest on the roof of the buildings.

Invertebrates:

The majority of the site is sub-optimal for this group, although the plants beginning to colonise the site, particularly buddleia provide some foraging opportunities for common species. Small white and gatekeeper butterflies were seen during the visit.

Herpetofauna:

There is currently no suitable habitat for this group and due to the site's isolation there is a very low risk that they could colonise from the surrounding area.

Mammals:

The habitat provides very few opportunities for this group, although there are numerous hedgehog records in the area.

Comments and recommendations:

We have no information regarding proposals for site IP045.

As this site is located close to Holywells Park CWS and is east of the River Orwell CWS, there is an opportunity to create small-scale stepping-stone habitats which will in turn contribute to the wider ecological network. The built density on this site is high, but the planting of individual trees and other landscaped areas to enhance the street scene will also provide additional microhabitat.

In addition, careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. Green roofs on buildings such as offices can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. They can provide important stepping stone habitat in urban areas. Rain gardens are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping stone habitat in urban areas.

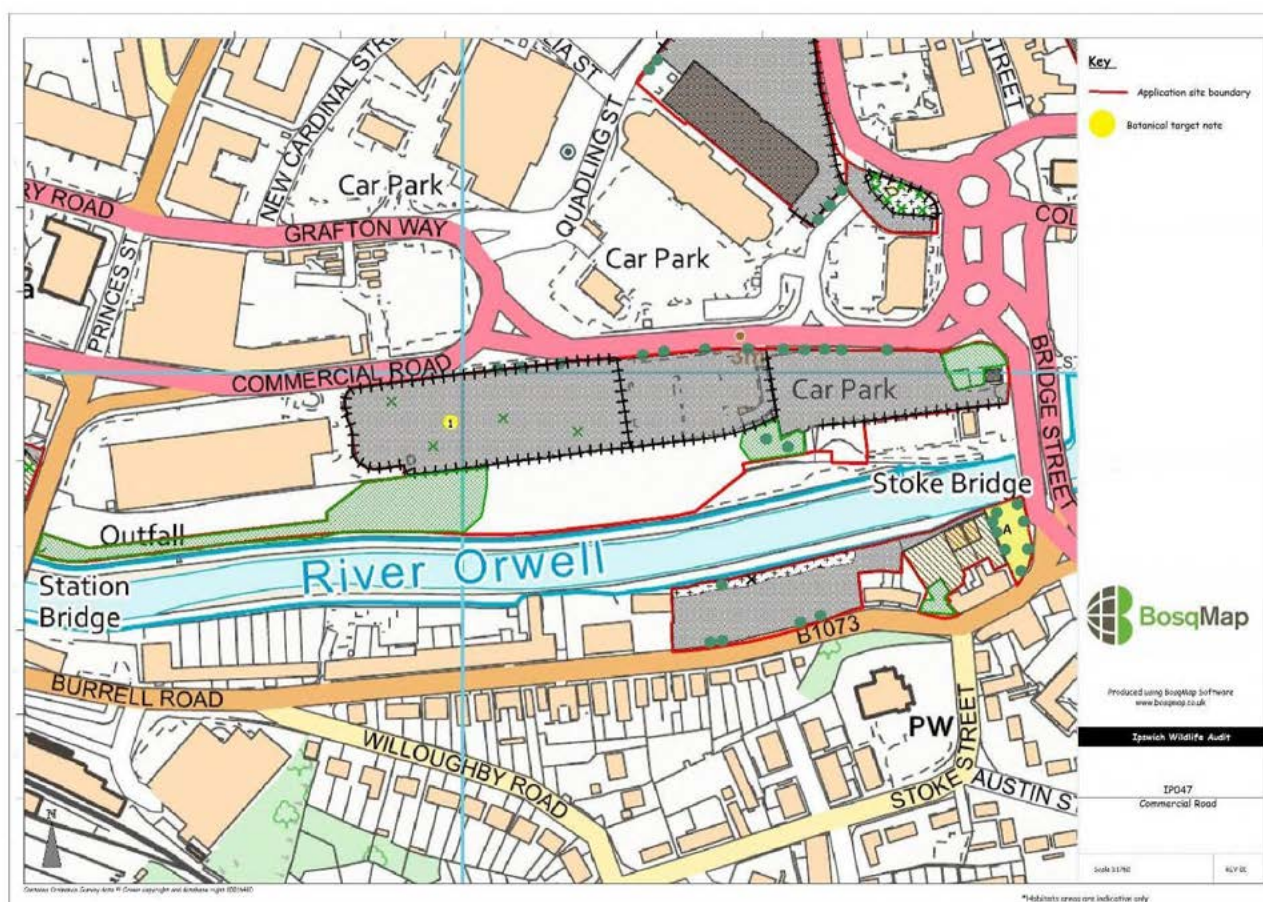
Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

It is unknown whether houses or flats are proposed for this site. Swifts are a fast declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into new taller buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Commercial Road

Site ref: IP047
Site status: No wildlife designation
Grid ref: TM 16033 23955
Area: 3.11 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 30°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Inaccessible area of car park



Scrub belt along the south of the site

Habitat type(s):

Dense continuous scrub, hard standing, scattered trees, scattered scrub, introduced shrub

Subsidiary habitats:

Bare ground with vegetation typical of brownfield sites (Target Note 1)

Site description:

This site comprises three car parks to the south of Grafton Way, between the Cardinal Park Leisure and Entertainment Park and the River Orwell (County Wildlife Site). The site lies adjacent to an Area of Archaeological Importance and contains remnants of the old railway. The old railway is located to the south of the car parks, adjacent the River Path, and is a relatively undisturbed area with dense scrub. This represents an area of biodiversity interest in an otherwise low ecological value site and provides a good wildlife corridor.

Of the three car parks, only two are operational, with a large area in the west which is currently closed-boarded fenced and inaccessible. This section was viewed from the perimeter only but has been left unmanaged and contains typical brownfield species such as buddleia. The two operational car parks have a boundary of introduced shrub with trees along the roadside. There are also a number of trees planted throughout the car parks. Some of the trees within the site are protected by Tree Preservation Orders (TPOs).

Protected species seen or known:

Records in the surrounding area include:

Otter

Water vole

Badger

Slow worm
Grass snake
Great crested newt
Daubenton's bat
Natterer's bat
Noctule bat
Common pipistrelle bat
Soprano pipistrelle bat

Protected species potential:

Common lizard

Priority habitats present:

-

Priority species seen or known:

House sparrow (seen)
Records in the surrounding area include:
Hedgehog
Stag beetle
Swift (Suffolk Character Species)

Associated with the river corridor, BoCC Red List birds include herring gull, curlew, common scoter, white-fronted goose and yellow wagtail, and BoCC Amber List include black-tailed godwit, black-throated diver, dark-bellied Brent goose and little tern.

Associated with the scrub, Red List birds include house sparrow, starling, linnet and song thrush, and Amber List birds include dunnoek.

Priority species potential:

-

Connectivity:

The site borders the River Orwell and consequently has good ecological connectivity. This river and the associated River Gipping form a continuous wildlife corridor through Ipswich, with semi-natural vegetation along its banks.

Structural diversity:

The south of the site with the dense scrub has good structural diversity and offers a range of habitats for several taxonomic groups. However, the car parks have very sparse vegetation and limited structural diversity.

Flora:

The main ecological interest of this site is the scrub along the southern boundary, adjacent to the River Orwell. This scrub is largely buddleia and silver birch but other species such as sycamore, cherry, dog rose, clematis, bramble and hop are scattered throughout. There are some areas where the scrub thins and there are grassy patches with false oat, Yorkshire fog, cock's foot and wall barley and the occasional forb such as common mallow and nettle.

The fenced area of disused carpark contains species typical of brownfield sites including weld, smooth hawk's-beard, great mullein, St John's wort, groundsel and spear thistle. These plants were noted growing from cracks in the hard-standing exposing small areas of bare ground (Target Note 1). Sapling sycamore and buddleia are scattered throughout the site with some mature trees around the perimeter including sycamore, Italian alder, whitebeam and ash.

On the northern boundary of the operational car parks there are raised beds planted with introduced shrub such as the Japanese rose and cotoneaster (both are invasive species) with a non-native dogwood species. Bramble has started to encroach on unmanaged areas along with some ruderal vegetation such as wild mignonette, mugwort, wild parsnip and ribwort plantain. Mature trees have also been planted along this stretch including rowan, crab apple, cherry and false acacia. Notably some locally common dittander (Nationally scarce) is present within the scrub margins along with feverfew. Some silver birch trees are also planted throughout the car parks.

A patch of scrub is present at the easternmost end of the site with sycamore, broom, buddleia and bramble scrub with hedge bindweed and a ground flora of common mallow, bristly ox tongue, yarrow, black horehound, ragwort, nettle and spear thistle with cock's foot, perennial rye, wall barley and Yorkshire fog grasses.

Avifauna:

It was a sub-optimal time of year for recording this group. House sparrow was the only notable bird species recorded. The areas of dense scrub provide good foraging, nesting and roosting opportunities for a range of common bird species and could attract summer migrants such as whitethroat and the River Orwell is notable for its over-wintering waders and wildfowl and is designated as SSSI, SPA and Ramsar site further down the estuary.

Invertebrates:

The fenced off area has potential to support a wide range of invertebrates, with a patchy mosaic of flowering vegetation and habitat types including bare ground. The tall buffering strip of scrub along the adjacent southern boundary also provides shelter and a range of microclimates.

Herpetofauna:

Grass snake and slow worm are likely to be present within the scrub mosaic corridor on the southern boundary and there are records of both these species in the local area. The disused, fenced area could provide habitat which supports common lizard.

Mammals:

The river corridor and associated scrub belt provide good commuting and foraging habitat for bats.

There are records of otter along the River Orwell. Otters are highly mobile species, so the river corridor is likely to be regularly used for commuting and foraging. The undisturbed scrub in the south of the site, directly adjacent the river is capable of supporting an otter holt or resting place. However, there was no evidence that otters were using this area at the time of the survey, so any activity is likely to be transient.

There are a number of hedgehog records in the immediate area and the scrub mosaic provides excellent foraging, refuge and hibernation opportunities for them.

Common species of mammal such as fox and rabbit are likely to be present on this site. Mice, voles and shrews are also likely to be present in the scrub mosaic in the south. Although no evidence of badger movement was noted on site (raised gaps in boundary fencing), and there are no records of this species near to the site, the scrub could provide potential foraging and sett building habitat.

Comments and recommendations:

This site has been allocated for primary use as residential on 80% of the site, with 173 dwellings at medium density (55dph). Its secondary function will be that of hotel, leisure and retail with public open space and enhanced river path on 20% of the site.

A survey for reptiles is recommended prior to any vegetation clearance and if present they should ideally be retained within existing habitat on site, or on enhanced habitat adjacent to the site. Such measures include a well secured log pile for basking reptiles over the top of a below-ground hibernacula incorporated into an undisturbed area of greenspace.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

Cotoneaster species and Japanese Rose are present on site and these species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. When such plants are removed as part of a vegetation clearance programme then they should be disposed of in a way as not to contravene the legislation. Another highly invasive species, Japanese knotweed, has been recorded associated with the train station on the opposite side of the River Orwell so further investigation is required to ensure this has not colonised the site. This site assessment does not constitute an invasive species survey.

This site is located next to the River Orwell, so the lighting scheme should be designed to prevent light spillage into this area, or the scrub habitat above the banks. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

As this proposal includes public open space provision this should be sited on the southern boundary to enhance the existing wildlife corridor. Providing a habitat mosaic would help maximize biodiversity opportunities in conjunction with public access. Ideally patches of the existing scrub should be retained or supplemented by new planting using native species. If feasible, a wildflower area could also be sown along the southern boundary of the site, but this would require a higher level of maintenance to retain its ecological interest. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September. An interpretation panel could be considered to showcase the presence of on-site habitats and species.

Sustainable drainage proposals to dispose of surface water are recommended. Rain gardens associated with the housing provision can slow down run-off from downpiped or paved areas. They

require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

At this location there is also an opportunity for off-site enhancement to benefit eels, as since the mid-1980s there has been a significant decline in their populations. An important contributing factor to this decline is thought to be the addition of water control structures such as weirs and gauging stations, which present a barrier to the natural migration of eels and elvers. A potential solution to the problem is the installation of a suitable 'eel pass' to the obstruction. Detailed information can be found in the "Elver and eel passes; A guide to the design and implementation of passage solutions at weirs, tidal gates and sluices" (Gregory *et al*, 2017).

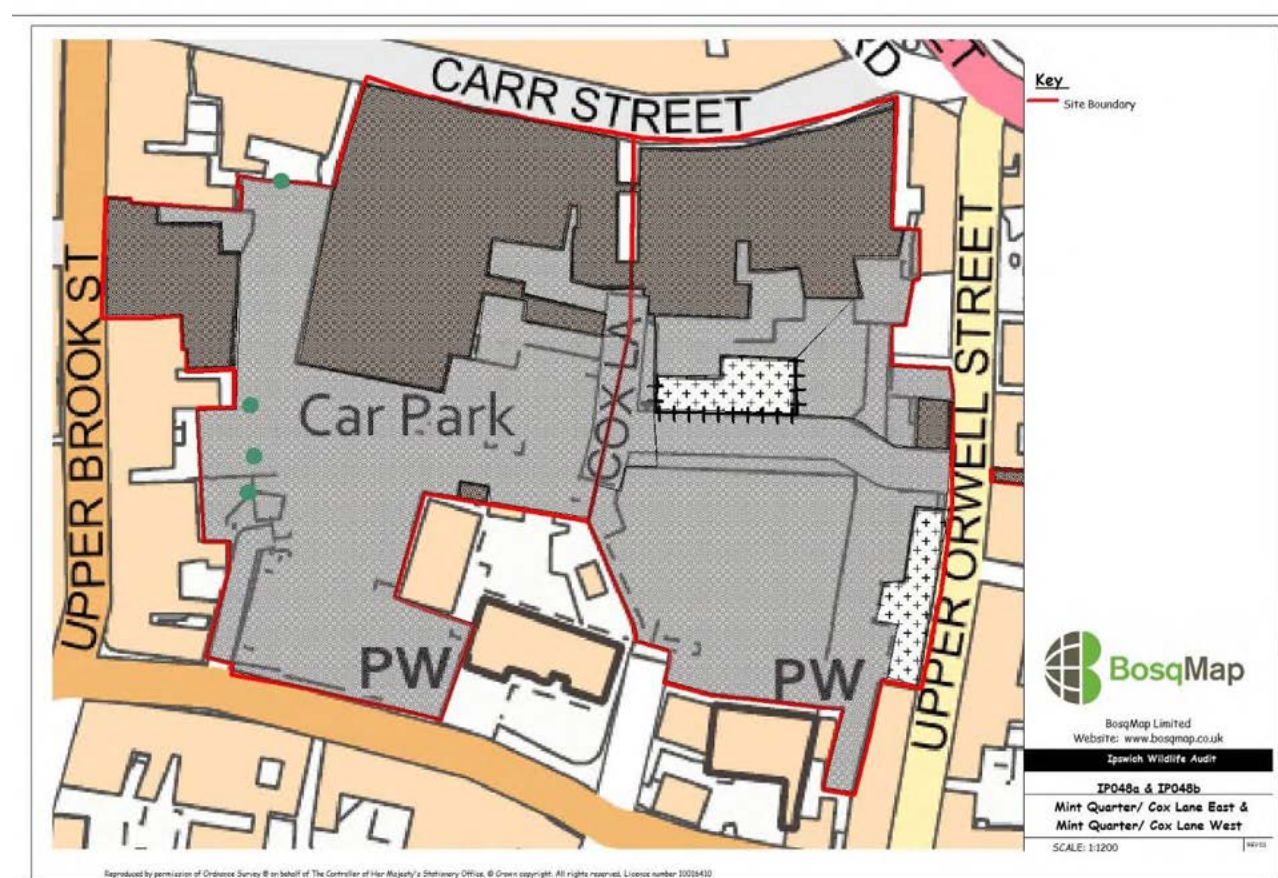
References:

Gregory, J. *et al* (2017). *Elver and eel passes; A guide to the design and implantation of passage solutions at weirs, tidal gates and sluices. The Eel Manual – GEHO0211BTMV-E-E*. Bristol, Environment Agency

Site name: Mint Quarter/Cox Lane West Regeneration Area

Site ref: IP048a/IP048b
Site status: No wildlife designation
Grid ref: TM16667 44501/TM 16556 44514
Area: 1.33 hectares/1.34 hectares
Date: 29th July 2019
Recorder: J Crighton
Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Mature whitebeams within IP028b



Bank of IP028a, adjacent to Upper Orwell Street

Habitat type(s):

Hard standing, scattered trees, scattered scrub, ephemeral short perennial

Subsidiary habitats:

Bare ground

Site description:

These two sites are currently used as car parks. IP048a lies west of Upper Orwell Street, with locally listed buildings fronting Carr Street in the north and the grade II Listed St Pancras church is directly south of the southern boundary. IP048b is west of IP048a and accessed via Eagle Street in the south. Similarly, it has a northern boundary with Carr Street with locally listed buildings, and a grade II Listed church to the south-east (Christ Church). The eastern boundary includes one building which fronts Upper Brook Street, but the neighbouring buildings are not included. The sites are within an Area of Archaeological Importance adjacent to the Central Conservation Area. Below the car parks is a large scheduled monument related to the Middle and Late Saxon town.

The sites are currently split into three car parks, two of which are NCP run and the third run by is Ipswich Borough Council. The Council car park has an area sloping down to Upper Orwell Street which appears to have been planted with ornamental plants. However, it has not been maintained and now is mostly ephemeral short perennial vegetation and bare ground. There are Tree Preservation Orders (TPOs) on site or nearby.

There is a fenced area in the north which is mainly hard standing with an area containing vegetation typical of brownfield sites; access to this area was limited due to high fencing.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat

Common pipistrelle bat

Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site is isolated being surrounded by busy roads within a heavily built-up area.

Structural diversity:

Structural diversity is limited being mostly buildings and hard standing.

Flora:

The majority of this site is hard standing but some mature whitebeam has been planted throughout the car park in IP048b and some buddleia and oak are present in IP048a.

The area within the fencing has mainly Canadian fleabane and prickly lettuce and the area set aside for planting alongside Upper Orwell Street contains fat hen, ribwort plantain, common mallow, scentless mayweed, common stork's-bill and hedge mustard amongst the ornamental plants.

Avifauna:

It was a sub-optimal time of year for recording this group. Gulls were heard flying overhead and the mature trees throughout the site offer some nesting opportunities for common birds.

Invertebrates:

Due to the majority of this site being laid to concrete hard standing, there is limited potential for this group. However, the planted area with ephemeral short perennial vegetation could offer some limited habitat for common invertebrates.

Herpetofauna:

There is no suitable habitat for this group.

Mammals:

The presence of several listed buildings adjacent to the site provides potential for roosting bats in the locality.

Comments and recommendations:

Site IP048a has been allocated as siting for a primary school, amenity greenspace and short stay multi-storey car parking on 40% of the site. Its secondary use is for 53 dwellings at high density (1000dph) on 40% of the site.

IP048b will primarily be used for retail, a short stay car park and open space, with a secondary use for 36 dwellings at high density (90dph) on 30% of the site.

As this area will remain highly built-up the options for net gain are limited, but should include utilising some available space, i.e. on the retail, multi-storey car park and primary school areas, green roofs and living walls are recommended, which can provide important stepping-stone habitats in urban areas. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. Living walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. A simple solution could include climbers, such as ivy, which can be trained on wires or trellis, or for more complex schemes, adapted planters can be used for other species to create diverse green walls. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates.

Additionally, sustainable drainage proposals to dispose of surface water are recommended. Rain gardens are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

Special consideration should be given to the primary school grounds; a 'wild garden' would not only provide added biodiversity value but could also benefit the education, health and wellbeing of the pupils and staff.

In addition, action can be taken for individual species such as swifts and bats.

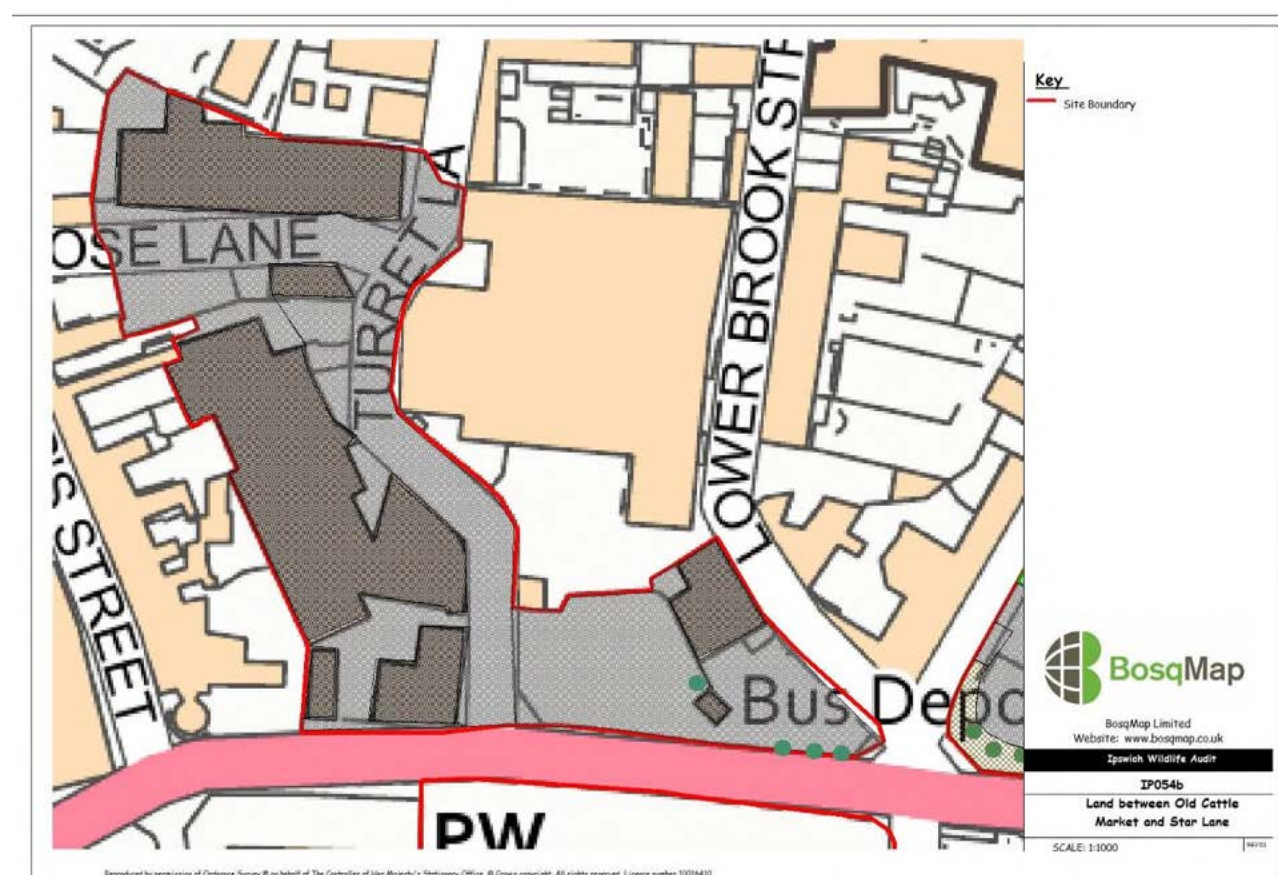
Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes can be placed on trees where there is a low risk of interference.

Site name: Land between Old Cattle Market and Star Lane

Site ref: IP054b
Site status: No wildlife designation
Grid ref: TM 61350 44221
Area: 1.08 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Soft substrate car park in the south eastern corner



Typical industrial building with the site

Habitat type(s):

Buildings, hard standing, dense continuous scrub, scattered broad-leaved trees

Subsidiary habitats:

Wall surfaces

Site description:

This site covers several industrial buildings and associated car parks. It encompasses sections of Turret Lane in the east and Rose Lane in the north. The retail facilities on St Peter's Street lie to the west and beyond Turret Lane to the east there is a large area currently under development with evidence of recently demolished buildings. The site lies within an Area of Archaeological Importance, partly within the Central Conservation Area and contains a scheduled monument and two grade II Listed buildings.

The large car park in the south extends to Lower Orwell Street and contains several mature trees along the southern boundary, some of which may be protected by Tree Preservation Orders.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat

Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site is fairly isolated being surrounded by busy roads within a heavily built-up area.

Structural diversity:

Structural diversity is limited being mostly buildings and hard standing. The mature trees offer some natural height differentiation and the walls and roofs could offer an additional substrate for growth, however, nothing has currently colonised this niche habitat.

Flora:

This site contains very little in the way of botanical interest. The only features are beech and London plane trees lining the southern boundary of the car park along Star Lane.

Avifauna:

It was a sub-optimal time of year for recording this group. However, it is likely that feral pigeons, often associated with industrial buildings and town centres, will nest in the buildings. Gulls may also use the roofs of the buildings for perching and nesting. The trees could also provide some nesting opportunities.

Invertebrates:

The site is currently sub-optimal for this group.

Herpetofauna:

There are no opportunities for this group within this site.

Mammals:

The presence of several listed buildings within the site and the surrounding area, and mature trees on the southern boundary could indicate the potential for roosting bats.

Comments and recommendations:

It is proposed that 40 dwellings will be sited on 60% of this site at medium density (60dph). Additionally, there are areas allocated for small scale retail opportunities and an electricity sub-station.

Although this site is currently of low wildlife value, there is a potential risk that buildings could support bats and consequently an internal inspection by a suitably qualified ecologist is recommended, which will also encompass nesting birds.

This site is relatively small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

Careful planning and design should integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. In the residential area this should include the provision of a rain garden, which are most effective when larger in size and slow down run-off from down-piped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

There is also the opportunity to provide enhancement for individual species:

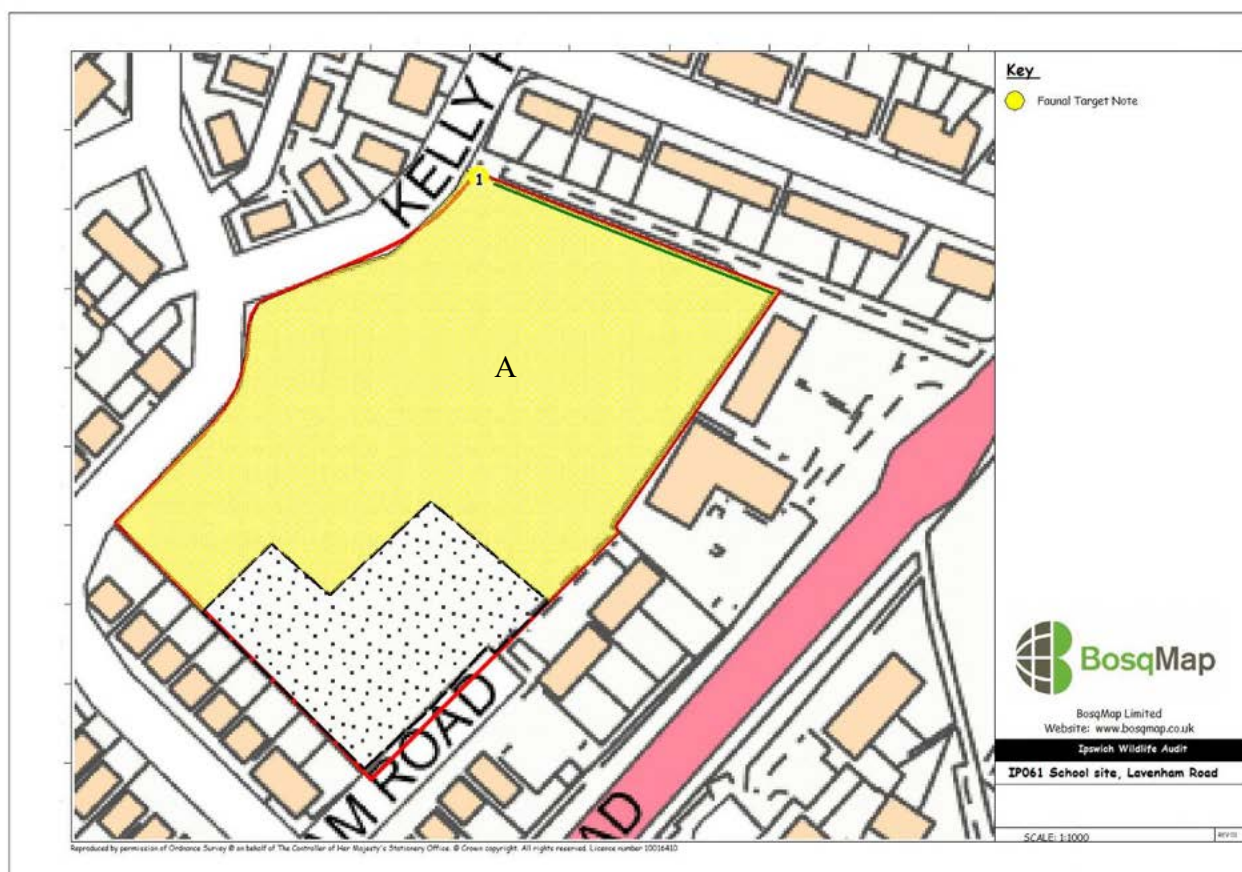
Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: School Site, Lavenham Road

Site ref: IP061
Site status: No wildlife designation
Grid ref: TM 14340 44160
Area: 0.90 hectares
Date: 22nd July 2019
Recorder: A Looser
Weather conditions: Warm and Sunny, 23⁰C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View south-west across site from Kelly Road



Mature ash tree in north-eastern corner (Target Note 1)

Habitat type(s):

Amenity grassland

Subsidiary habitats:

Species poor hedgerow, broadleaved tree

Site description:

This is an area of short mown amenity grassland bordering Lavenham Road and Kelly Road. A hedge defines the north-eastern boundary, with all other boundaries being open or garden fences. There is a mature ash tree in the north-eastern corner. Along the road edge is a low bank. The south-western corner of the site is currently fenced off and under construction. The remaining area of the site is used for dog exercising as well as other local recreational activities.

Protected species seen or known:

Species recorded in the area includes:

Common pipistrelle bat

Soprano pipistrelle bat

Daubenton's bat

Natterer's bat

Noctule bat

Grass snake

Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog

Stag Beetle

Common toad

BoCC Red List birds including house sparrow and starling

BoCC Amber List birds including dunnock and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is surrounded by roads and residential housing. Although Chantry Park lies 125m to the west, there is no direct connectivity between the two sites. However, it does provide a stepping stone habitat between Chantry Park and Gippeswyk Park in combination with the London Road Allotments.

Structural diversity:

Structural diversity is poor due to the close mown sward and very few trees or shrubs.

Flora:

Perennial rye grass is the predominant grass with occasional wall barley. Within the sward are common herbs typical of mown grassland including ribwort plantain, greater plantain, yarrow, daisy, white clover, red clover, dandelion, smooth hawk's-beard, creeping cinquefoil, dove's foot cranesbill, mallow, field bindweed and comfrey.

The hedge comprises elder and ivy in the western section, with some hawthorn and Prunus species in the centre and a dense stand of elm at the eastern end. Some bramble and hedge bindweed is also associated with the hedge. A large ash tree is situated at the northern corner, adjacent to the hedge. The tree displays signs of damage on one side of the trunk and limbs.

Avifauna:

This site has limited opportunities for nesting and foraging. Common species including carrion crow, wood pigeon, collared dove and magpie were seen during the visit.

Invertebrates:

There are limited opportunities for this group. Small white butterflies were seen, and other common species are likely to utilize the site during the year. The bank along the road had small patches of bare ground which could be important for ground nesting bees and wasps. Ants were also noted on the bank.

The ash tree and hedgerow associated with the north-eastern boundary could provide habitat for stag beetles (priority species) whose larvae feed on subterranean dead wood.

Herpetofauna:

The habitat is not suitable for this group.

Mammals:

The mature ash tree on the north-eastern corner has some cracks and crevices which could support a bat roost. However, it is likely that the roosting opportunities are limited, so the suitability of these features for bats are thought to be 'Low'. Although further surveys for bats are not recommended, if this tree is to be cut down then a precautionary method of felling should be adopted and if any evidence of bats is found, then work must stop immediately and a suitably qualified ecologist consulted.

There are numerous records of hedgehog in the area and the short grassland provides good foraging opportunities for them, although there are limited nesting opportunities.

Comments and recommendations for net gain:

This site is proposed for a housing development on 60% of the site, with 40% left as open space. Part of the site is currently being developed.

Although the site is small and currently of relatively low ecological value it does provide valuable stepping-stone habitat between Chantry Park County Wildlife Site and Gippeswyk Park in combination with the London Road Allotments. With sensitive landscaping there is the opportunity to improve the quality of this stepping-stone habitat through enhancement of the remaining on-site habitat.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, particularly the hedgerow and mature tree along the northern boundary. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices.

New planting should seek to use native species typical of the local area such as hawthorn, blackthorn, oak, dogwood, hazel and field maple. If possible, it is the northern part of the site which should be retained as this currently contains the greatest biodiversity interest.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

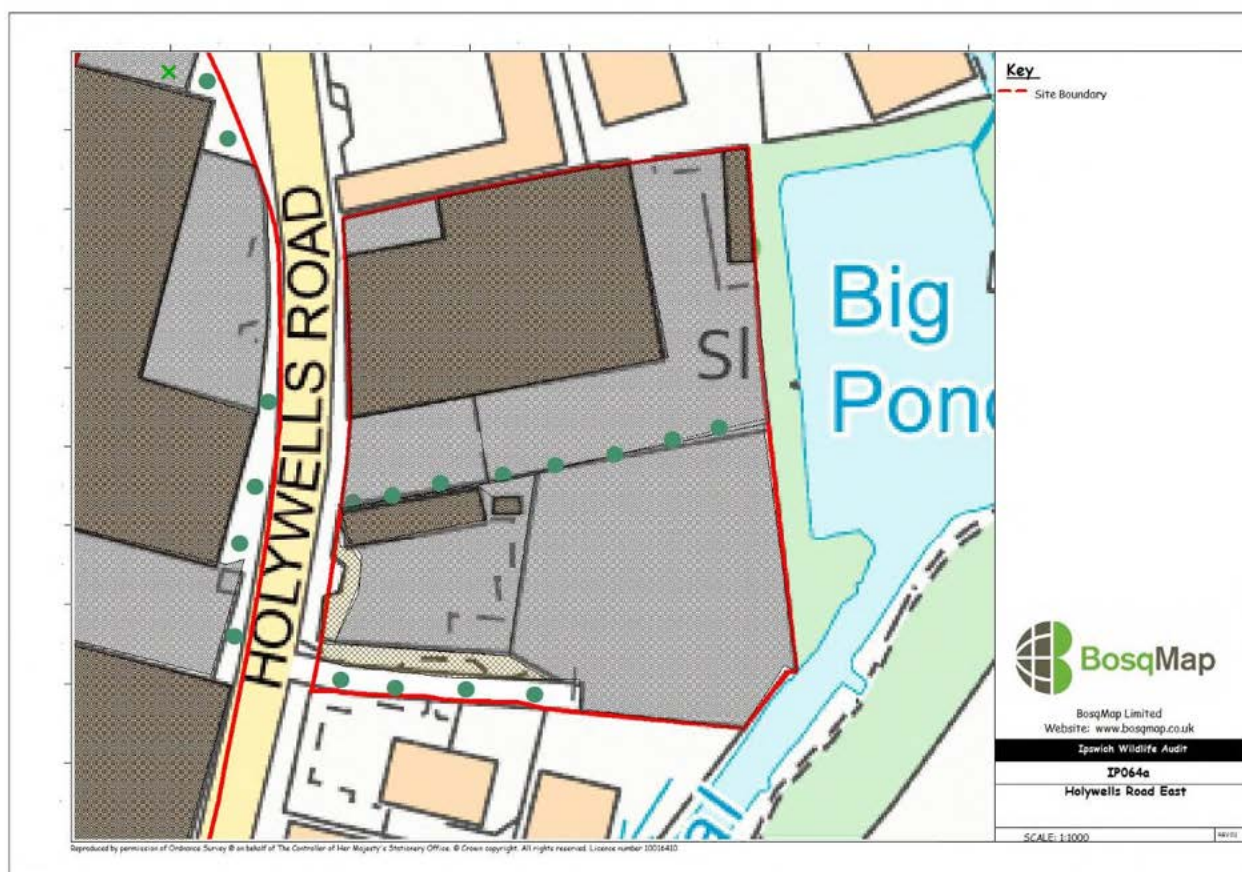
Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of the allocated greenspace.

Site name: Land between Holywells Road and Holywells Park

Site ref: IP064a
Site status: No wildlife designation
Grid ref: TM 17299 43506
Area: 1.2 hectares
Date: 28th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 27°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Looking east along tree line

Habitat type(s):

Hard standing, buildings, introduced shrub, scattered trees

Subsidiary habitats:

-

Site description:

This site is located between Holywells Road and Holywells Park CWS. The majority of it is buildings surrounded by hard standing. Currently it is used by businesses including storage facilities, vehicle workshop and car sales. There is a line of trees down the centre of the site and along the south-western boundary with some introduced shrub along the road edge in the southern part of the site.

Protected species seen or known:

Species in the area include:

Common pipistrelle bat
Soprano pipistrelle bat
Brown long eared bat
Daubenton's bat
Noctule bat
Serotine bat
Badger
Grass snake

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

-

Priority species potential:

Species in the area include:

Hedgehog

Stag beetle

Common toad

BoCC Red List birds including house sparrow and starling

BoCC Amber list birds including swift (Suffolk Character Species)

Connectivity:

This site is adjacent to Holywells Park CWS which provides good connectivity to the east. Otherwise it is surrounded by roads and industrial buildings.

Structural diversity:

The structural diversity is poor with only a few shrubs and trees.

Flora:

The flora on this site is extremely limited. The trees were largely sycamore, with some willow and wild cherry. There were a few areas of landscaping near the road with a mixture of ornamental species.

Avifauna:

This site has very limited opportunities for this group. The trees will provide some foraging, nesting and roosting opportunities for common species.

Invertebrates:

The habitat is poor for this group, although the landscaped areas provide nectar for some common species.

Herpetofauna:

There is no suitable habitat for this group, although reptile species are known to be present adjacent to the site in Holywells Park.

Mammals:

The habitat is sub-optimal for this group. Bats are likely to commute and forage over the large pond, canal and tree belt adjacent to the eastern boundary. Common species such as grey squirrel may be use the tree lines.

Comments and recommendations:

This site is proposed for housing on 100% of the site.

Japanese Knotweed and Himalayan Balsam have been recorded adjacent to the site. These species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive

species survey and further monitoring of this species is required to ensure it has not spread and colonised the site.

As the site is located adjacent to Holywells Park CWS the eastern boundary should be buffered from any development. There is an opportunity to strengthen the local ecological network by siting any new greenspace adjacent to the Park. New planting should use native planting local to the area for example a new hedge with berry producing shrubs such as hawthorn and dogwood. Similarly, holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Due to the proximity of the park, the lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Site name: JJ Wilson, White Elm Street

Site ref: IP066
Site status: No wildlife designation
Grid ref: TM 17441 43924
Area: 0.88 hectares
Date: 28th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 29°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Looking across the car park



Japanese Knotweed



Scrub in south-eastern corner

Habitat type(s):

Buildings, hard standing, ephemeral short perennial, dense scrub

Subsidiary habitats:

-

Site description:

This site is located south of Cavendish Street. The majority of the site is occupied by brick buildings dating from approximately 1974. Part of the site south of White Elm Street was surveyed in the 2012 audit, but the current site is larger. There is a small patch of dense scrub in the south-eastern corner of the site adjacent to Fore Hamlet.

Protected species seen or known:

Species in the area includes:

Common pipistrelle bat

Soprano pipistrelle bat

Brown long eared bat
Daubenton's bat
Noctule bat
Serotine bat
Natterer's bat
Common Lizard
Slow worm
Grass snake

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species in the area include:

Hedgehog
Common toad
Stag beetle
BoCC Red List birds including house sparrow and starling
BoCC Amber List birds including swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

Connectivity is poor, although the site is situated to the west of an area of private semi-natural habitat to the east.

Structural diversity:

The structural diversity is poor.

Flora:

There were several plants coming up in cracks in the hard standing and along the edge of the car park with species typical of this habitat including wall barley, barren brome, rat tailed fescue and fern grass, with prickly lettuce, Canadian fleabane, pellitory-of-the-wall, henbit dead nettle, red dead nettle, willowherb spp, groundsel, perennial sow thistle, creeping cinquefoil, coltsfoot, dandelion, black medick, redshank, fat hen, pineapple mayweed, flixweed, purple toadflax, curled dock and a liverwort spp. Occasional buddleia bushes are also colonising the site.

Japanese Knotweed was seen in the north-western corner of the site (Target Note 1).

The small area of scrub along Fore Hamlet was composed primarily of ash and sycamore with bramble and ivy also abundant.

Avifauna:

The site has very limited opportunities for this group apart from the scrub which provides some nesting opportunities for common birds.

Invertebrates:

The habitat is sub-optimal for this group, although the diversity of species colonising the site provides some nectar sources for common species. The area of scrub could provide habitat for stag beetles (Priority Species) if there is any subterranean dead wood present.

Herpetofauna:

There is no suitable habitat on site for this group.

Mammals:

The habitat is sub-optimal for this group, apart from common small mammals in the area of scrub.

Comments and recommendations:

This site is proposed for residential development.

Japanese Knotweed is a non-native ornamental plant which has escaped from cultivation to become a serious invasive species of urban and countryside areas. It spreads via rhizomes and even tiny fragments can result in a new plant. It is an offence to plant or cause Japanese Knotweed to spread in the wild under the Wildlife and Countryside Act (1981) as amended and all waste containing Japanese Knotweed comes under the control of Part II of the Environmental Protection Act (1990). It is therefore important that before any vegetation is cleared, or machinery is operating on site, safeguards are put in place to prevent the spread of this plant. Soil contaminated with Japanese knotweed is classed as Controlled Waste.

Any clearance of woody vegetation must take place outside the bird nesting season (March to end of August inclusive) unless a suitably qualified ecologist carries out a check immediately prior to work and confirms that no active nests are present.

Any greenspace provision should be located at the north-eastern end of the site as this is closest to the area of off-site, private semi-natural habitat. Any additional planting should seek to incorporate nectar and berry producing shrubs.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. Rain gardens are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Former British Energy Site

Site ref: IP067a & b
Site status: No wildlife designation
Grid ref: TM 17223 42333 / TM 17261 42144
Area: 0.38 hectares / 4.16 hectares
Written by: J Crighton
Date written: 30th August 2019
Recorder: Not Surveyed
Weather conditions: N/A
Ranking: 4 (based on the available information)
Biodiversity value: Medium

Map:



IP067a



IP067b

Habitat type(s):

Likely to be dense scrub, mature trees, rough grassland

Subsidiary habitats:

-

Site description:

It was not possible to access these sites. Preliminary assessment has been undertaken from available aerial imagery.

Located in an industrial area in the south of Ipswich, these sites make up the former British Energy site, which is now vacant. The northern-most site (IP067a) has a small boundary off Sandy Hill Lane, but the rest of both of the sites are enclosed on all boundaries by a large number of industrial buildings/water treatment works and a small number of residential dwellings on Piper's Vale Close in the north.

IP067a appears to be comprised of mature trees and a mown field.

IP067b appears to be largely comprised of dense scrub cover with some mature trees and small patches of grassland/bare ground. This area is likely to have biodiversity value.

Protected species seen or known:

Records in the surrounding area include:

Badger
Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat
Common lizard
Grass snake
Slow worm
Adder
Barn owl

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Common toad
Stag beetle
Cinnabar moth
Butterflies include grayling, silver-studded blue, wall, white admiral, white letter hairstreak and small heath
BoCC Red List birds include cuckoo, house sparrow, lapwing, lesser redpoll, linnet, skylark, song thrush, spotted flycatcher, starling and yellowhammer
BoCC Amber List birds include bullfinch, dunnoek, reed bunting and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site lies directly adjacent to the Volvo Raeburn Road Site County Wildlife Site (originally designated for its large population of bee orchids, but subsequently developed a grassland scrub mosaic) on its south-eastern boundary, which then connects to Piper's Vale County Wildlife Site habitat mosaic. The River Orwell County Wildlife Site lies to the west (also the Stour and Orwell Estuaries Ramsar site and Special Protection Area (SPA), and Orwell Estuary Site of Special Scientific Interest (SSSI)). This site contributes to an important continuous wildlife corridor throughout the south of Ipswich.

Structural diversity:

This site appears to have excellent structural diversity with varying heights offering several habitat types including bare ground, grassland, scrub and trees.

Flora:

Given the sandy, dry nature of the soil in this area, gorse, broom and bramble are likely to be present, along with silver birch and oak (potentially similar to IP143) to the north-west.

Avifauna:

IP067b is of particular importance to nesting birds. The undisturbed nature of the site and the large expanse of dense scrub with trees will offer nesting, foraging and breeding opportunities to a number of resident and summer migrant species.

Invertebrates:

The diversity of habitats on the sites, including a number of native trees and scrub, should provide a high invertebrate biomass and diversity. Stag beetles are highly likely to be present on site where there is subterranean deadwood suitable for their larvae.

Herpetofauna:

Although these sites are heavily scrub dominated, there is some potential to support a population of common reptiles including grass snake, common lizard and slow worm.

Mammals:

It is possible that some of the mature trees within the wooded area may contain features suitable for roosting bats. The entire site is likely to be used by foraging bats and the wood belts continuing to the east and west offers a good commuting corridor.

Scrub provides good habitat for badger.

The scrub also provides nesting and hibernation opportunities for hedgehogs using the local area. There are a number of records of them from the surrounding area.

Common species of mammal such as fox, rabbit, muntjac deer are likely to forage on this site. Mice, voles and shrews are also likely to be present in the rough grassland areas and the scrub. Small predatory species such as stoat and weasel are likely to be present.

Comments and recommendations:

These two sites were originally one application site and have recently been split. IP067a is proposed for the siting of 17 residential dwellings at medium density (45dph). IP067b is allocated for industrial (B-Class) and appropriate employment-generating sui generis uses on 20,000sqm of the site. These sites carry the risk of surface water flooding.

Prior to any development, a preliminary ecological appraisal of the site, along with any required species-specific surveys will need to be undertaken.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, to deliver locally accessible natural greenspace. In this instance, a habitat mosaic of grassland, scrub and woodland should be retained. All retained features should not be subjected to any light spillage so any lighting scheme should be designed to prevent this. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. New planting should seek to use native species typical of the local area.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the likely nature of the existing habitat on this site, it is possible that future development will require compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions. Rain gardens are another option and are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

The industrial buildings could offer the potential to include green roofs and/or living walls. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. And living

walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates. Both of these options can provide important stepping stone habitat in urban areas.

In addition to this, action can be taken for individual species such as swifts, bats, reptiles, stag beetles and other invertebrates.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Given that reptiles are likely to be present, mitigation for impacts on the reptile population will be required and ideally populations should be retained on site in conjunction with additional habitat enhancement. In order to achieve this, log piles for basking reptiles sited over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. This structure will also benefit amphibians and could also be used to provide stag beetle habitat if logs are buried to support their larvae.

If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing soil conditions, eg. either sandy and free draining or if there are heavier soils. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

Site name: Reeves Yard and The Black Barn, Upper Orwell Street

Site ref: IP074

Site status: No wildlife designation

Grid ref: TM 16753 44496

Area: 0.07 hectares

Date: 29th July 2019

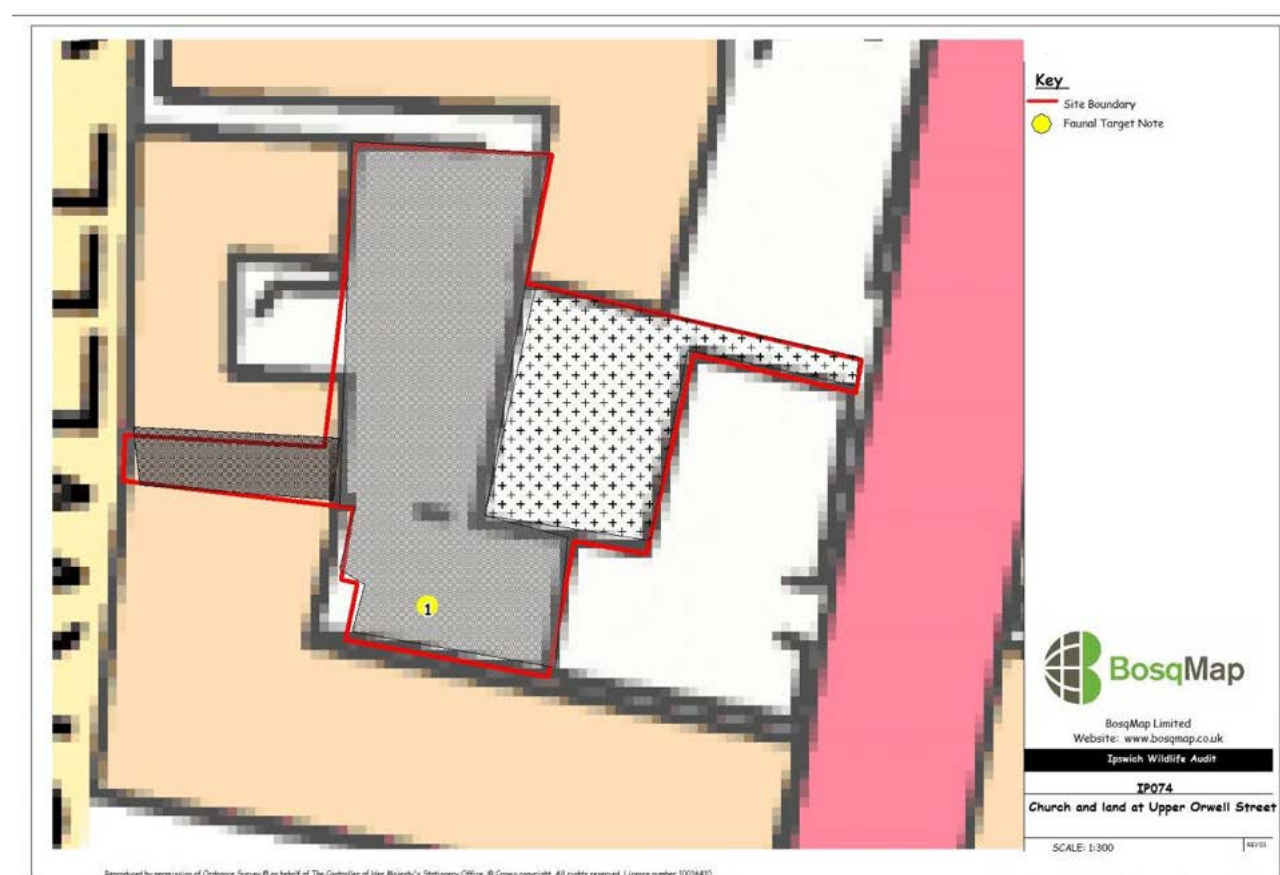
Recorder: J Crighton

Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C

Ranking: 6

Biodiversity value: Low

Map:



Photos:



Looking east across site



Burnt out church building to the north of the site

Habitat type(s):

Hard standing, ephemeral short perennial, scattered scrub

Subsidiary habitats:

Rubble pile

Site description:

This site is accessed via a walkway off Upper Orwell Street, west of Bond Street. It is within an Area of Archaeological Importance adjacent to the Central Conservation Area. It lies south of the St Michael's Church ruins. Reeves Yard is a small, private area currently used for parking, with a fenced area containing evidence of a previously demolished building. A rubble pile is present in the south of the site (Target Note 1).

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site is isolated being in a heavily built-up area, surrounded by houses.

Structural diversity:

This site, albeit small, has moderate structural diversity. The bare ground, rubble, sparse vegetation and scrub offer different substrates for habitation and the adjacent buildings offer additional potential habitat.

Flora:

The site is relatively sparsely vegetated with a small area of scrub on the eastern boundary containing mainly sycamore and buddleia. Some vegetation is present throughout the rubble and bare ground including pellitory of the wall, lesser burdock, hedge mustard, creeping thistle, smooth sow thistle, fat hen, black nightshade, green alkanet and wall barley, all of which are typical of this type of habitat.

Avifauna:

It was a sub-optimal time of year for recording this group. However, a small flock of house sparrows (approximately 6) were noted feeding within the rubble and a wood pigeon was perching on a roof. The site currently has limited opportunities for this group.

Invertebrates:

The bare ground and rubble areas with forbs and scrub vegetation could support common and widespread invertebrates. Buddleia will likely attract bees and butterflies.

Herpetofauna:

Although this site contains a rubble pile, sparse vegetation, scrub and bare ground areas which would normally offer good habitat for reptiles, it is too small and isolated to support a population.

Mammals:

The adjacent burnt-out church ruins could support roosting bats and possibly provide refuge for hedgehogs depending on access points.

Comments and recommendations:

Proposals for this site include 9 dwellings.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, a landscaping scheme could include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates. Rain gardens would also benefit local biodiversity and are most effective when larger in size. They slow down run-off from downpiped or paved areas and require free-draining soils in trenches. They can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can also provide important stepping-stone habitat in urban areas.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: 240 Wherstead Road

Site ref: IP080
Site status: No wildlife designation
Grid ref: TM 16299 43000
Area: 0.49 hectares
Date: 5th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 25°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Large mound in the centre of the site



Low growing vegetation and disused building to the rear of the site

Habitat type(s):

Buildings, hard standing, scattered coniferous tree, scattered scrub, tall ruderal, ephemeral short perennial

Subsidiary habitats:

-

Site description:

This is a small site situated to the west of the Wherstead Road, adjacent to a branch line of the Ipswich to London railway line. It consists of a steeply sloping bank coming away from the railway which has a mixture of tall ruderal vegetation, ephemeral short perennial vegetation, scattered scrub, and scattered trees. A tall leylandii hedge is present at the top of the slope. There is a long, thin brick building near the western boundary of the site. There was no access to this site so it was assessed from the boundary along Wherstead Road only and therefore the southern section of this site could not be viewed.

Protected species seen or known:

Species recorded in the area includes:

Badger
Brown long eared bat
Daubenton's bat
Common pipistrelle bat
Soprano pipistrelle bat
Serotine bat
Noctule bat
Common lizard
Slow worm
Grass snake

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species in the area include:

Hedgehog

Stag beetle

Common toad

BoCC Red List birds include herring gull, house sparrow and starling.

BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

This site has very good connectivity via the railway lines which provide a good wildlife corridor in this part of the Town.

Structural diversity:

The structural diversity is moderate with low growing vegetation, scrub and occasional trees.

Flora:

There is a good diversity of species typical of this habitat type including false oat and wall barley grasses with toadflax, Canadian fleabane, rosebay willowherb, wild carrot, poppy, bristly ox-tongue, perennial sow thistle, beaked hawk's-beard, dove's-foot cranesbill, herb Robert, mare's-tail, hedge bindweed and cleavers.

The trees and scrub seen included bramble, honeysuckle, sycamore and sweet chestnut as well as large leylandii.

Avifauna:

The time of year was sub-optimal for recording this group, however the habitat provides good foraging, nesting and roosting opportunities for a range of bird species.

Invertebrates:

The plant assemblage as well as the range of sward heights provide some habitat for this group.

Herpetofauna:

The habitat is suitable for this group and due to its proximity adjacent to the railway line there is a high likelihood that reptiles are present. The bank also provides good hibernation opportunities for them.

Mammals:

The site provides good habitat for this group. Bats are highly likely to commute and forage along the railway line. There are badger records in the area but the lack of access means that the presence of this species on site cannot be ruled out. Hedgehogs may be present if they can access the site from the adjacent residential properties. Common species of mammals including grey squirrels and mice, voles and shrews are likely to be present.

Comments and recommendations:

This site is proposed for residential housing.

An ecological appraisal of this site should be undertaken prior to development, along with any species-specific surveys highlighted in the report. These are likely to include, but not be limited to, reptiles, bats and badgers. Given the nature of the site this should also encompass the potential for invasive plant species.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

This site is located adjacent to the railway line. There is an opportunity to strengthen the local ecological network by enhancement of on-site habitats adjacent to this feature. As such any residential lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

In addition, action can also be taken for individual species including reptiles, stag beetles, swifts and hedgehogs.

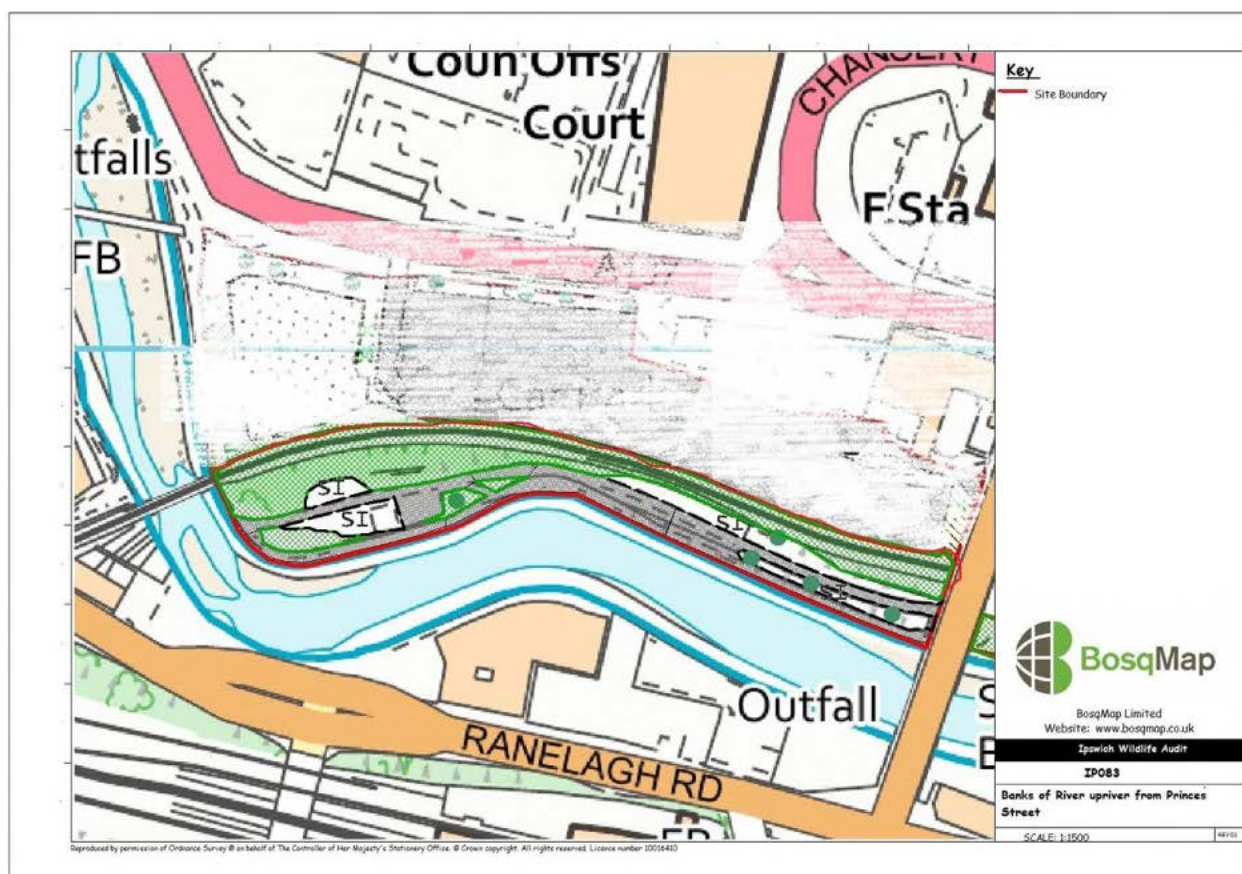
As reptiles are highly likely to be present on or adjacent to the site, a log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. These features also provide good habitat to support stag beetles whose larvae require subterranean dead wood.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Site name: Banks of River upriver from Princes Street

Site ref: IP083
Site status: No wildlife designation
Grid ref: TM 15538 43936
Area: 0.75 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 30°C
Ranking: 4
Biodiversity value: Medium

Map:



Photos:



Dense scrub with clematis along river walk



River walk path with grassland and scrub edgings



River Orwell with little egrets and gulls (black headed and herring)

Habitat type(s):

Dense continuous scrub, poor semi-improved grassland, scattered trees

Subsidiary habitats:

Bare ground, bank, bridge

Site description:

This site forms part of the river path along the northern bank of the River Orwell, south of a public car park (Site IP015). The former rail bridge crosses at the western boundary and the eastern boundary is the Princes Street bridge (B1075). The site is dominated by dense scrub, but there are some areas of grassland which have been managed to provide public seating areas.

The path is evidently well-used but a large volume of litter was observed. There is also evidence of rough sleeping within the scrub.

Protected species seen or known:

Records in the surrounding area include:

Otter

Water vole

Badger

Slow worm

Grass snake

Common lizard

Great crested newt

Daubenton's bat

Natterer's bat

Noctule bat

Common pipistrelle bat

Soprano pipistrelle bat

Common seal and common porpoise associated with the river corridor

Protected species potential:

-

Priority habitats present:

River (southern boundary)

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Common toad

Swift (Suffolk Character Species)

Five-banded weevil wasp

Associated with the river corridor, BoCC Red List birds include herring gull, curlew, common scoter,

white-fronted goose and yellow wagtail, and BoCC Amber List include black-tailed godwit, black-throated diver, dark-bellied Brent goose and little tern. Lesser black-backed gull seen.

Associated with the scrub, Red List birds include house sparrow, starling, linnet and song thrush, and Amber List birds include dunnoek.

Priority species potential:

-

Connectivity:

This site has good connectivity along the River Orwell, with continuous dense scrub along the banks. The Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar site, including the Orwell Estuary Site of Special Scientific Interest (SSSI) is situated 1.9km to the south east (2.8km via the river corridor).

Structural diversity:

Albeit limited by size, this site has excellent structural diversity with dense scrub with trees, banks with some ruderal vegetation and dry grassland offering a range of habitats. Additionally, the adjacent River Orwell offers an entirely different habitat used by specialist groups such as waders and wildfowl.

Flora:

This site offers a wide range of botanical interest, with the verge along the river path containing species typically associated with brackish or salt-water including sea couch, sea beet and dittander. The scrub along the majority of the site comprises of buddleia, dog rose, hazel, silver birch, dogwood, hawthorn, lilac, grey willow, crack willow and elder with some more mature specimens including field maple, sycamore cherry, apple and young oak trees. The scrub is particularly dense where bramble and traveller's joy are present.

Some significant features of the site include a raised bank near the centre and several small patches of parched, dry grassland. The bank is partially covered with scrub but also supports some tall forbs such as tansy, wild parsnip, perforate St John's wort, curled dock, ragwort, prickly lettuce and fennel. The parched grassland is dominated by hare's foot clover but also contains knotgrass, lesser trefoil, and melilot sp., with creeping bent and annual meadow grass. Some evidence of non-native species such as sumac and bamboo are present in this area.

Towards the west, the site narrows and there is bracken alongside some planted saplings with tree guards, including hazel and hawthorn.

Avifauna:

It was a sub-optimal time of year for recording this group. However, there are two specialist habitat types which this site offers. The first is the dense scrub within the site itself which could support common assemblages of nesting bird, as well as birds of conservation concern including house sparrow, linnet, starling and dunnoek and may attract summer migrants such as whitethroat. The second habitat is the adjacent river and riparian corridor, which is important for wading birds and gulls. Noted during the survey were little egrets, black-headed gull, lesser black-backed gull,

oystercatcher and moorhen.

Invertebrates:

The diversity of habitats on site, with a patchy mosaic including a substantial number of native trees and scrub adjacent to grassland provides nectar sources, sunny hotspots, variable microclimates and sheltering opportunities for a rich invertebrate community. Noted during the survey were numerous butterflies including gatekeeper, large white and brimstone along with grasshoppers, crickets, bees and spiders. Therefore, this site offers a haven for invertebrates in a largely built-up area. Nearby records exist for five-banded weevil wasp which burrow into sandy soil.

Herpetofauna:

There are records of slow worm, common lizard and grass snake associated with the River Orwell adjacent to the site. The habitat and abundance of invertebrate prey means that the presence of reptiles such as slow worm and grass snake is highly likely, particularly along the river path walk.

Despite a record of great crested newt to the east of the site, it is unlikely to support this species due to a lack of connectivity to suitable breeding habitats for this group. Common toad could be present associated with the river corridor.

Mammals:

Although there are no trees within the site with a suitable age or structure to support roosting bats, they are likely to commute along the river corridor and the site offers valuable foraging habitat. Several species of bat have been recorded in the locality.

There is a record of otter to the south of the site, on the opposite bank of the River Orwell. Otters are highly mobile species, so the river corridor is likely to be regularly used for commuting and foraging. The scrub provides habitat capable of supporting an otter holt or resting place. However, there was no evidence that otters were using this area at the time of the survey and a high volume of littering and human disturbance is likely to discourage use by otters, so any activity is likely to be transient. Additionally, although there are local records of water vole, the river in this area does not offer any potential burrowing opportunities.

There are records of hedgehog from various areas surrounding the site, and they are likely to use the scrub for refuge and hibernation.

Comments and recommendations:

The primary allocation of this site is as continued use as public open space with a new cycle path.

Japanese knotweed and Japanese rose have been recorded associated with the train station on the opposite side of the River Orwell. These species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although not recorded on site, this assessment does not constitute an invasive species survey, so further surveys for these species are advisable to ensure they have not colonised the site.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check. In addition, if any scrub

is to be removed, then consideration should be given to the potential impacts upon the local hedgehog population and how this can be limited.

We also recommend a survey for reptiles if any suitable habitat is to be impacted by development. As reptiles are highly likely to be present on the site, a log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace, potentially on the edge of the scrub. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with loose rubble (such as brick) and log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time.

This site is located adjacent to the River Orwell and there is an opportunity to strengthen the local ecological network by encouraging further growth of scrub and grassland habitat in species-poor amenity grassland areas offsite to the west.

Additionally, there is the potential for the disused railway bridge to further improve terrestrial connectivity with the opposite bank. For example, climbers such as clematis and honeysuckle should be encouraged to grow up part of the structure.

As this site is located next to the River Orwell, any new lighting scheme should be designed to prevent light spillage into this area, or the scrub habitat above the banks. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Whilst public open space could benefit from the installation of an interpretation panel in order to showcase the presence of on-site habitats and species, this would have to be weighed up against the likelihood of it being vandalized.

In addition to this, action can be taken for individual species such as eels.

Since the mid-1980s there have been drastically declining numbers in eel populations. An important contributing factor to this decline is thought to be the addition of water control structures such as weirs and gauging stations, which present a barrier to the natural migration of eels and elvers. A potential solution to the problem is the installation of a suitable 'eel pass' to the obstruction. Detailed information can be found in the "Elver and eel passes; A guide to the design and implementation of passage solutions at weirs, tidal gates and sluices" (Gregory *et al*, 2017). This could be offered as off-site net gain.

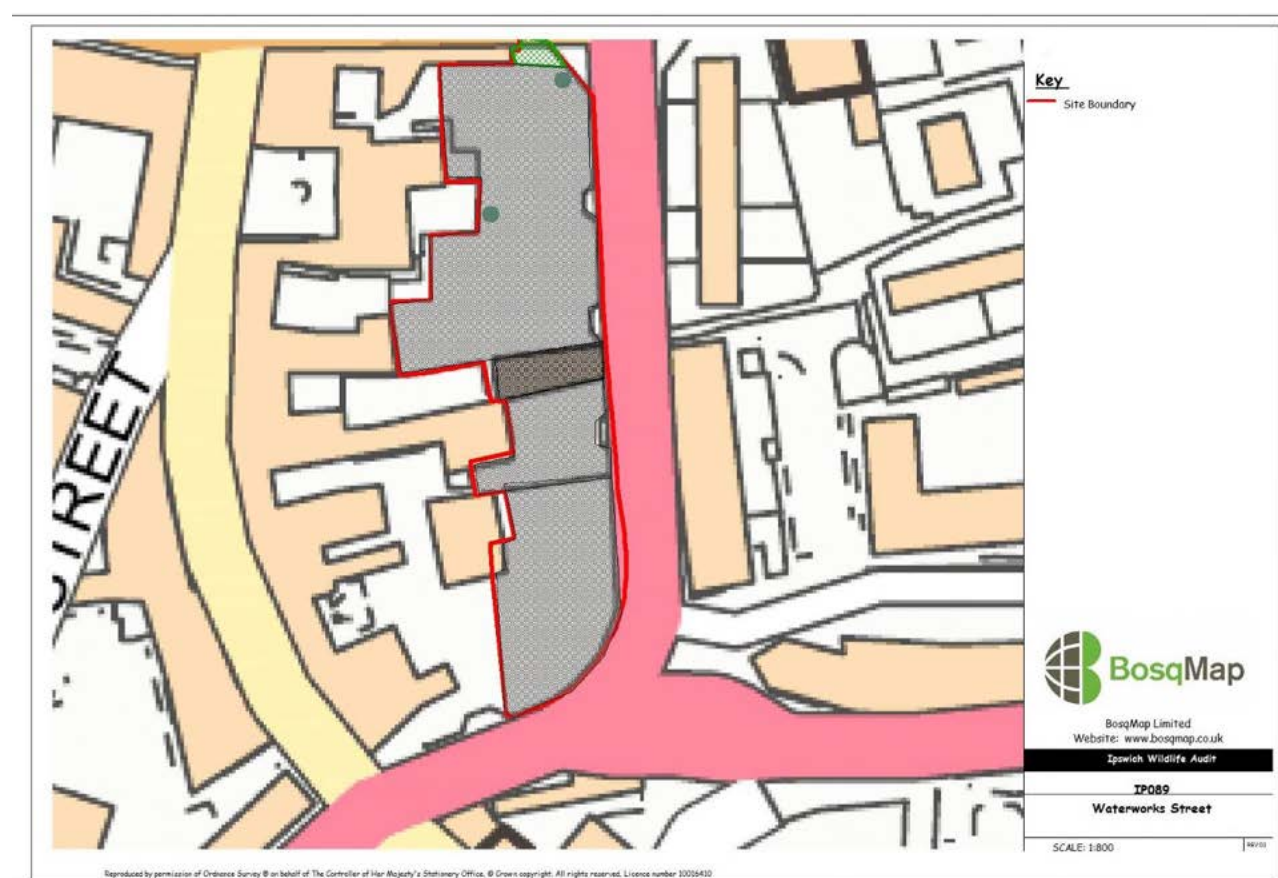
References:

Gregory, J. *et al* (2017). *Elver and eel passes; A guide to the design and implantation of passage solutions at weirs, tidal gates and sluices. The Eel Manual – GEHO0211BTMV-E-E*. Bristol, Environment Agency

Site name: Waterworks Street

Site ref: IP089
Site status: No wildlife designation
Grid ref: TM 16754 44315
Area: 0.3 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Tall lime tree in northern section



Walnut tree and adjacent building

Habitat type(s):

Buildings, hard standing, dense/continuous scrub, scattered broad-leaved trees

Subsidiary habitats:

Wall surfaces

Site description:

This site comprises two car parks, separated by a row of dwellings across the centre. The site lies directly west of Waterworks Street and backs on to the dwellings and businesses east of Fore Street and Dedham Place, with Eagle Street and Star Lane forming the northern and southern boundaries.

It is within the Anglo-Saxon and medieval core; an Area of Archaeological Importance, partly within the Central Conservation Area. There are several listed buildings adjacent to the site and one or both of the trees present are protected by Tree Preservation Orders. The central section of the site contains part of the old Ipswich Ragged School, founded in 1849. Both of the car parks are surrounded by brick walls.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat

Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Swift (Suffolk Character Species)
Starling
Song thrush
House sparrow

Priority species potential:

-

Connectivity:

This site is largely isolated being surrounded by busy roads within a densely built-up area. However, there are some small areas of garden close to the site which offer a small degree of connectivity.

Structural diversity:

Structural diversity is limited being mostly buildings and hard standing. The small area of scrub and mature trees in the northernmost section offer some height differences and the walls and roofs could offer an additional substrate for growth, although nothing has yet colonised this niche habitat.

Flora:

A single, very impressive tall lime is located on the raised bed in the middle of the northern car park. In addition to this a mature walnut tree is present in the north-eastern corner along with a small area of buddleia scrub.

Avifauna:

It was a sub-optimal time of year for recording this group. However, a fledgling house sparrow was noted in an adjacent garden and the tall lime tree could offer potential nesting opportunities for common species.

Invertebrates:

The site is currently sub-optimal for this group. However, the buddleia is likely to attract bees and butterflies.

Herpetofauna:

There are no opportunities for this group within this site.

Mammals:

The mature lime tree on the site, and the inclusive and adjacent dwellings/buildings could offer potential roosting features for bats.

The adjacent gardens may also be visited by hedgehogs, with access across the site.

Comments and recommendations:

Proposals for the site include the demolition of the existing 5 dwellings and the erection of 23 dwellings at high density (90 dph).

Although this site is currently of low wildlife value, we strongly recommend the retention of the mature trees on site.

In addition, the buildings could support bats and consequently further surveys are recommended. The lime tree should also be assessed for potential bat roosting features.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, a landscaping scheme could include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

There is also the opportunity to target individual species, such as the installation of swift and bat boxes.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes can be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

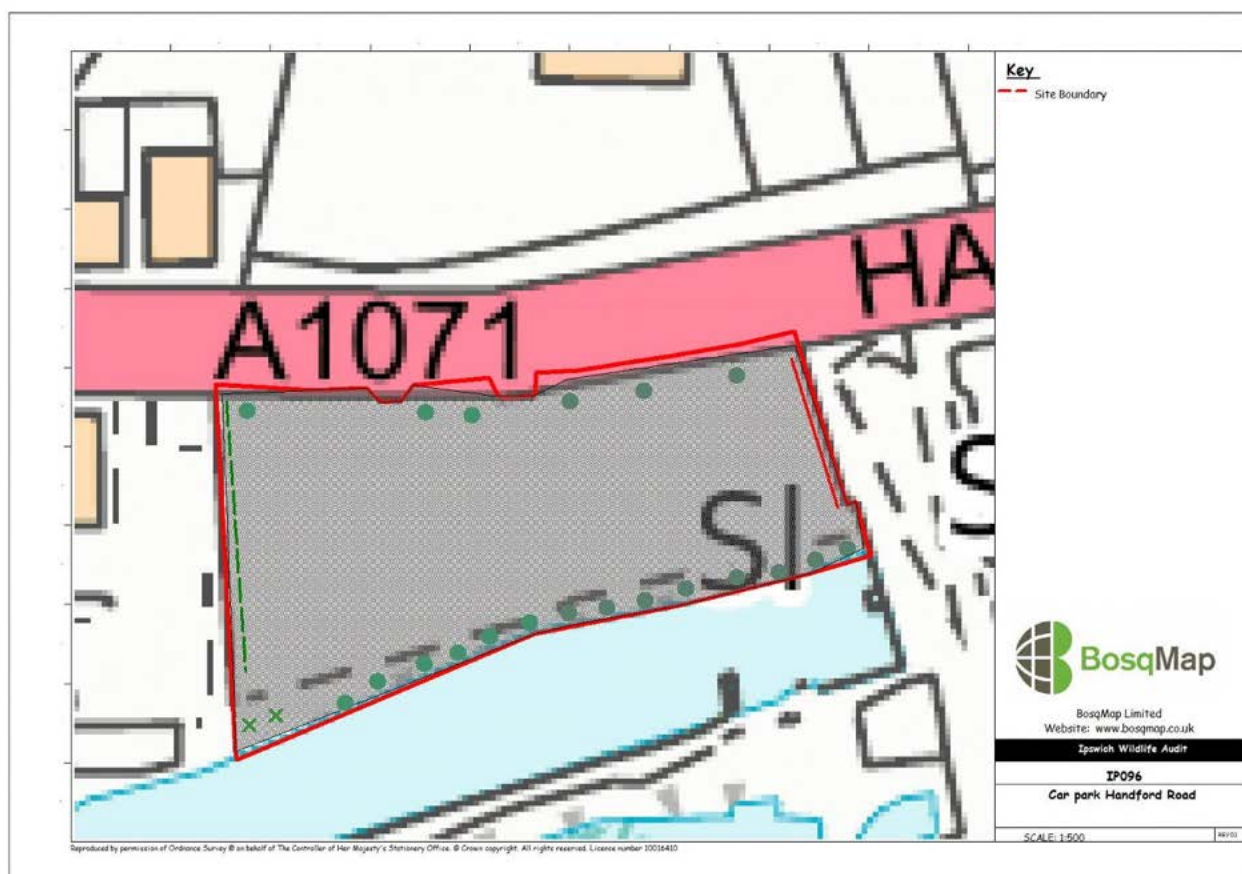
Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Car Park Handford Road

Site ref: IP096
Site status: No wildlife designation
Grid ref: TM 15611 44572
Area: 0.22 hectares
Date: 25th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 24°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View east with tree belt alongside the Alderman Canal CWS

Habitat type(s):

Hard standing, scattered scrub, broadleaved trees, defunct species-poor hedge

Subsidiary habitats:

Wall

Site description:

This site is currently a public car park in Handford Road and is largely hard standing. There is a tree belt along the southern boundary of the site which is adjacent to the Alderman Canal County Wildlife Site (CWS). Along the western boundary is a defunct species-poor hedge. There is a line of five poplar trees along the road edge.

Protected species seen or known:

Species recorded in the area include:

Common pipistrelle bat

Soprano pipistrelle bat

Natterer's bat

Noctule bat

Grass snake

Slow worm

Otter

Water vole

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog

Common toad

Stag beetle

BoCC Red List birds including house sparrow, starling, song thrush and yellow wagtail

BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The Alderman Canal provides good connectivity to the River Gipping and Orwell. The Alderman Canal recreation ground lies to the south of the car park.

Structural diversity:

The structural diversity is poor apart from the southern tree belt.

Flora:

Due to the nature of the site the flora is limited. The tree belt adjacent to the Alderman Canal has a reasonable diversity of woody species including oak, ash, hornbeam, sycamore, wild cherry, field maple, hawthorn, prunus spp and dog rose. The ground flora was poor with occasional nettle, mugwort and black horehound.

The western boundary was dominated by sycamore, hops and ivy with a very large ivy-covered sycamore.

The trees along the road are poplars.

Avifauna:

The tree belt provides foraging, roosting and nesting opportunities for a range of species. It was a sub-optimal time of year for recording this group. Swifts (Suffolk Character Species) were noted foraging overhead.

Invertebrates:

Although the majority of the site is poor for this group, the margins provide some habitat for common invertebrate species. There are several areas dominated by ivy which provide an excellent nectar source for insects and a number of bees and hoverflies were seen on it. Small white butterfly was also seen. The tree belt may provide good habitat for stag beetles (Priority Species), whose larvae depend on subterranean dead wood.

Herpetofauna:

The majority of the habitat is unsuitable for this group, although due to the proximity of the canal grass snake may use the southern margin.

Mammals:

Although the majority of the site is sub-optimal for mammals, the margins provide suitable habitat for some species. Bats are likely to forage and commute along the Alderman Canal and some of the more mature trees along the southern margin have features which could support a bat roost. Otter has been recorded in the canal although they are only likely to pass by the site due to the high levels of disturbance. Hedgehogs are regularly recorded in the area and the tree belt provides foraging and nesting opportunities for them. Other common mammals such as grey squirrels and deer as well as small mammals such as mice, voles and shrews are also likely to be present along the river corridor.

Comments and recommendations:

This site has been allocated for residential housing at high density.

The trees along the southern boundary were not fully assessed for their potential to support a bat roost. If these trees are affected by any scheme, further bat assessment will be required. Scrub or tree clearance should not be undertaken in the bird nesting season unless a suitably qualified ecologist has indicated that no active bird's nests are present.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, particularly the tree belt along the southern boundary adjacent to the Alderman Canal CWS. There is an opportunity to strengthen the local ecological network by enhancement of on-site habitats or the creation of new habitat adjacent to this feature. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks, therefore the scheme must maintain some open space adjacent to the Alderman Canal. The residential lighting scheme should be designed to prevent light spillage into areas specifically retained for wildlife. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. For example, rain gardens are most effective when larger in size and they slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping stone habitat in urban areas.

Holes in fences for hedgehog should be part of this new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings

such as flats using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of the allocated greenspace.

Site name: Transco south of Patteson Road

Site ref: IP098

Site status: No wildlife designation

Grid ref: TM 17130 43572

Area: 0.57 hectares

Date: 28th July 2019

Recorder: A Looser

Weather conditions: Hot and sunny, 27°C

Ranking: 6 (based on assessment from boundaries)

Biodiversity value: Low

Map:



Photos:



View from Cliff Road

Habitat type(s):

Hard standing, buildings, ephemeral short perennial, scattered scrub

Subsidiary habitats:

-

Site description:

This site is located to the south of Patteson Road, west of Cliff Lane. It is located approximately 80m east of the River Orwell CWS. This site was fenced off and could only be assessed from the boundaries. It has formerly been used for industrial purposes, although it appears to be currently disused and vegetation is colonising the site.

Protected species seen or known:

Species in the area include:

Common pipistrelle bat

Soprano pipistrelle bat

Brown long eared bat

Daubenton's bat

Noctule bat

Serotine bat

Common lizard

Grass snake

Slow worm

Great Crested Newt

Badger

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Hedgehog

Stag beetle

Common toad

BoCC Red List birds including herring gull, house sparrow and starling

BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

This is a small site in a built-up area of the Town. Although it is only approximately 80m from the River Orwell CWS there is currently no direct connectivity.

Structural diversity:

The structural diversity is moderate at the current time but will improve if the site continues to be abandoned.

Flora:

The flora is limited due to the nature of this site. The plants noted from the boundaries which have started to colonise are typical of brownfield habitats including false oat grass, wild carrot, weld, poppy and ivy, with occasional buddleia bushes.

Avifauna:

This site is currently sub-optimal for this group, although the plants will provide some foraging opportunities for them. The scattered scrub may also provide limited nesting opportunities for common species.

Invertebrates:

The habitat is sub-optimal for this group, although the plants will provide nectar sources for common species.

Herpetofauna:

The habitat currently has low suitability for this group.

Mammals:

The habitat is largely sub-optimal for this group, although common small mammal species such as mice, voles and shrews are likely to be present.

Comments and recommendations:

This site is proposed for housing at high density.

Japanese Knotweed has been recorded approx. 200m east of the site. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was seen during the survey, this site was not accessed and this assessment does not constitute an invasive species survey. Further monitoring of this species is required to ensure it has not spread and colonised the site.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

Rain gardens can form part of a sustainable drainage scheme and are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide important stepping-stone habitat in urban areas.

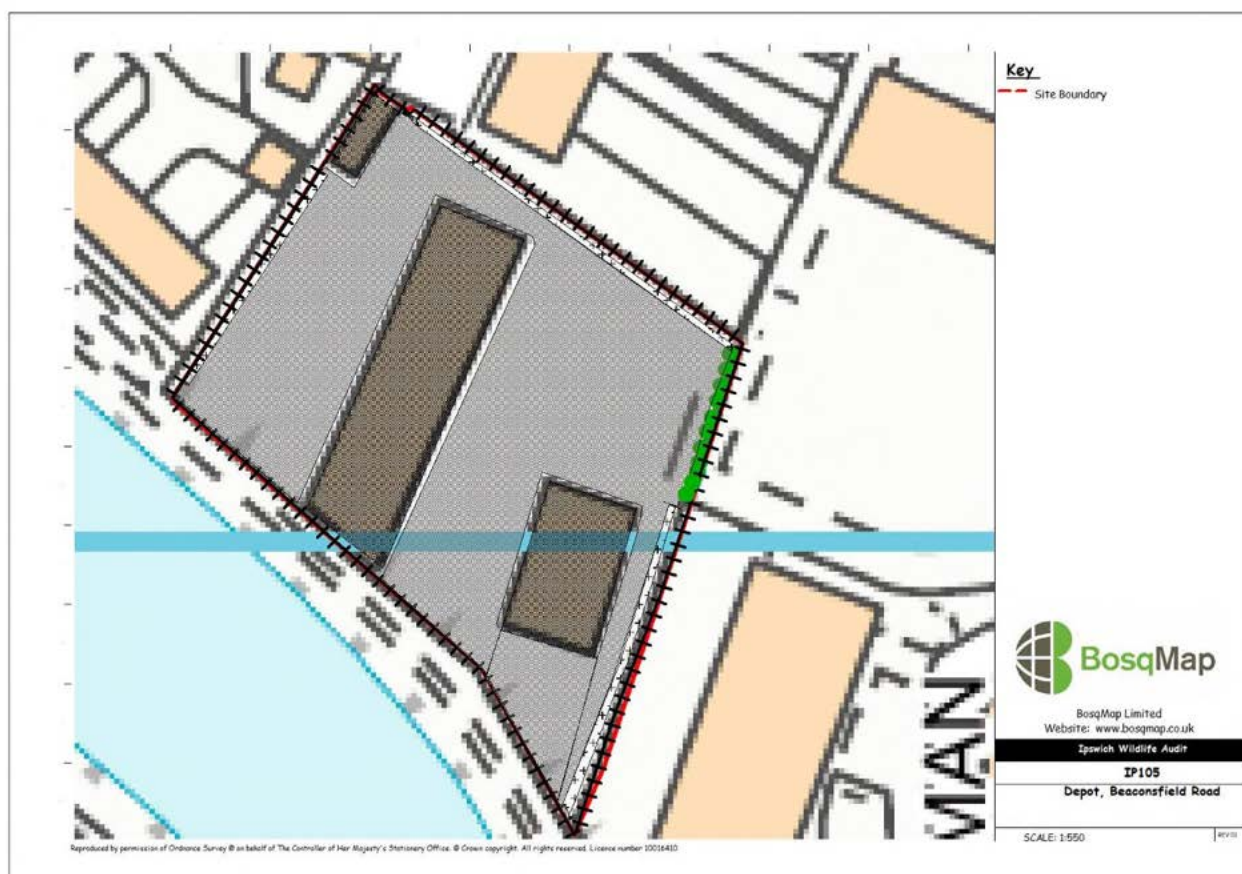
It is unknown whether the proposals are for houses or flats. Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings such as flats using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Depot, Beaconsfield Road

Site ref: IP105
Site status: No wildlife designation
Grid ref: TM 14902 45011
Area: 0.33 hectares
Date: 25th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 27°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



View south-west across site

Habitat type(s):

Hard standing, buildings, ephemeral short perennial, scattered coniferous trees

Subsidiary habitats:

-

Site description:

This site is currently a depot, situated at the southern end of Beaconsfield Road. The majority of the site is hard standing with buildings. The River Gipping lies adjacent to the site on the south-western side. There is a short stretch of leylandii hedge along the north-eastern edge. The margins are rough with ephemeral short perennial vegetation coming through.

Protected species seen or known:

Species recorded in the surrounding area include:

Common pipistrelle bat

Soprano pipistrelle bat

Daubenton's bat

Natterer's bat

Noctule bat

Grass snake

Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the surrounding area include:

Hedgehog

Stag beetle

Common toad

BoCC Red List bird species including herring gull (seen), house sparrow and starling

BoCC Amber List birds including swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is adjacent to the River Gipping which represents a good wildlife corridor on the western boundary. The gardens also provide a degree of connectivity. Otherwise it is surrounded by roads and residential housing.

Structural diversity:

The structural diversity is poor.

Flora:

Due to the nature of the site the flora is limited. However, the narrow margins have some diversity with barren brome and false oat grasses, Canadian fleabane, perennial sow thistle, smooth hawk's-beard, greater celandine, coltsfoot, prickly lettuce, rosebay willowherb, hedge bindweed, dove's-foot cranesbill, yarrow, poppy and nettle.

There is some scattered scrub also around the margins including buddleia, privet, elder, hops, bramble, dog rose and honeysuckle.

Avifauna:

The habitats on site are sub-optimal for this group. However, the roofs of the buildings provide roosting and nesting opportunities for gulls and herring gull (Priority species) was seen during the visit. Swifts (Suffolk Character Species) were also seen feeding overhead although there is not thought to be any nesting opportunities for this species. The scrub and leylandii hedge will provide some habitat for other common bird species.

Invertebrates:

Although much of the habitat is unsuitable for invertebrates, the edges provide a nectar source for common species. Green veined white, small white and small skipper butterflies were noted during the visit as well as a brown hawker dragonfly.

Herpetofauna:

Slow worm has been recorded adjacent to the site but the habitat is largely unsuitable for this group. However due to the proximity of the river corridor small numbers of slow worm could be present in

the narrow, vegetated margins if there is access beneath the fence. There is no suitable habitat for amphibians.

Mammals:

The habitat is sub-optimal for this group. However, a dead hedgehog was seen in Beaconsfield Road close to the site entrance and they are likely to navigate through the site to get between the river corridor and the gardens surrounding the site. Bats will use the adjacent river corridor for foraging and commuting.

Comments and recommendations:

This site is proposed for medium density housing development.

To reduce impacts upon slow worm, it is recommended that the margins of the site are cut short ahead of construction commencing.

As this site is located next to the River Gipping any lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

There is an opportunity to strengthen the local ecological network by creation of new habitat adjacent to this feature. New habitat should use native planting such as a new hedge incorporating berry-producing scrubs such as hawthorn and dogwood. Alternatively, a nectar rich wildflower strip could be sown, although this would require a higher degree of maintenance to retain its biodiversity value.

Given the proximity of the river corridor, holes in fences for hedgehog should be part of this new housing proposal, to maintain landscape permeability for this wide-ranging, declining species.

It is unknown whether houses or flats are proposed for this site. Swifts are a fast-declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into new taller buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Jupiter Road/Reading Road

Site ref: IP109

Site status: No wildlife designation

Grid ref: TM 18679 45135

Area: 0.49 hectares

Date: 29th July 2019

Recorder: J Crighton

Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C

Ranking: 4

Biodiversity value: Medium

Map:



Photos:



Looking south across the site from the northern-most point



East of the road through the site



West of the road running through site



Looking north up the road running through site

Habitat type(s):

Poor semi-improved grassland, ephemeral short perennial, scattered scrub, dense continuous scrub

Subsidiary habitats:

Deadwood, rubble and brash piles,

Site description:

This site is a relatively small, narrow area between the residential dwellings and gardens fronting Jupiter Road to the east and Reading Road to the west. The Drift, which is a minor dead-end road, runs through the centre of the site from Woodbridge Road and terminates at the gates to a small urban park, currently used as a sports pitch, north of the site.

The site once contained a number of garages which have now been demolished and has become overgrown with vegetation. There are some small business units south of the site and several sections fenced off with closed-boarding, so access was not possible. The two visible sections, in the north east and north west of the site are fenced off, so all assessment was carried out from the road.

Protected species seen or known:

Records in the surrounding area include:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Serotine bat
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Common toad
Stag beetle
Swift (Suffolk Character Species)

BoCC Red list birds include house sparrow, linnet, song thrush and starling. Amber List birds include Dunnock.

Priority species potential:

Cinnabar moth

Connectivity:

This site is directly south of a small urban park surrounded by trees, and the rest of the site is bounded by residential gardens so connectivity is moderate within the local community but does not extend to any significant green spaces or wildlife corridors.

Structural diversity:

The site has moderate structural diversity with areas of bare ground, tall forbs and grasses as well as patchy scrub and small sections of hedgerow. Additional subsidiary habitat features are provided by man-made features such as rubble piles, deadwood and brash.

Flora:

The area in the east of the site, which is currently fenced, contains a mix of species generally associated with undisturbed urban sites, such as Canadian fleabane, mugwort, smooth hawksbeard wall barley, cow parsley, hedge mustard, ragwort, creeping thistle, spear thistle, nettle, broad-leaved dock, weld, black horehound and evening primrose but also contained a mix of grasses and herbs that indicate the historic use of the greenspace was once as amenity grassland. These species include Yorkshire fog and false oat grasses, dove's foot and cut-leaved crane's bill, greater and ribwort plantain, dandelion and yarrow. Some more interesting species are present which are likely to have self-seeded here including tansy, corn marigold, feverfew, lesser stitchwort and dittander (Nationally scarce).

The western area of the site, also fenced, is dominated by plants typical of disturbed ground such as fat hen and good King Henry, with some common mallow, common poppy, mugwort, groundsel, prickly lettuce, knotgrass and field pansy. There is also evidence of garden escapes including sunflower, larkspur and soapwort.

Throughout the area there is some patchy scrub including bramble and blackthorn with some young sycamore. A small section of gappy hedge runs along the south western edge of The Drift which contains mainly privet with horse chestnut, holly and laurel. One area, as shown on the map, was viewed through the fence and appeared to be covered with dense scrub with similar species to the above.

Avifauna:

It was a sub-optimal time of year for recording this group. This site and the surrounding garden vegetation is likely to support a small number of nesting birds and also offers good foraging opportunities.

Invertebrates:

This site could offer potential habitat for stag beetles (Priority Species) in the scrub habitats on the boundaries, if there is any subterranean deadwood suitable for supporting their larvae. The fallen deadwood and brash piles within the site are likely to support a good range of insects and the flowering plants will attract bees, hoverflies and butterflies. Large white, red admiral and gatekeeper butterflies were noted on site during the survey. Cinnabar moth caterpillars (Priority Species) feed exclusively on ragwort and so the presence of ragwort within the sward means this moth may be present.

Herpetofauna:

This site has the potential to support reptiles particularly slow worm albeit it is surrounded by roads and housing. The wood and rubble piles within the habitats, along with a range of sward heights, offer excellent basking and refuge opportunities. The rich insect community would allow for good foraging also.

Mammals:

The tall dense vegetation as well as brash piles on site could offer foraging, refuge and hibernation opportunities for hedgehogs, mice, voles and shrews. Fox and muntjac deer are also likely to use this site.

It is also possible that commuting and foraging bats would use this site due to the invertebrate populations.

Comments and recommendations:

This site has had planning permission approved for 13 dwellings, which is awaiting a Section 106 Agreement for renewal.

Due to the potential for reptiles on site it is recommended that a precautionary method of site clearance is undertaken. If reptiles are found to be present, mitigation for this group ahead of any

further vegetation clearance will be required. In addition, clearance of woody vegetation should take place outside of the bird nesting season (March-August inclusive) unless immediately preceded by a nesting bird check undertaken by a suitably qualified ecologist.

This site is very small so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

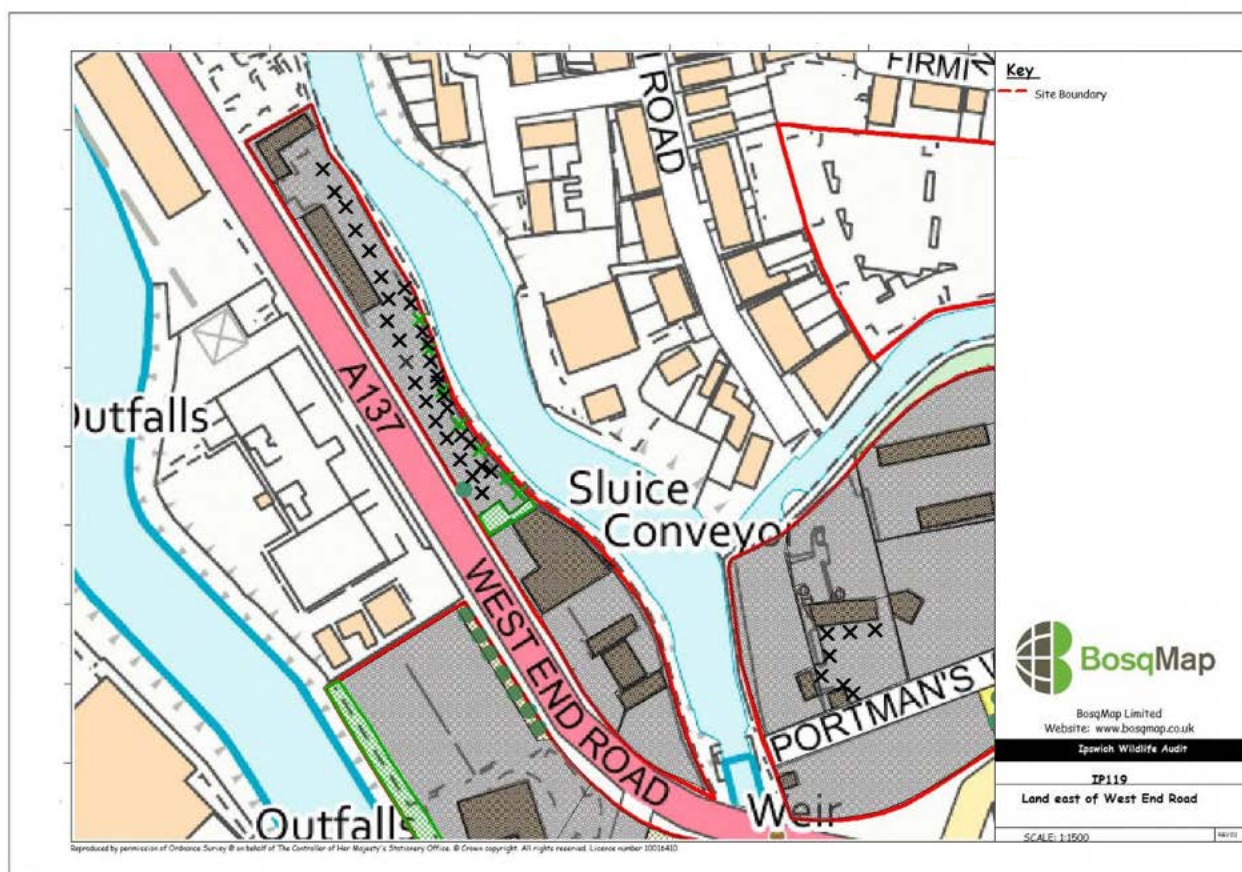
As this site is within an existing residential area, holes in fences for hedgehog should be part of this housing proposal, to deliver landscape permeability for this wide-ranging, declining species.

Although a declining species, this area of the county is a stronghold for stag beetles which can often be found in relatively small garden habitats around Ipswich. A habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of greenspace to benefit this species.

Site name: Land east of West End Road

Site ref: IP119
Site status: No wildlife designation
Grid ref: TM 15615 44382
Area: 0.61 hectares
Date: 25th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View across vacant land showing colonising vegetation

Habitat type(s):

Hard standing, buildings, ephemeral short perennial, tall ruderal, dense scrub, scattered scrub, scattered trees

Subsidiary habitats:

Roof voids

Site description:

This site is long and narrow and is situated on the eastern side of West End Road. The eastern boundary is marked by the River Gipping. The site is currently occupied by car sales and MOT centre. The northern part of the site is vacant land with derelict buildings, surrounded by fencing which is being colonised by vegetation. This part was viewed from the boundaries only. There is a hedgerow/scrub belt along the edge of the river.

Protected species seen or known:

Species recorded in the area include:

Otter

Water vole

Common pipistrelle bat

Soprano pipistrelle bat

Daubentons bat

Natterer's bat

Noctule bat

Grass snake

Slow worm

Protected species potential:

-

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Records in the area include:

Hedgehog

Stag beetle

Common toad

BoCC Red List birds including herring gull, house sparrow and starling

BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

Cinnabar moth

Connectivity:

This site has good connectivity due to its location adjacent to the River Gipping which represents an important wildlife corridor through the Town.

Structural diversity:

The majority of the site has poor structural diversity, being largely hard standing and buildings. However, the northern part of the site is slightly better with low growing vegetation and scrub.

Flora:

The flora in the southern part of the site is limited to some sycamore, ivy and buddleia along the eastern boundary.

The plants coming up through the cracks in the hard standing in the vacant site were only viewed from the boundaries but a good diversity of typical plants were recorded including occasional false oat grass with Canadian fleabane, perforate St John's-wort, prickly lettuce, wild carrot, red dead nettle, mugwort, ragwort, fine leaved ragwort, bristly ox-tongue, dove's-foot cranesbill, mallow, poppy, great mullein, curled dock, weld, rosebay willowherb, toadflax and dittander (a Nationally Scarce but locally common species).

The scrub and trees along the river corridor includes sycamore, blackthorn, plum, elder, dog rose and bramble with occasional buddleia bushes.

Avifauna:

The trees and shrubs along the river corridor provide nesting, roosting and foraging opportunities for a range of common bird species. Due to its location next to the river the shrubs could be important temporary resting areas for migrant small birds.

Invertebrates:

Although in general the site is sub-optimal for invertebrates, the diversity of plants colonising the area of vacant land provides some habitat for a range of invertebrates. Small white, gatekeeper and peacock butterflies were seen as well as numerous bee species. Other species will be present during the year and the presence of ragwort amongst the sward means that cinnabar moths could be present (Priority Species). Stag beetles have been recorded in the area and the area with trees along the eastern boundary provides potential habitat for them if there is any subterranean deadwood present.

Herpetofauna:

The habitats are sub-optimal for this group, although due to the presence of the river corridor they could start to colonise the site if the habitat continues to improve.

Mammals:

The site is sub-optimal for mammals. Bats are likely to forage along the river corridor and may roost in the disused buildings on site, so any development would need to be informed by a bat survey prior to works. Otters have been recorded adjacent to the site in 2013. Otters are highly mobile species, so the river corridor is likely to be regularly used for commuting and foraging.

Comments and recommendations:

This site is proposed for medium density housing on 45% of the site, with secondary uses on 40% for leisure and 15% for employment.

As there are derelict buildings with bat potential a bat survey should be carried out before any works commence. If the site is left for any significant period of time so that the northern part of the site becomes more vegetated, then a reptile survey should also be undertaken. However, woody vegetation clearance must take place outside bird nesting season (March – end of August inclusive), unless immediately preceded by a nesting bird check undertaken by a suitably qualified ecologist.

Japanese knotweed has been recorded approx. 150m north of the site. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of this species is required to ensure it has not spread and colonised the site.

This site is located adjacent to the River Gipping. There is an opportunity to strengthen the local ecological network by creation of new habitat adjacent to this feature. New habitat should use native planting local to the area such as a new hedge adjacent to the river or nectar rich wildflower areas. Any greenspace should be located adjacent to the river corridor.

Due to the proximity of the river, the lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

In addition, action can also be taken for individual species including stag beetles, hedgehogs and eels.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of the allocated greenspace.

At this location there is also an opportunity for off-site enhancement to benefit eels, as since the mid-1980s there has been a significant decline in their populations. An important contributing factor to this decline is thought to be the addition of water control structures such as weirs and gauging stations, which present a barrier to the natural migration of eels and elvers. A potential solution to the problem is the installation of a suitable 'eel pass' to the obstruction. Detailed information can be found in the "Elver and eel passes; A guide to the design and implementation of passage solutions at weirs, tidal gates and sluices" (Gregory *et al*, 2017).

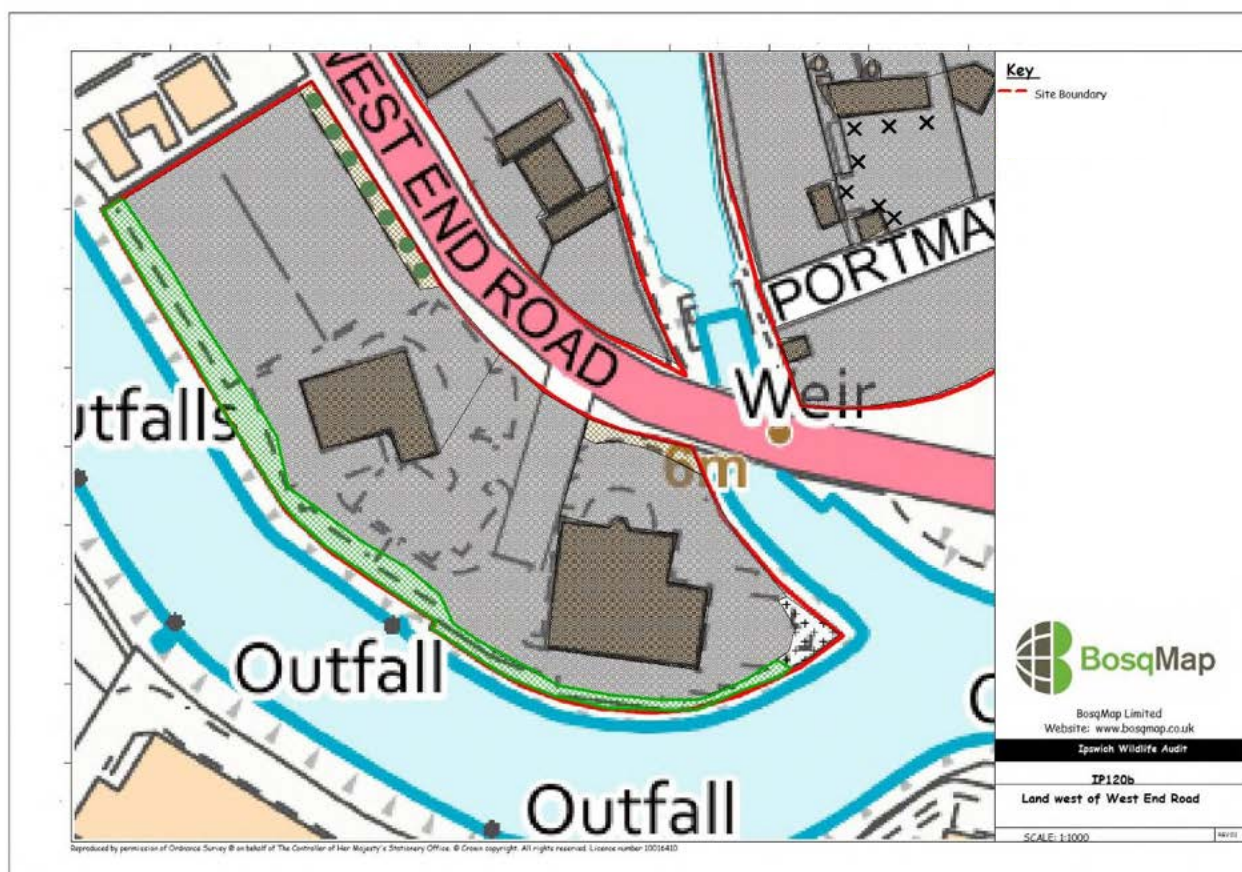
References:

Gregory, J. *et al* (2017). *Elver and eel passes; A guide to the design and implantation of passage solutions at weirs, tidal gates and sluices. The Eel Manual – GEHO0211BTMV-E-E*. Bristol, Environment Agency

Site name: Land west of West End Road

Site ref: IP120b
Site status: No wildlife designation
Grid ref: TM 15197 44258
Area: 1.02 hectares
Date: 25th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Introduced shrub at edge of car park



Dense scrub belt along River Orwell

Habitat type(s):

Hard standing, buildings, dense continuous scrub, ephemeral short perennial, introduced shrub, scattered trees

Subsidiary habitats:

-

Site description:

This site is located at the confluence of the River Gipping and River Orwell on the western side of West End Road. The river is a County Wildlife Site at this point. It is currently used as car showrooms and car park by Mitsubishi Motors. Along the road edge is a border of introduced shrubs with trees and along the River Orwell is a dense scrub belt. There is small triangle of ephemeral short perennial vegetation at the eastern end.

Protected species seen or known:

-

Protected species potential:

Species recorded in the area include:

Otter

Water vole

Common pipistrelle bat

Soprano pipistrelle bat

Daubentons bat

Natterer's bat

Noctule bat

Grass snake

Slow worm

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Records in the area include:

Hedgehog

Stag beetle

Common toad

BoCC Red List birds including herring gull, house sparrow and starling

BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The River Orwell and Gipping provide excellent connectivity despite it being a built-up area of the Town.

Structural diversity:

The structural diversity is moderate with some short vegetation, shrubs, scrub and trees.

Flora:

The scrub belt along the river has a good mixture of species including ash, beech, silver birch, lime, sycamore, alder, privet, hawthorn, blackthorn, gorse, hazel, elder, buddleia and occasional berberis. There is occasional sea couch, perforate St john's-wort, perennial sow thistle, black horehound and mugwort along the base of the scrub.

The eastern corner has a good diversity of species typical of the habitat including false oat grass, Canadian fleabane, mugwort, common cat's-ear, hop trefoil, bristly ox tongue, rough hawkbit, common field speedwell, poppy, fat hen, dove's-foot cranesbill and common storksbill. Dittander, a nationally scarce but locally common species is also present along the river along with sea couch, ragwort, horseradish and perennial sow thistle.

Avifauna:

The time of year and weather conditions were sub-optimal for recording this group. Only herring gull (Priority species) and black headed gull were recorded during the visit, however the scrub and trees along the river corridor provide excellent habitat for a range of common and migratory birds. Due to its location the site could be important for small migratory birds when they first make landfall.

Invertebrates:

Most of the site is sub-optimal for this group. However, the vegetation around the margins provides some foraging opportunities for common invertebrates. Small white butterflies were seen during the visit.

Herpetofauna:

The habitats are unsuitable for this group, except along the River corridor.

Mammals:

Bats are likely to forage and commute along the River Orwell and the scrub alongside the river. Otter has been recorded in the river and they could rest in the scrub along the river. Hedgehogs are recorded in the area and they are likely to forage along the river corridor. Common small mammal species including mice, voles and shrews will be present in the scrub.

Comments and recommendations:

This site is proposed for housing at high density on 80% of the site.

This site is located adjacent to both the River Orwell and River Gipping CWS. There is an opportunity to strengthen the local ecological network by enhancement of on-site habitats adjacent to this feature.

The scrub along the river provides valuable habitat for birds and as much as possible should be retained. Further bird surveys should be undertaken. Any tree or scrub removal must take place outside bird nesting season (March to the end of August inclusive) unless immediately preceded by a nesting bird check undertaken by a suitably qualified ecologist.

As this site is located next to the river any lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

At this location there is also an opportunity for off-site enhancement to benefit eels, as since the mid-1980s there has been a significant decline in their populations. An important contributing factor to this decline is thought to be the addition of water control structures such as weirs and gauging stations, which present a barrier to the natural migration of eels and elvers. A potential solution to the problem is the installation of a suitable 'eel pass' to the obstruction. Detailed information can be found in the "Elver and eel passes; A guide to the design and implementation of passage solutions at weirs, tidal gates and sluices" (Gregory *et al*, 2017).

References:

Gregory, J. *et al* (2017). *Elver and eel passes; A guide to the design and implantation of passage solutions at weirs, tidal gates and sluices. The Eel Manual – GEHO0211BTMV-E-E*. Bristol, Environment Agency

Site name: Milton Street

Site ref: IP131

Site status: No wildlife designation

Grid ref: TM 18453 45049

Area: 0.28 hectares

Date: 29th July 2019

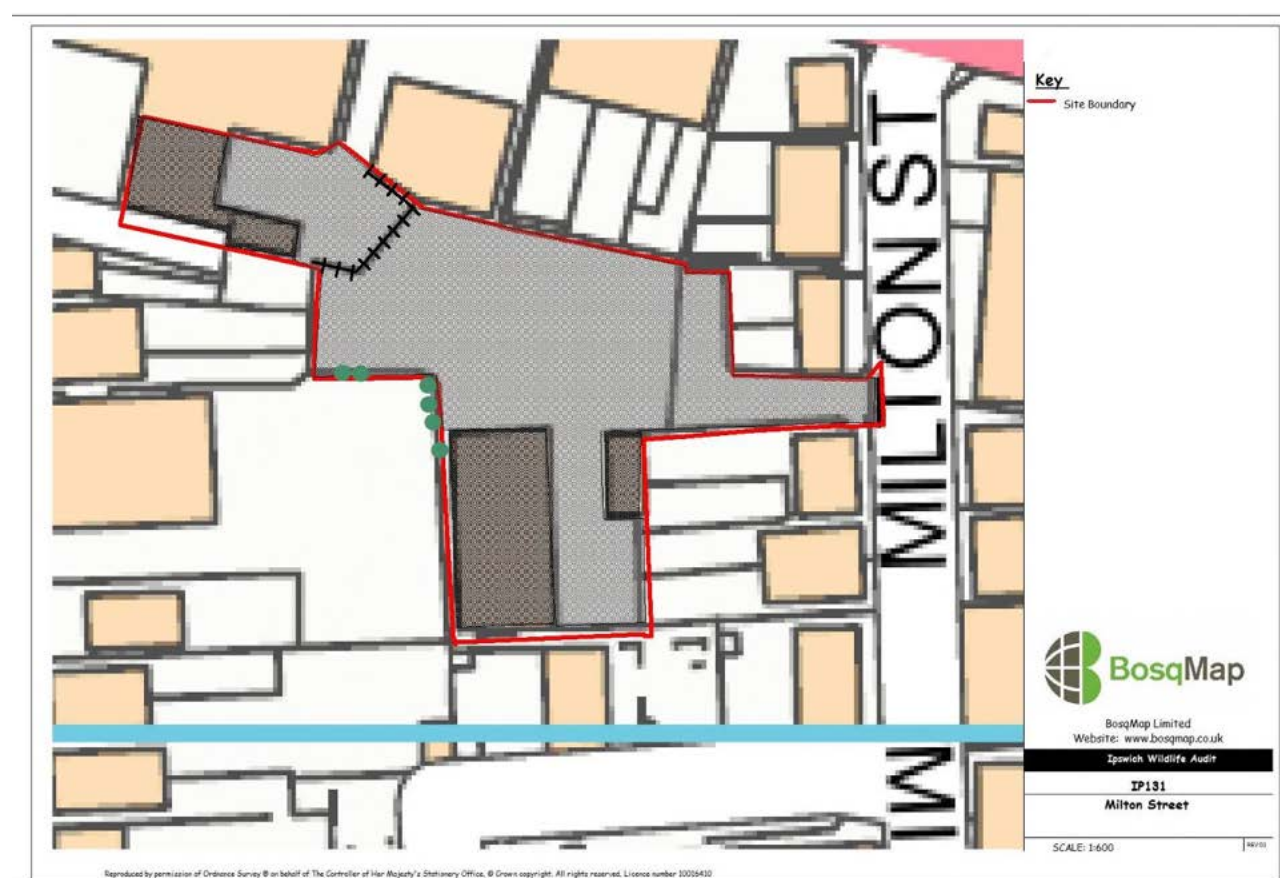
Recorder: J Crighton

Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C

Ranking: 6

Biodiversity value: Low

Map:



Photos:



Car park within industrial yard

Habitat type(s):

Hard standing, buildings

Subsidiary habitats:

Cracks in tiles and bricks

Site description:

This site is currently in use as a mechanics yard along with some other small businesses. It is enclosed on all sides by residential dwellings and is accessed via a lane leading from Milton Street, off Woodbridge Road in the west of Ipswich.

Protected species seen or known:

Records in the surrounding area include:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Serotine bat
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle

Swift (Suffolk Character Species)
Common toad
House sparrow
Starling

Priority species potential:

-

Connectivity:

A degree of connectivity is provided by the gardens of the properties that surround the site.

Structural diversity:

Structural diversity is very poor being entirely buildings and hard standing.

Flora:

There are no plants within the site itself, however, in an adjacent garden, overhanging the fence, lime, sycamore, hazel and clematis are present.

Avifauna:

It was a sub-optimal time of year for recording this group. The only potential habitat is for nesting along the eaves of the buildings. However, no activity was recorded during the survey and the site lacks any feeding opportunities.

Invertebrates:

There are no opportunities for this group within this site.

Herpetofauna:

There are no opportunities for this group within this site.

Mammals:

There are very limited opportunities for this group within the site itself, but bats, hedgehogs and foxes may forage around the surrounding gardens.

Comments and recommendations:

The indicative capacity of this site is 9 dwellings. Development would be subject to relocation of the current business use.

This site is very small and located in a built-up area, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

In addition to this, action can be taken for individual species such as swifts and hedgehogs.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span

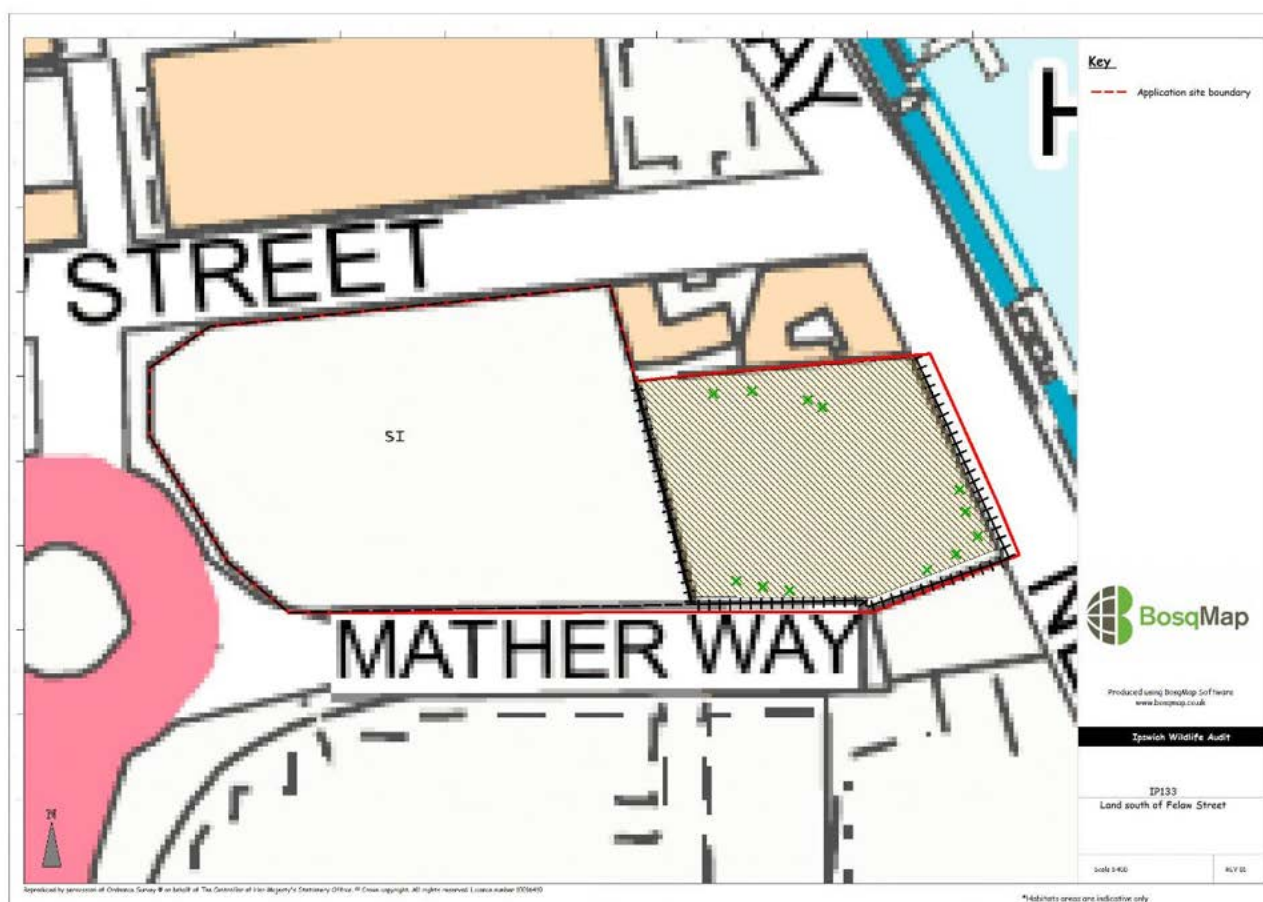
than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of any new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: Land south of Felaw Street

Site ref: IP133
Site status: No wildlife designation
Grid ref: TM 16672 43654
Area: 0.37 hectares
Date: 5th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 25°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Short mown grassland on western part of site



Eastern section of site

Habitat type(s):

Amenity grassland, poor semi-improved grassland, ephemeral short perennial, tall ruderal, scattered scrub

Subsidiary habitats:

-

Site description:

This site is located to the south of Felaw Street, east of the roundabout. The New Cut West road runs along the eastern boundary of the site which separates the site from the River Orwell County Wildlife Site (CWS). It has two distinct areas: the western area is short mown grassland which is currently public open space. East of that is a fenced off section containing tall ruderal vegetation with scattered scrub. This part was only viewed from the boundaries.

Protected species seen or known:

Species recorded in the area include:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Brown long eared bat
Common lizard
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records recorded on site or surrounding area include:

Hedgehog
House sparrow
Dunnock
Starling
Stag beetle
Wall butterfly

Priority species potential:

Cinnabar moth

Connectivity:

Although situated in a built-up area of the Town the eastern boundary of the site is very close to the River Orwell which provides an excellent wildlife corridor.

Structural diversity:

The structural diversity of the western part of the site is poor, however the eastern part has a much more varied sward height, as well as some scattered scrub.

Flora:

Although short mown, the grassland in the western part of the site has a good diversity of species typical of dry grassland near the coast. Species recorded include rye, wall barley and common couch grasses with greater plantain, ribwort plantain, sea plantain, perennial sow thistle, ragwort, groundsel, dandelion, rough hawkbit, dove's-foot cranesbill, cut leaved cranesbill, herb Robert, mallow, common mouse ear, daisy, black nightshade, field bindweed, poppy, yarrow and common field speedwell.

The area that was fenced off was viewed from the boundaries but also has a good diversity of species associated with disturbed habitats. There is very little grass except a clump of wood small-reed, with ribwort plantain, mugwort, weld, evening primrose, curled dock, fennel, poppy, bristly ox-tongue, black medick, knotgrass, scarlet pimpernel, creeping thistle, comfrey and fat-hen.

The scrub, which is starting to encroach, includes buddleia, willow, sycamore, elm, bramble and dog rose.

Avifauna:

The diversity of plants and occasional scrub in the eastern section of the site provides good habitat for a range of bird species, particularly for foraging. A large flock of house sparrows (Priority species) were seen, and other species recorded include dunnock (Priority species) and more common species such as goldfinch.

Invertebrates:

The habitat in the eastern part of the site is good for common invertebrates. A range of butterflies were noted including painted lady, peacock, small white and meadow brown. Buff-tailed bumblebees

and red-tailed bumblebees were also seen and the site provides good habitat for other members of this group. A number of crickets and grasshoppers were also recorded. Due to the presence of ragwort, cinnabar moths (Priority species) are likely to occur as their caterpillars feed exclusively on ragwort.

Herpetofauna:

The habitat in the eastern part of the site is currently suitable for this group. However, the relative isolation of this site reduces the risk that reptiles may have colonised this site.

Mammals:

The habitat is largely sub-optimal for this group although common species will be present. There are numerous hedgehog records in the area and the short-mown grassland provides good foraging habitat for hedgehogs.

Comments and recommendations:

This site is proposed for housing at a high density.

This site is located adjacent to the River Orwell CWS. New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks, particularly the River Orwell CWS. New planting should seek to use native species typical of the local area.

As the site is located next to the river any lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

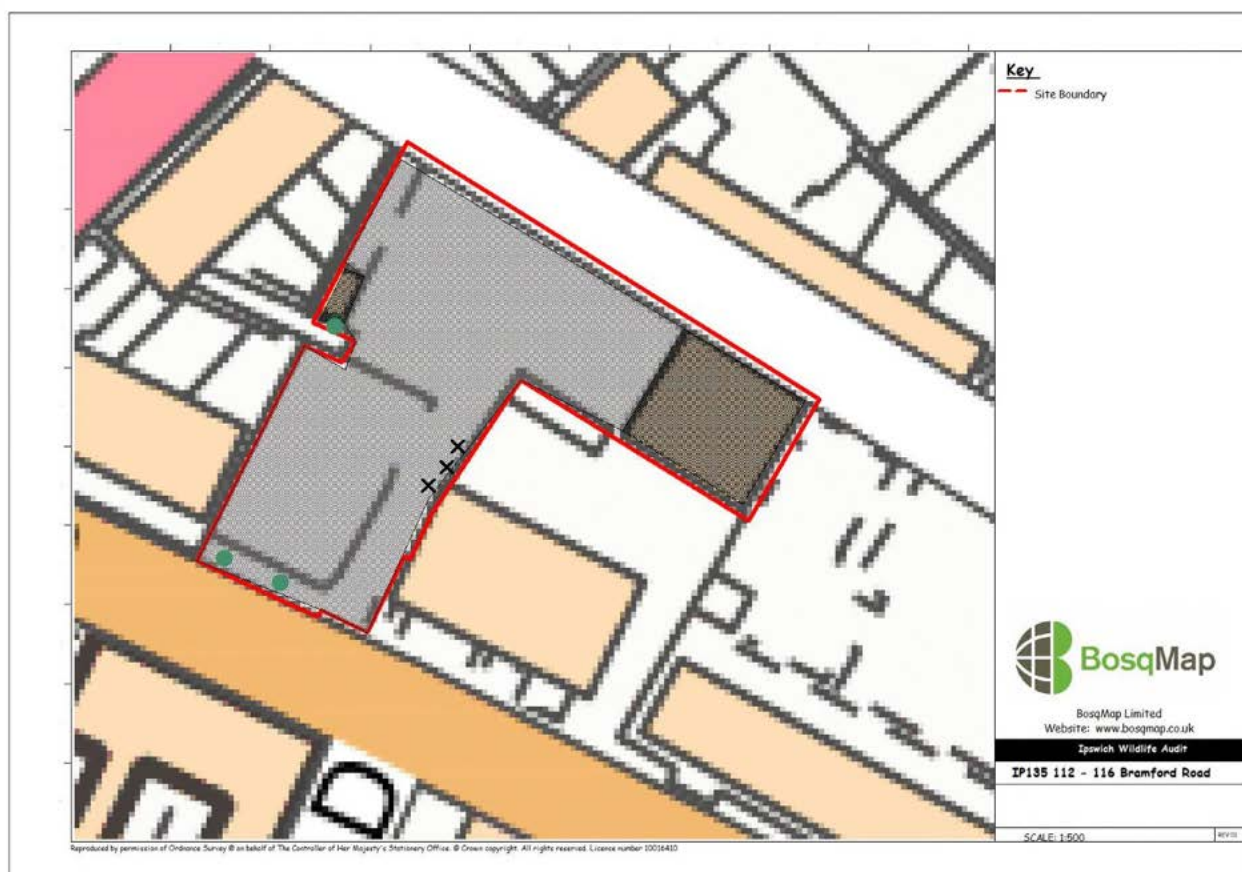
It is unknown if houses or flats are proposed for this site. Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: 112 – 116 Bramford Road

Site ref: IP135
Site status: No wildlife designation
Grid ref: TM 15181 45216
Area: 0.17 hectares
Date: 25th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 25°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Mature sycamore on western edge

Habitat type(s):

Broadleaved tree, ephemeral short perennial, hard standing, building

Subsidiary habitats:

Standing dead wood

Site description:

This is a small site which is currently a car wash and car sales area. It is situated to the north of Bramford Road. It consists of an area of hard standing with a couple of buildings. There is a large multi-stemmed sycamore located on the western edge which is believed to be covered by a Tree Preservation Order. There are also two lime trees on the road edge.

Protected species seen or known:

Species in the surrounding area include:

Common pipistrelle bat

Soprano pipistrelle bat

Natterer's bat

Noctule bat

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog

Stag beetle

BoCC Red List birds including house sparrow and starling

BoCC Amber List birds including swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

This site has poor connectivity being located in a built-up area of the town, surrounded by roads and residential housing.

Structural diversity:

This site has poor structural diversity.

Flora:

The nature of the site means this group is very limited. However, a few common plants are growing through cracks in the paving along the eastern fence including wall barley, fat hen, redshank, dandelion and scarlet pimpernel.

The tree on the western edge is a sycamore and the two roadside trees are lime.

Avifauna:

There is very little habitat suitable for this group, although the trees provide some foraging and nesting opportunities for common species.

Invertebrates:

The habitat is poor for this group, although the trees and plants near the fence provide limited foraging opportunities for common invertebrates. Stag beetle (Priority species) may be present if the sycamore has any subterranean dead wood.

Herpetofauna:

The habitat is unsuitable for this group.

Mammals:

The habitat is poor for this group, although hedgehogs may pass through the site to navigate between local gardens. The mature sycamore has some potential roosting features for bats.

Comments and recommendations:

This site is proposed for housing.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check. The significant trees on this site are covered by a TPO.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

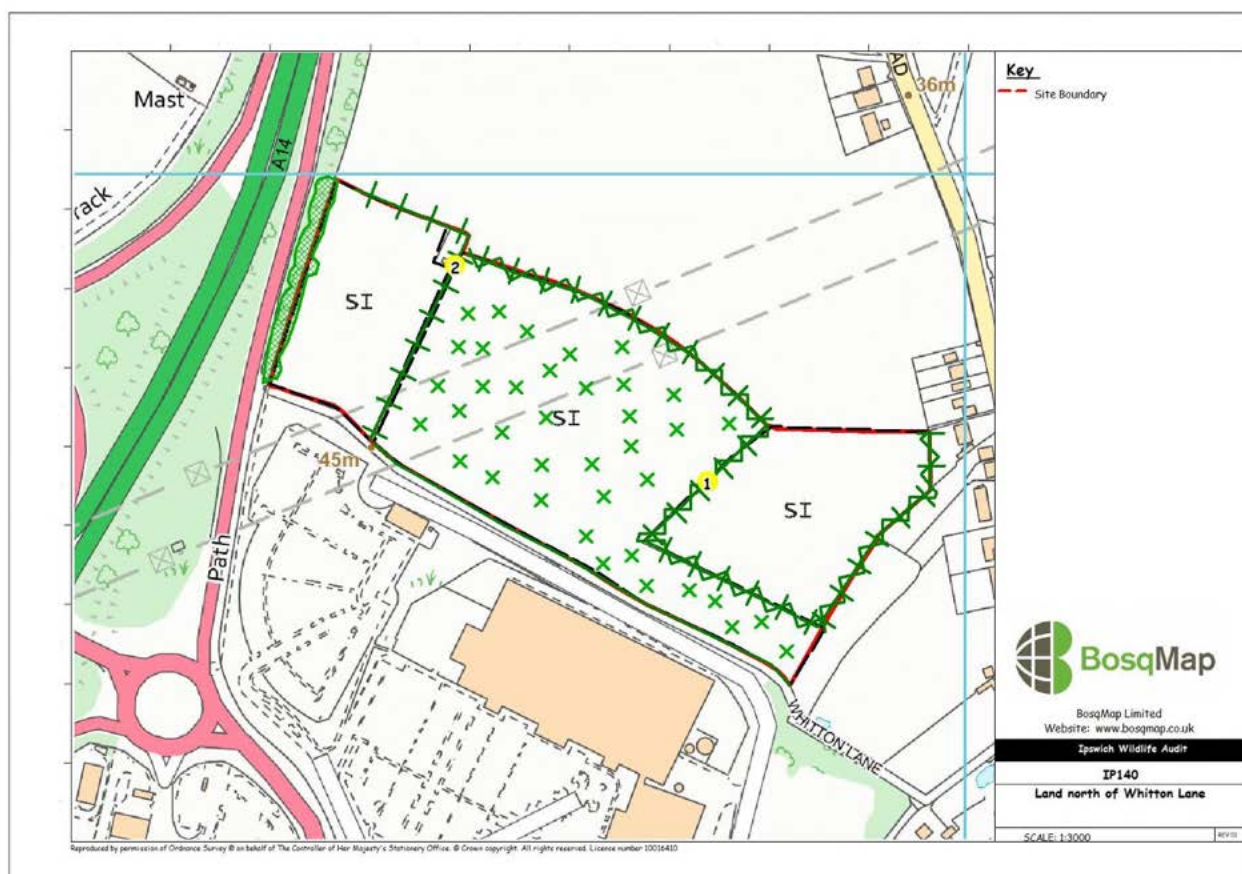
Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

It is unknown whether this housing proposal is for houses or flats. Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Land North of Whitton Lane

Site ref: IP140
Site status: No wildlife designation
Grid ref: TM 13747 47823
Area: 6.9 hectares
Date: 22nd July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 28°C
Ranking: 4
Biodiversity value: Medium

Map:



Photos:



View across eastern field



Scattered scrub developing on central field



Mature elm close to northern boundary (Target Note 2)

Habitat type(s):

Species-rich hedgerows, species-poor hedgerows, poor semi-improved grassland, dense scrub, scattered scrub

Subsidiary habitats:

Standing and fallen deadwood

Site description:

This site lies to the north of Whitton Lane and the industrial estate. The site comprises three fields separated by tall, thick hedgerows. Currently all the fields are grassland, with the central field developing a grassland scrub mosaic. The central and eastern field used to be in arable production, and the western field was formerly a horse grazed paddock. The central hedgerow which turns in a right angle to run parallel to the southern boundary is the most species rich. These hedges are likely to be classed as 'important' under the Hedgerow Regulations 1997. Elm is the dominant tree in this landscape and the hedge close to the mobile phone mast is unusual in having tall elm trees. The

wooded banks of the A14 slip road at Junction 53 forms the western boundary.

Protected species seen or known:

Species in the area include:

Badger
Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Natterer's bat
Noctule bat
Serotine bat
Grass snake
Slow worm
Great Crested Newt

Protected species potential:

Hazel dormouse
Common lizard

Priority habitats present:

Hedgerows

Priority species seen or known:

Hedgehog
Common toad
Stag beetle
BoCC Red List birds including herring gull, skylark, house sparrow, starling, song thrush and yellowhammer
BoCC Amber List birds including dunnoek and swift (Suffolk Character Species)

Priority species potential:

Cinnabar moth
White-letter hairstreak butterfly.

Connectivity:

This site lies at the northern end of Ipswich and as such has countryside to the north. Old Whitton Lane and nearby Fiske's Lane are both ancient and are good wildlife corridors.

Structural diversity:

The site has good structural diversity with grassland, scattered scrub and hedgerows/mature trees.

Flora:

The grassland is currently poor semi-improved. Grasses include false oat, cock's-foot, barren brome, soft brome, rough meadow grass and Yorkshire fog. The herbs are typical of dry grassland including ragwort, bristly ox-tongue, dandelion, perforate st john's wort, ox-eye daisy, Canadian fleabane, mugwort, vipers bugloss, black medick, hop trefoil, dove's-foot cranesbill, ribwort plantain, greater

plantain, creeping thistle, spear thistle and curled dock.

The central field had similar species, but also included wall barley and common couch grass with hogweed, lesser burdock, poppy, prickly lettuce, violet spp, common cat's-ear and common cudweed which is declining nationally and classed as Near Threatened.

The hedgerows are dominated by elm with walnut, blackthorn, hawthorn, ash, oak, elder, dogwood and traveler's joy also recorded.

Avifauna:

The time of year and weather conditions were sub-optimal for recording this group. However common species including blackbird, green woodpecker, wood pigeon and magpie were recorded during the visit. The grassland provides good habitat for ground nesting birds such as skylark and meadow pipit and the hedgerows provide excellent habitat for roosting, nesting and foraging for a range of species including declining farmland bird species such as yellowhammer.

Invertebrates:

This site is currently very good for invertebrates. Numerous ant hills were noted, which suggests the grassland has been undisturbed for some time. There were plenty of grasshoppers and crickets and meadow brown and small skipper butterflies were observed during the visit along with common carder bees and a ruddy darter damselfly. Ragwort is present which is the food plant of cinnabar moth caterpillars (Priority species). The hedgerows provide good habitat for stag beetles (Priority species) whose larvae feed on subterranean deadwood. The presence of elm in the hedgerows provides good habitat for white-letter hairstreak butterflies (Priority species).

Herpetofauna:

The habitat has improved for this group since the last audit and is currently suitable for reptiles. All three common species could be present, but the habitat is particularly suited to slow worm. Toads could also be present as there are several ponds in the area. There are records of great crested newt in the area and the terrestrial habitat on site is excellent so their presence cannot be ruled out.

Mammals:

The hedgerows provide good commuting corridors for bats and some of the mature trees in the hedgerows have cracks and crevices with the potential to support a bat roost (Target Note 2). An outlier badger sett was noted during the visit (Target Note 1) and there are recent (2019) records of them very close to the site. The hedgerows provide suitable habitat for hazel dormice and they have been recorded on the northern edge of Ipswich. Hedgehog (Priority species) has been recorded from the site in 2012 and the mix of grassland and hedgerows is suitable for them. Common small mammal species such as mice, voles and shrews are likely to be present and other common mammals such as deer and fox are also likely to be present.

Comments and recommendations:

This site is proposed for an employment park. Due to the extent of semi-natural habitats, detailed and up-to-date surveys are required for flora, bats, hazel dormouse, reptiles and amphibians, breeding birds and Priority species.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, particularly the hedgerow network. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. New planting should seek to use native species typical of the local area such as hawthorn, blackthorn, oak, dogwood, hazel and field maple.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on this site, including Priority habitat (hedgerows) it is likely that future development will require compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

Green Roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds.

Living Walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates. They can provide important stepping stone habitat in urban areas.

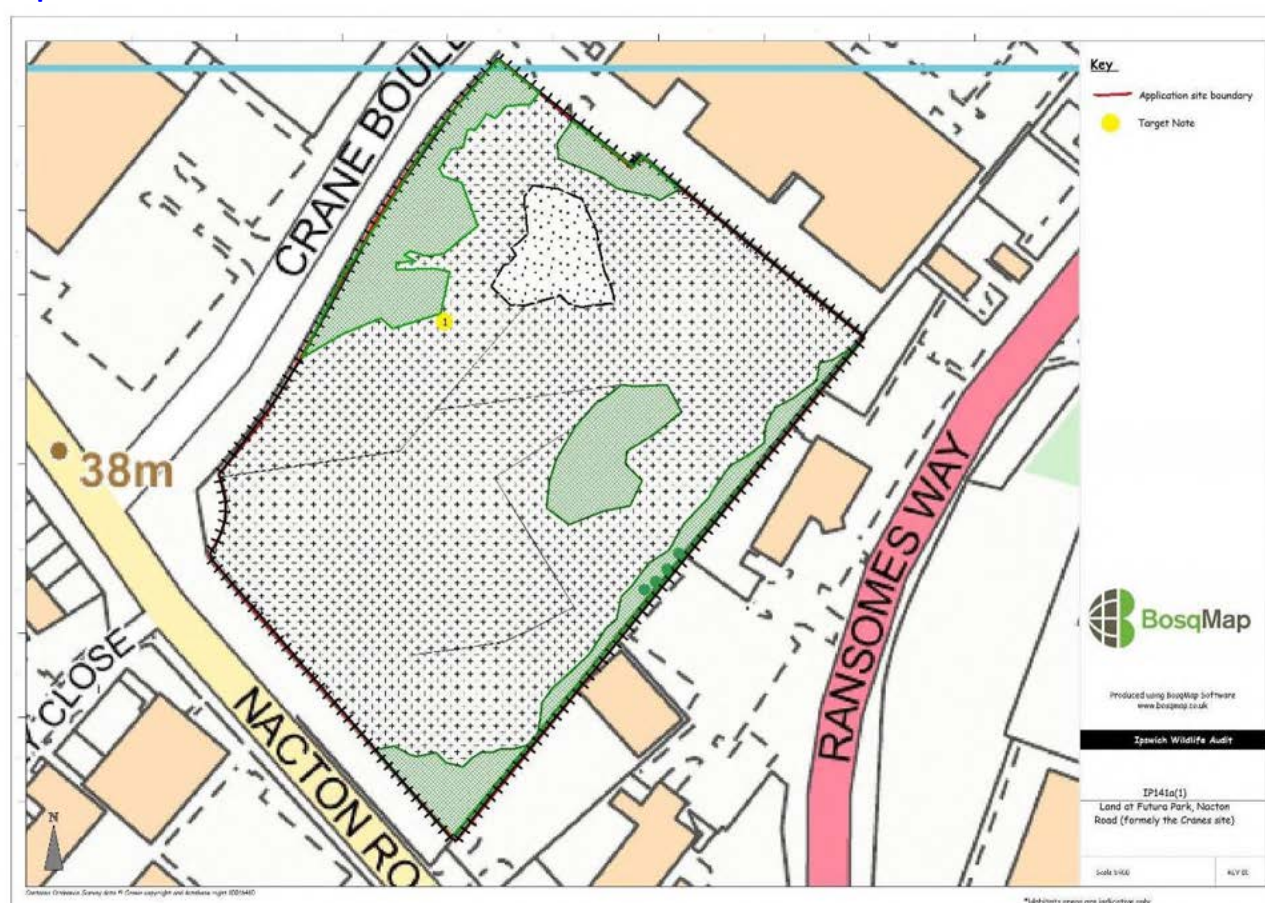
Rain gardens are most effective when larger in size and slow down run-off from downpiped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive.

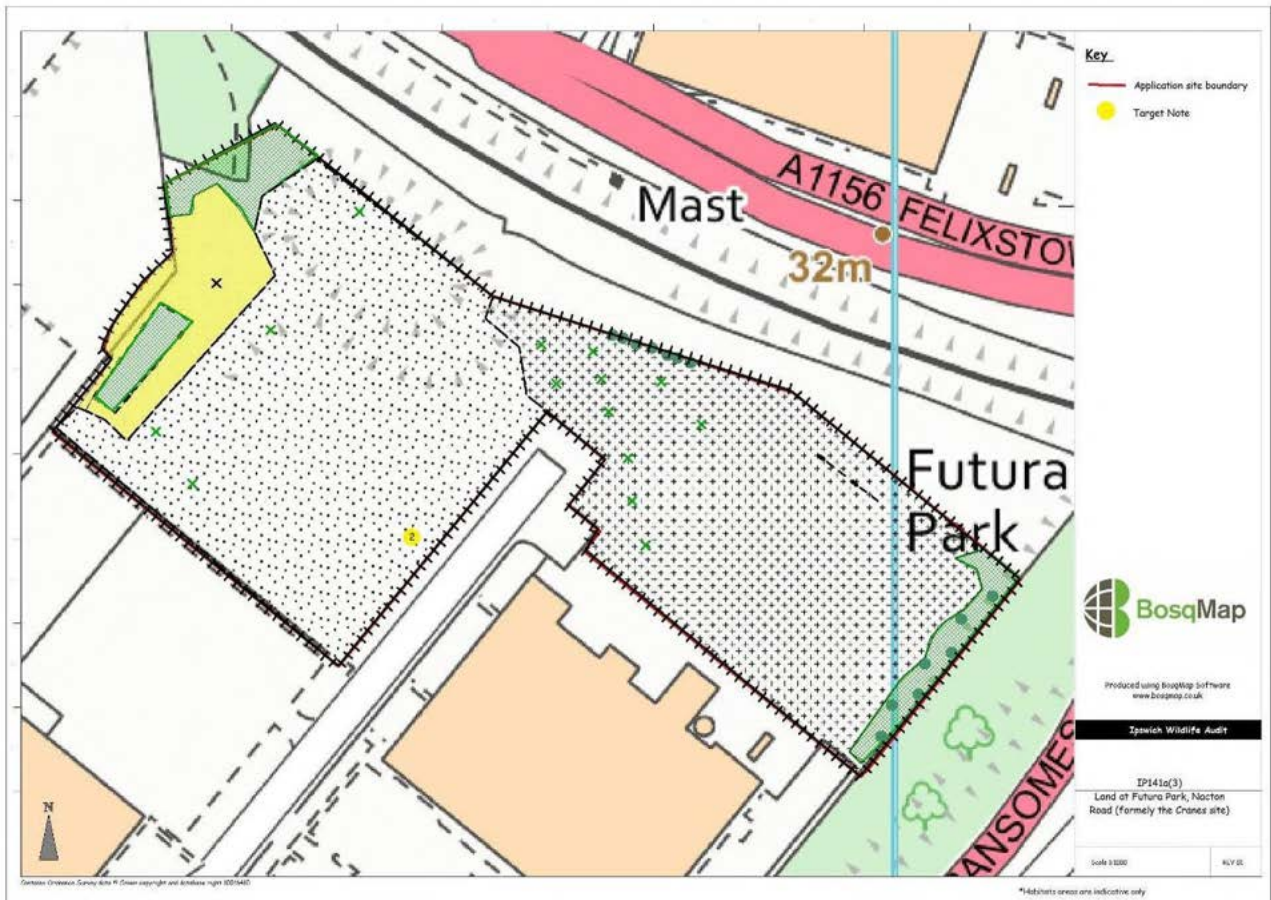
Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Land at Futura Park, Nacton Road (formerly the Cranes site)

Site ref: IP141a (1)/IP141a (3)
Site status: No wildlife designation
Grid ref: TM 19679 41889/TM 19805 42290
Area: 2.24 hectares/ 2.75 hectares
Date: 29th July 2019
Recorder: J Crighton
Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C
Ranking: 3/4
Biodiversity value: Medium

Map:





Photos:



IP141a (1) Looking east across the site



IP141a (1) Sparse sward on bare ground



IP141a (1) Example of general sward



IP141a (3) 1 South east section of site from middle



IP141a (3) Looking towards railway on south east section



IP141a (3) Target Note 2 Sparse sward on north west section

Habitat type(s):

Ephemeral short perennial, dense continuous and scattered scrub

Subsidiary habitats:

Bare ground, rubble piles

Site description:

These two sites lie within a largely built-up area in the south west of Ipswich called Futura Park. IP141a (1) is located north east of Nacton Road, with its north-western boundary adjacent to Crane Boulevard. It is surrounded by chestnut paling fencing, with a locked gate. However, could be viewed sufficiently from the perimeter and was found to contain a composition of species indicative of the Priority Habitat, Open Mosaic Habitats on Previously Developed Land (Brownfield) (Target Note 1). There is evidence of fly-tipping on this site. Some of the trees fronting Nacton Road are protected by TPOs.

IP141a (3) is located at the terminal end of Crane Boulevard and extends along the length of the park with its north-eastern boundary abutted by the railway line. It is currently surrounded by metal security paling and completely inaccessible. The majority of the site is sandy/gravelly substrate with scattered ephemeral short perennial vegetation, which is denser in the south eastern section. Some areas of the site could not be assessed from the perimeter but appeared fairly uniform with the rest of the sections. The site is currently undergoing development, particularly in the north western section where the ground has been recently disturbed.

Protected species seen or known:

Records in the surrounding area include:

Badger
Common lizard
Slow worm
Grass snake
Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Brown long-eared bat

Protected species potential:

-

Priority habitats present:

Open Mosaic Habitats on Previously Developed Land (Brownfield)

Priority species seen or known:

Records in the surrounding area include:

Stag beetle
Hedgehog
House sparrow
Song thrush
Starling

Dunnock
Skylark
Herring gull
Swift (Suffolk Character Species)

Priority species potential:

Common toad

Connectivity:

The sites have varying connectivity. IP141a (1) is fairly isolated by the surrounding industrial estate and roads, whereas IP141a (3), with its position immediately adjacent to the railway, has excellent connectivity to the wider environment along this important wildlife corridor.

Structural diversity:

The structural diversity is also varied across the sites. IP141a (1) contains a diverse range of habitats with bare ground, ephemeral short perennial vegetation and patches of dense scrub, whereas IP141a (3) is much more sparsely vegetated with a higher degree of structural diversity on the boundaries.

Flora:

The majority of IP141a (1) is comprised of sparse vegetation typical of brownfield sites including smooth hawkbeard, Canadian fleabane, weld, rosebay willowherb and evening primrose with some scentless mayweed, St John's wort, ragwort, great willowherb and black nightshade with several tufts of red fescue. There is also quite a large number of flaxweed plants, which are a declining species. Throughout the site there are patches of scrub mainly comprised of buddleia, which is a rapid colonizer of disturbed ground but also contains gorse and bramble with some poplar. Some semi-mature sycamores are present around the perimeter.

Of particular interest, and the reason for the suggested designation of Priority habitat, is an area in the south east of the site which is particularly parched and contains hare's foot clover, bird's foot trefoil, common centaury, common cudweed (Near Threatened), white melilot and common stork's bill (Target Note 1).

The south-eastern section of IP141a (3) is very similar in composition to IP141a (1) with the addition of common poppy, fat hen and redshank. There are several white poplars along the north eastern boundary, alongside the railway. As previously mentioned, the northwestern section contains more sparse vegetation (Target Note 2), but again contains similar species.

Avifauna:

It was a sub-optimal time of year for recording this group. However, the site offers potential nesting prospects within the areas of dense continuous scrub, and the habitat is likely to support a substantial invertebrate biomass which will offer foraging opportunities. House sparrow, linnet and great tit were seen or heard during the survey.

Invertebrates:

Brownfield sites are known to support rich invertebrate communities, often with interesting species assemblages. The patchy mosaic of vegetation and habitat types, structural diversity and tall

buffering patches of scrub adjacent to open habitat provides shelter, sunny hotspots and variable microclimates. These sites could offer potential habitat for stag beetles, if there is any subterranean deadwood on the boundaries suitable for supporting their larvae. IP141a (1) supports a large number of flaxweed plants, which is the larval food plant for the grey carpet moth, a Priority species Listed under Section 41 of the NERC Act. This species is currently restricted to the dry, stony Breckland of East Anglia likely due to a lack of suitable habitat for its food plant elsewhere. Several butterflies were noted on site including common blue, large white, red admiral and peacock.

Herpetofauna:

The railway corridor is known to support slow worm and common lizard, and therefore they could also be present in the perimeter habitat of IP141a (3). This site could also support grass snake.

The perimeter habitat may also support toads, frogs and smooth newts, with a number of small ponds in the area and the connectivity offered by the railway corridor.

Mammals:

There is a record of badger from within site IP141a (3), which could have been commuting along the railway corridor and entered the site to forage.

Bats are likely to use the railway corridor for commuting and the invertebrate populations within these sites are likely to provide foraging opportunities. The mature trees on the railway could also contain features which may support a bat roost.

There are a number of hedgehog records in the immediate area and the combination of sparse vegetation and scrub provides good foraging and refuge opportunities for them.

The site is also likely to be frequented by common species such as fox, rabbit, grey squirrel and muntjac deer, and the perimeter scrubby habitat is likely to support mice, voles and shrews.

Comments and recommendations:

These sites have been allocated as B-class used (excluding office use) and appropriate employment-generating sui generis uses with an indicative capacity of 18,000 sq m.

Due to their likely presence, additional surveys for reptiles and bats are recommended. As this includes Open Mosaic Habitats on Previously Developed land (Priority habitat), then detailed terrestrial invertebrate surveys are also recommended.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

As this site is located next to the railway corridor, the lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on this site, it is likely that

future development will require compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

For this site in particular, the Priority habitat which would be lost should be replicated within the existing footprint through the provision of a green roof. Green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. In addition to this, living walls can be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates. These features can provide important stepping-stone habitat in urban areas.

In addition to this, action can be taken for individual species such as swifts, bats, reptiles, stag beetles and other invertebrates.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of public interference or light spillage.

As reptiles are highly likely to be present and thus require mitigation, a log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of

greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time.

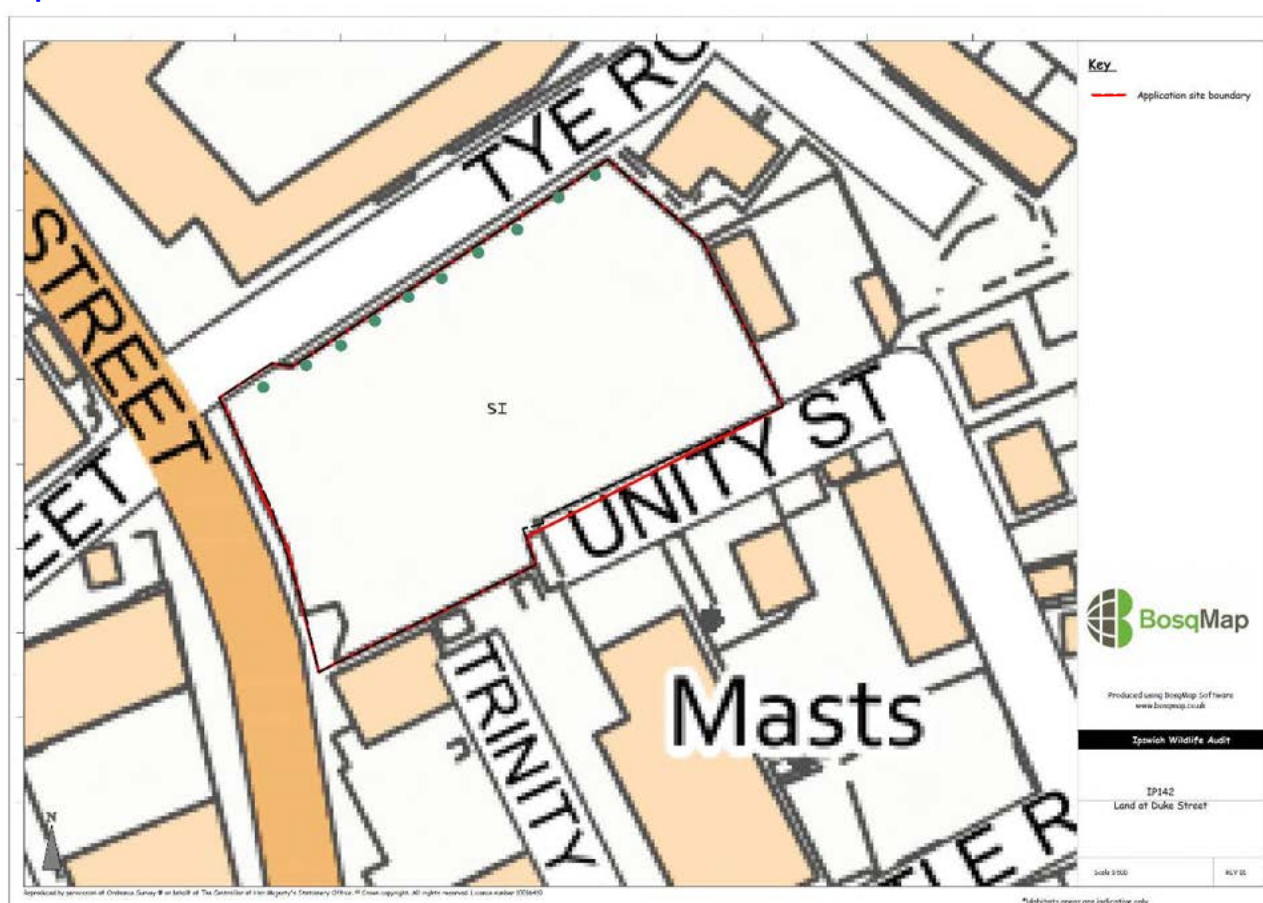
A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed on the perimeter of IP141a (3).

If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing sandy and free draining soil conditions. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

Site name: Land at Duke Street

Site ref: IP142
Site status: No wildlife designation
Grid ref: TM 17256 43771
Area: 0.38 hectares
Date: 28th July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 28°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Looking east across site

Habitat type(s):

Poor semi-improved grassland, scattered trees

Subsidiary habitats:

-

Site description:

This site is located east of Duke Street, between Tye Road on the northern boundary and Unity Street on the southern boundary. It comprises a small rectangle of grassland which is fully fenced. The grassland was short at the time of survey but it is unknown how regularly it is managed. A line of young trees is present along the northern boundary. The site was viewed from the boundaries only.

Protected species seen or known:

Records in the area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Serotine bat
Common lizard
Grass snake
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog

Common toad

Stag beetle

BoCC red list birds including house sparrow and starling

Priority species potential:

-

Connectivity:

This is a small, isolated site. Although it is less than 100m from Holywells Park CWS there is currently no direct connectivity between the two sites.

Structural diversity:

The structural diversity is poor as the sward appeared to be fairly uniform in height. The areas of bare ground provide some structural diversity.

Flora:

Although only viewed from the boundaries, there was a good diversity of plants noted which are typical of dry grasslands. Species recorded include wall barley, Yorkshire fog, barren brome and bent grasses with sand sedge, common cat's-ear, smooth hawk's-beard, autumn hawkbit, creeping cinquefoil, groundsel, perennial sow thistle, bristly ox-tongue, tansy, vipers bugloss, Canadian fleabane, mallow, poppy, violet spp, dove's-foot cranesbill, yarrow, fennel, mullein spp, red campion, speedwell spp, calamint spp, field pansy and hare's-foot clover. Bracken was noted along the southern edge.

The trees along the northern boundary were dominated by field maple.

Avifauna:

There is very limited nesting opportunities for this group although some common species will forage in the grassland. Carrion crow and feral pigeon were noted during the visit.

Invertebrates:

The diversity of plants provides good nectar sources for a range of common invertebrates. Small white, large white and peacock butterflies were seen. There are several areas of bare ground which could provide good habitat for ground nesting bees, wasps and ants.

Herpetofauna:

The site is sub-optimal for this group.

Mammals:

The habitat is sub-optimal for this group. The grassland does provide good foraging opportunities for hedgehogs, although the fencing will restrict their movement.

Comments and recommendations:

The site has planning permission for 44 dwellings (ref. 17/00570/FUL).

Japanese Knotweed has been recorded close to the site. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of this species is required to ensure it has not spread and colonised the site.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

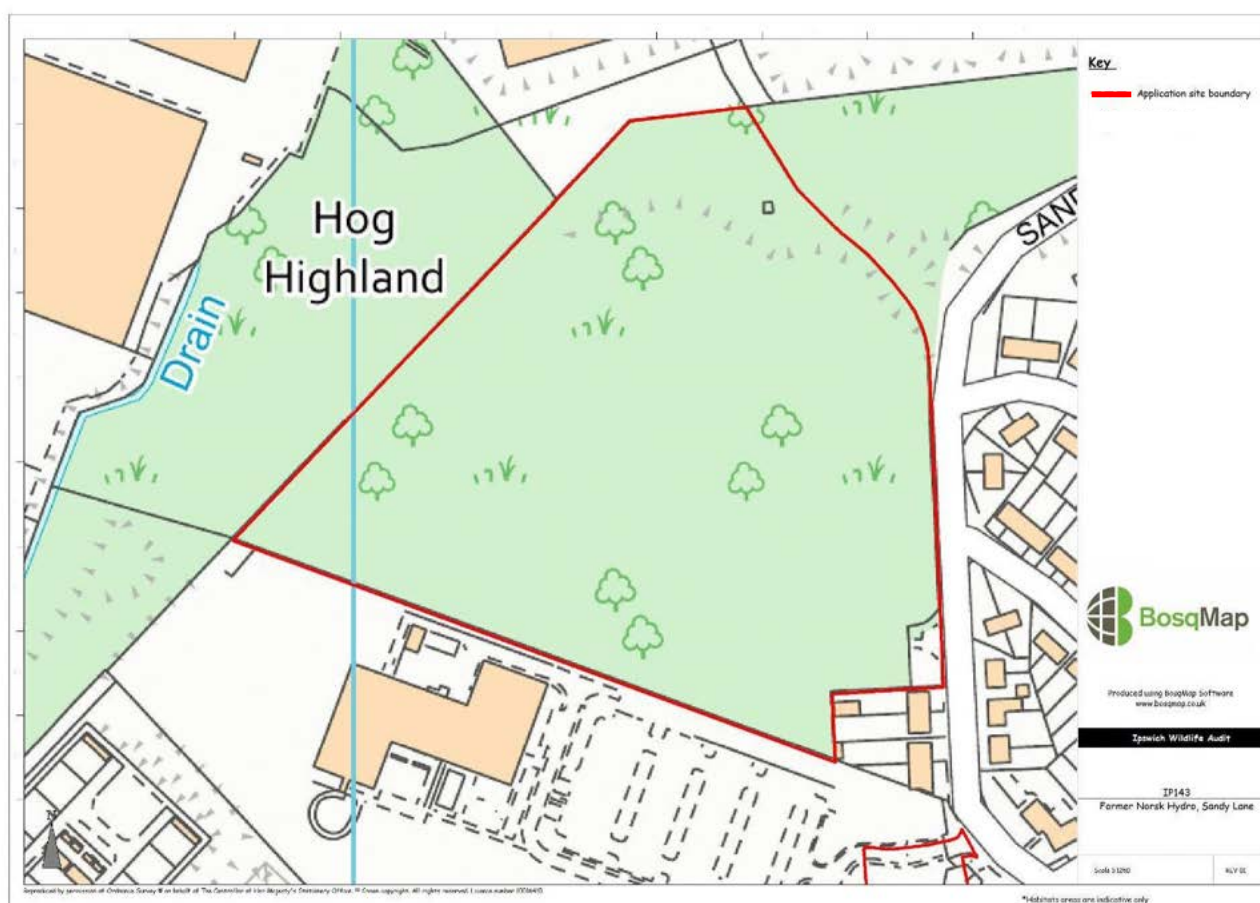
Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: Former Norsk Hydro, Sandy Lane

Site ref: IP143
Site status: No wildlife designation
Grid ref: TM 17095 42494
Area: 4.49 hectares
Written by: J Crighton
Date written: 30th August 2019
Recorder: Not surveyed
Weather conditions: N/A
Ranking: 4 (based on the available information)
Biodiversity value: Medium

Map:



Habitat type(s):
Woodland, rough grassland, scrub

Subsidiary habitats:
Bare ground

Site description:

Access was not possible to this site. However, a previous ecological assessment was undertaken by Adonis Ecology in April 2016, so information has been extracted from the report and noted from available imagery, as well as a previous SWT Trading Ltd Wildlife Audit undertaken in August 2012.

This site is roughly triangular in shape, with Sandy Hill Lane forming the eastern boundary, offices with associated car parks and amenity grassland to the south and a block of woodland separates the site from the Ipswich Grain Terminal on the eastern bank of the River Orwell. To the north is a further block of woodland.

In 2016 the site was largely open short grassland with patches of scrub, compared with 2012 when it was described as acid grassland with areas of bare ground with lichen and bryophyte cover. This earlier report advised that this site may meet the criteria for designation as a County Wildlife Site.

It is possible that the site has changed in nature over the years or has been affected by site vegetation removal works. The site will have continued to change since 2016.

Scrub and some woodland line the perimeter, with a steeply sloping area within the woodland. A chain-link fence runs along the boundary with Sandy Hill Lane.

Protected species seen or known:

Records in the surrounding area include:

Badger
Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat
Common lizard
Grass snake
Slow worm
Adder
Barn owl

Protected species potential:

-

Priority habitats present:

Open mosaic habitat on previously developed land

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Common toad
Stag beetle

Cinnabar moth

Butterflies include grayling, silver-studded blue, wall, white admiral, white letter hairstreak and small heath

BoCC Red List birds include cuckoo, house sparrow, lapwing, lesser redpoll, linnet, skylark, song thrush, spotted flycatcher, starling and yellowhammer

BoCC Amber List birds include bullfinch, dunnoek, reed bunting and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site lies between Landseer Park County Wildlife Site to the north east and the River Orwell County Wildlife Site to the south west (also the Stour and Orwell Estuaries Ramsar site and Special Protection Area (SPA), and Orwell Estuary Site of Special Scientific Interest (SSSI)). Although Sandy Hill Lane bisects the continuous habitat between the site and the park, there is still a good degree of connectivity. Areas of woodland and scrub continue to the north and the south of the site providing an important wildlife corridor in the south-east of Ipswich.

Structural diversity:

This site appears to have excellent structural diversity with varying heights offering several habitat types including bare ground, short and tall grass, scrub and trees.

Flora:

From the 2016 report, the site was found to be predominantly short grassland with low soil mounds, containing sheep's sorrel, tansy and spotted and black medick, ragwort and yarrow amongst others. The vegetation on the mounds was generally longer than that of the surrounding ground with species such as cleavers, field forget-me-not, climbing corydalis and common mouse-ear. Conversely, in the 2012 report, the grassland was dominated by common bent and patches of bare soil with lichen cover, and there was a more diverse range of forbs present than in 2016.

Both of the surveys describe the scrub and woodland similarly as follows: The southern and eastern edges were lined with dense scrub dominated by gorse and broom, with occasional bramble and young silver birch trees. Along the eastern and northern edges of the site was a strip of woodland dominated by oak and silver birch.

Avifauna:

If the site remains similar to how it was described in 2016, it could good potential nesting sites for skylark and meadow pipit, with a large open expanse of grassland. The surrounding scrub and woodland offer additional nesting sites for common species and summer migrants. With such close proximity to the River Orwell the site may be visited by wildfowl and waders, such as lapwing.

Invertebrates:

The diversity of habitats on site, including a number of native trees and scrub, should provide a high invertebrate biomass and diversity. However, a detailed invertebrate survey was undertaken in 2016 but no protected or rare species were recorded. Stag beetle was not specifically included as a target

species in these surveys and they are highly likely to be present on site where there is subterranean deadwood suitable for their larvae.

Herpetofauna:

The long and short grass with scrub edging along with areas of bare ground offer suitable foraging, refuge, hibernation and basking opportunities for common reptiles such as grass snake, common lizard and slow worm. However, a detailed reptile survey during the summer and early autumn of 2016 did not record any evidence of this group. This is surprising as there are thought to be good populations in the adjacent Landseer Park.

The site may support common toad, with the woodland offering hibernation opportunities.

Mammals:

A badger sett entrance and hairs were located on the steep slope within the woodland in the 2016 survey. Whilst badgers were filmed on site during further surveys, no direct evidence of badgers entering these holes was recorded. However, three years have elapsed and it is possible that badger activity may have increased and further sett entrances have been created.

The previous surveys also noted that some of the mature trees within the wooded area contained features suitable for roosting bats. The entire site is likely to be used by foraging bats and the woodland continuing to the north and south offers a good commuting corridor.

The large expanse of short grassland provides good foraging habitat for hedgehogs, and the scrub and woodland provide nesting and hibernation prospects. There are a number of records of them from the surrounding area.

Common species of mammal such as fox, rabbit, muntjac deer are likely to forage on this site. Mice, voles and shrews are also likely to be present in the rough grassland areas and the woodland and scrub on the boundaries of the site.

Comments and recommendations:

This site has been allocated for residential development with an estimated yield of 85 dwellings and is available for immediate redevelopment subject to a previously submitted planning application approval.

Prior to any development, an updated preliminary ecological appraisal of the site, along with any required species-specific surveys will need to be undertaken.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, to deliver locally accessible natural greenspace. In this instance, a habitat mosaic of grassland, scrub and woodland should be retained. All retained features should not be subjected to any light spillage so any lighting scheme should be designed to prevent this. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. New planting should seek to use native species typical of the local area.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing Priority habitat on this site, it is likely that future development will require compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

References:

Hurst, J., (May 2017). *Reptile Surveys and Badger Assessment at Top Site, Sandyhill Lane, Ipswich, Suffolk*. Adonis Ecology Ltd, Lavenham

Lee, P. (May 2017). *Invertebrate Survey Report at Top Site, Sandyhill Lane, Ipswich, Suffolk*. Adonis Ecology Ltd, Lavenham

Wells, K. (April 2016). *Ecological Assessment at Top Site, Sandyhill Lane, Ipswich, Suffolk*. Adonis Ecology Ltd, Lavenham

Wright, M. (August 2012). *Ipswich Wildlife Audit 2012, Site Reference 32 – Former Norsk Hydro & Part Hog Highland*. SWT Trading Ltd, Ashbocking

Site name: Land south of Ravenswood East and West

Site ref: IP150a, IP150b, IP150c, IP150d, IP150e

Site status: No wildlife designation

Grid ref: TM 19137 41539, TM 19255 41078, TM 19849 41433, TM 19404 41190, TM 19745 41382

Area: 2.21 hectares, 7.79 hectares, 1.18 hectares, 1.78 hectares, 3.59 hectares

Date: 18th July 2019

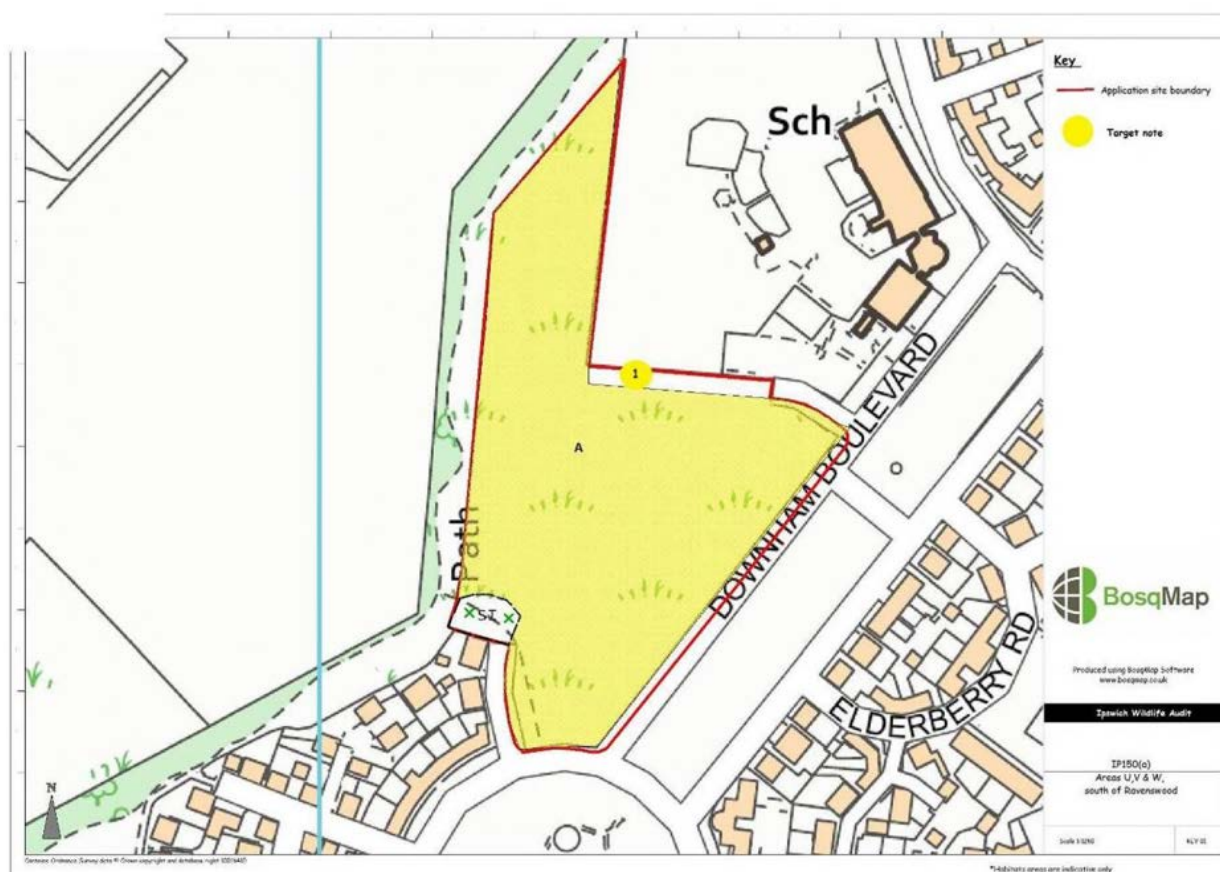
Recorder: J Crighton

Weather conditions: Overcast, light rain and wind, ca 19°C

Ranking: 4, 3, 3, 3, 3 (likely to be higher following detailed surveys)

Biodiversity value: Medium-High

Map:



IP150a (Areas U, V & W south of Ravenswood)



IP150b (sports park) and IP150d (fronting Alnesbourn Crescent). Land south of Ravenswood West.



IP150c (fronting Nacton Road) and IP150e (fronting Alnesbourn Crescent). Land South of Ravenswood East.

Photos:



IP150a Mown grassland from new earth bund



IP150a Harebells in species rich area (Target Note 1)



IP150b Scrub/grassland mosaic



IP150b Neutral semi-improved road verge



IP150c Dense scrub and coniferous woodland



IP150d Dittander along the edge of the site



IP150e Bare ground area (Target Note 2)



IP150e Neutral semi-improved verge

Habitat type(s):

Neutral semi-improved grassland, dense/continuous scrub, coniferous plantation woodland, amenity grassland, poor semi-improved grassland, scattered scrub and broad-leaved trees, species poor hedgerow

Subsidiary habitats:

Bare ground, fallen and standing deadwood

Site description:

These five sites which contribute to IP150 lie within Ravenswood, in the south of Ipswich, east of the River Orwell. Formerly part of the Ipswich Airport, sites IP150 b, c, d, and e have been left

undisturbed for a number of years and now contain a species-rich mosaic of grassland and scrub vegetation typical of the light sandy soil in the area.

IP150a was formerly similar in composition to the other sites but has undergone site clearance since it was last surveyed in 2013, when it contained a mosaic of long grass, tall ruderal and scrub along with a moderately dense assemblage of semi-mature trees in the northern-most section. However, the site is now short-mown amenity grassland, with recently created steep earth bunds around the perimeter with the Ravenswood Primary School and Downham Boulevard. Outside of the site boundary to the west, a tree belt and fence separates the site from the adjacent Gainsborough Sports Centre playing fields.

IP150b, IP150d and IP150e used to be part of a continuous linear corridor along the southern edge of Ravenswood Neighbourhood Estate. However, the recently constructed Bluebird Lodge Rehabilitation Centre now bisects the area between IP150d and IP150e. The vegetation throughout these three sites is a habitat mosaic of neutral semi-improved grassland with dense patches of successional scrub as well as scattered scrub and regenerating oaks. The presence of anthills throughout the grassland indicate the relatively undisturbed nature of the sites.

IP150b is the largest and most westerly of the sites. It lies directly east of a 'Community Managed' area which has recently been sown with a wildflower mix. Its northern boundary is a footpath which runs along the outer edge of the houses on Dunwich Close and the southern boundary is the disused airport access road. A high earth bank and associated ditch are set back around 10m from the disused airport road, giving the site an enclosed, sheltered feel, and providing valuable structural diversity.

IP150d lies between IP150b and Bluebird Lodge, with its northern boundary alongside Alnesbourn Crescent and is more heavily scrub dominated than the other sites.

IP150e is east of Bluebird Lodge and continues until it meets IP150c which fronts Nacton Road. In contrast to IP150d, this site is fairly open grassland with scattered scrub and regenerating oak.

IP150c is made up of dense scrub and a small stand of coniferous plantation woodland, which acts as a buffer against road noise and pollution. A species-poor hedgerow separates this woodland from Nacton Road.

Although no Priority habitat is present on these sites, IP150 b, c, d and e in particular have a high biodiversity value and represent part of an important wildlife corridor which further connects to the wider ecological network in the south of Ipswich. These sites are likely to support a diverse range of species.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Brown long-eared bat
Badger

Barn owl
Grass snake
Slow worm
Common lizard
Adder

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Small heath butterfly

White admiral butterfly

White letter hairstreak butterfly

BoCC Red List birds include song thrush, yellowhammer, reed bunting, lesser redpoll, linnet, cuckoo, starling, herring gull, house sparrow, tree pipit,

BoCC Amber List birds include swift (Suffolk Character Species), dunnock, reed bunting,

Priority species potential:

Cinnabar moth

Connectivity:

This site currently has excellent connectivity with similar habitats in the surrounding area (including Site IP152) and lies east of Orwell Country Park, which encompasses Brazier's Wood, Pond Alder Carr and Meadows County Wildlife Site (CWS). Bridge Wood (ancient woodland) CWS is located to the south on the other side of the A14. The verges and tree belts along the A14 are also an important component of the wider ecological network through Suffolk.

Structural diversity:

These sites (excluding IP150a) have excellent structural diversity with a habitat mosaic of bare ground, tall grass and forbs, dense scrub and semi-mature trees offering several different habitats which are likely to support a number of taxonomic groups.

Flora:

IP150a is currently short-mown right up to the edges of the site. The newly created earth bunds show some vegetation regeneration with species typical of disturbed ground including fat hen, scentless mayweed, bristly ox tongue, common mallow, prickly lettuce, nettle, creeping thistle and white campion. Although the main body of this site is covered with low quality amenity grassland, the southern boundary, which is unmanaged, contains a different composition of species including hedge mustard, teasel, curled dock, goat's beard, mugwort, soapwort, red clover and a few individual knapweed plants. The grasses seen here are likely to be present within the amenity sward also, but

are not so readily identifiable when short mown, such as cock's foot, false oat and red fescue. Although the amenity sward is heavily dominated by perennial rye grass. It also supports common forbs including ribwort plantain, autumn hawkbit, yarrow, common cat's-ear, dandelion, creeping cinquefoil and dove's foot crane's bill. Towards the south of this site, the soil is free draining and sandy and still contains relics of the more diverse historical sward including hares foot clover, common stork's bill and bird's foot trefoil.

The tree belt between the site and the adjacent Playing Fields does not form part of IP150a, but nonetheless is an important boundary feature containing a diverse range of species including oak, poplar, silver birch, sweet chestnut, Corsican pine, guelder rose, dogwood, rowan, holly, field maple, crab apple, walnut, gorse and grey willow.

Along the boundary with the school, a species-poor hedge overhangs the fence and an area (marked on the map as Target Note 1) has a more interesting sward with several harebells, toadflax, hare's foot clover, perforate St John's wort and common vetch.

IP150b, IP150d and IP150e all contain a similar mix of species with a mosaic of dense scrub and neutral semi-improved grassland. The dense scrub generally encloses the sites around the perimeter on the southern boundary, with the earth bund almost covered with thick scrub. There are several access points and mammal trails accessing the central areas of the sites, as well as patches of scrub and individual plants throughout the sites also.

The scrub comprises mainly gorse with dense stands of blackthorn, hawthorn, broom and dog rose, and frequent hazel, silver birch, field maple, elder, dogwood, rowan and buddleia. Bramble has spread throughout the scrub, with evidence of oak regeneration in places, particularly throughout the more open sward of IP150e.

The semi-improved neutral grassland sward is most dense along the road verge next to the former airport access road, it is unclear whether this is a semi-natural sward or if it has been historically sown with a wildflower seed mix. The sward is species-rich and contains wild carrot, common knapweed, field scabious, ox-eye daisy, lady's bedstraw, common poppy and perforate St John's wort. There is also a diverse range of grass species present including creeping bent, smaller cat's tail, timothy, common bent, Yorkshire fog, false oat, cock's foot, soft brome and sweet vernal grass.

These species are present throughout the central areas also, but in a more scattered constitution. Also present are some patches of ruderal vegetation including curled dock, mugwort, rosebay willowherb, creeping thistle, hedge mustard, white campion, common mallow, weld, hemlock and black horehound, which could indicate localized nutrient enrichment.

Some more open, parched areas (such as well used tracks and the edges of IP150e) support bird's foot trefoil, hare's foot clover, common cudweed (Near Threatened), selfheal, common centaury and common toadflax. Dittander has spread along the northern and southern edges of both IP150d and IP150e. Dittander (Nationally Scarce) is normally associated with coastal habitats, but is locally common in this part of Suffolk.

Along the northern edge of IP150b, adjacent the public footpath, is a wide area of heavily managed

amenity grassland. The scrub bordering this is particularly dense and in some areas, fruit trees have been planted including apple, crab apple and plum. Alongside IP150d and IP105e there are also some man-made depressions which have been landscaped with species such as holm oak, silver birch, field maple, gorse and bramble.

IP150c contains a similar species list of scrubby plants in half of the site, but immediately fronting Nacton Road there is some very different habitat, including a managed field maple and hawthorn hedge with some turkey oak, and a small stand of Corsican pine.

Avifauna:

It was a sub-optimal time of year for recording this group. However, the areas of dense scrub provide good foraging, nesting and roosting opportunities for a range of common bird species. It also provides an important resource for summer migrants such as whitethroat, which are likely to nest in the areas of dense bramble across sites IP150 b, c, d and e. From reports carried out across the whole of the former airport site across the years, it is known that these sites used to support several skylark and meadow pipit territories, which have diminished over the years, likely due to the scrub encroachment. During the survey several species were noted including some BoCC Red List species such as linnet, house sparrow and starling, along with house martin, whitethroat, garden warbler, blackbird, chiffchaff, chaffinch, goldfinch, wren, carrion crow and wood pigeon.

Invertebrates:

These sites are likely to support a rich invertebrate community, with a patchy mosaic of vegetation and habitat types, structural diversity and tall buffering patches of scrub adjacent to open grassland providing shelter and variable microclimates. There are also areas of bare ground where evidence of ground burrowing bees and wasps was noted. The fallen and standing deadwood within the site will also offer opportunities for saprophytic invertebrates and give good over-wintering habitat. Stag beetle larvae are likely to be present if there is any subterranean dead wood.

Anthills were noted throughout the site and a number of common invertebrates including spiders, soldier beetles, grasshoppers, hoverflies and bees were associated with the long grass and flowers.

Eight species of butterfly were recorded during the survey visit, despite sub-optimal weather conditions, which include gatekeeper, small skipper, large white, meadow brown, ringlet, brimstone, red admiral and peacock.

Herpetofauna:

The long grass and scrub cover, along with high banks and areas of bare ground offer excellent foraging, refuge, hibernation and basking opportunities for common reptiles such as grass snake, common lizard and slow worm. The fallen deadwood could also offer valuable hibernation sites. A previous survey (covering IP150 a, c, and e) estimated that a medium sized population of common lizard were present in 2013.

Mammals:

This site could provide important habitat for foraging and commuting bats with a high invertebrate density providing excellent feeding opportunities.

There are a number of hedgehog records in the immediate area and the combination of grassland, and scrub provides good foraging, refuge and hibernation opportunities for them.

Badger latrines were noted in the site south of this area (IP152). Badgers are regularly recorded after road traffic accidents along the A14 and although no evidence of setts were observed during the visit, the dense scrub could have concealed any entrances. They are highly likely to use this site.

Evidence of common species of mammal such as fox, deer, rabbit and grey squirrel using these sites were noted during the survey. The rough grassland and scrubby areas are also likely to support mice, voles and shrews. Small predatory species such as stoat and weasel are also likely to be present.

Comments and recommendations:

IP150a is proposed for residential use with 94 dwellings at medium density (45dph). IP150b has been allocated as a sports park, with the intention to link into cycling and pedestrian route networks in conjunction with the other sites. IP150c is proposed for B1 uses (offices, research & development, light industrial uses), similar to that of the surrounding industrial estates of Futura Park. IP150d and IP150e are also proposed for residential development, with 34 dwellings on 50% of the site and 126 dwellings on 100% of the site respectively, both at low density (35dph). The briefing sheet also noted that surface water flooding and drainage could be a concern around sites IP150b-e.

IP150a, IP150c and IP150e were subject to a range of specialist species surveys in 2013 prior to a development application. These included reptiles, breeding birds and invertebrates. Due to the time lapse, further updated detailed surveys encompassing sites IP150 b, c, d and e should be undertaken to assess the ecological interest of this site, with the addition of badgers.

Mitigation for impacts on the reptile population will be required and ideally populations should be retained on site in conjunction with additional habitat enhancement. In order to achieve this, log piles for basking reptiles sited over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. These structures will also benefit stag beetle larvae.

Lighting schemes should be designed to reduce light spillage into any retained boundary features which could provide a wildlife corridor. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on this site, it is likely that future development will require compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. In this instance, the magnitude of the habitat proposed to be lost will require significant off-site compensation habitat. This should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species

composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, in particular areas of scrub and grassland mosaic, ideally maintaining the wildlife corridor throughout this area. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices.

Any new greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks, therefore the scheme should maintain some open space adjacent to the A14 corridor, but ensure this space is still connected to similar habitat in the north.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

Additionally, green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. Living walls can also be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates.

In addition to this, action can be taken for individual species such as swifts and bats

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Site name: Airport Farm Kennels

Site ref: IP152

Site status: No wildlife designation

Grid ref: TM 198812 41199

Area: 7.34 hectares

Date: 29th July 2019

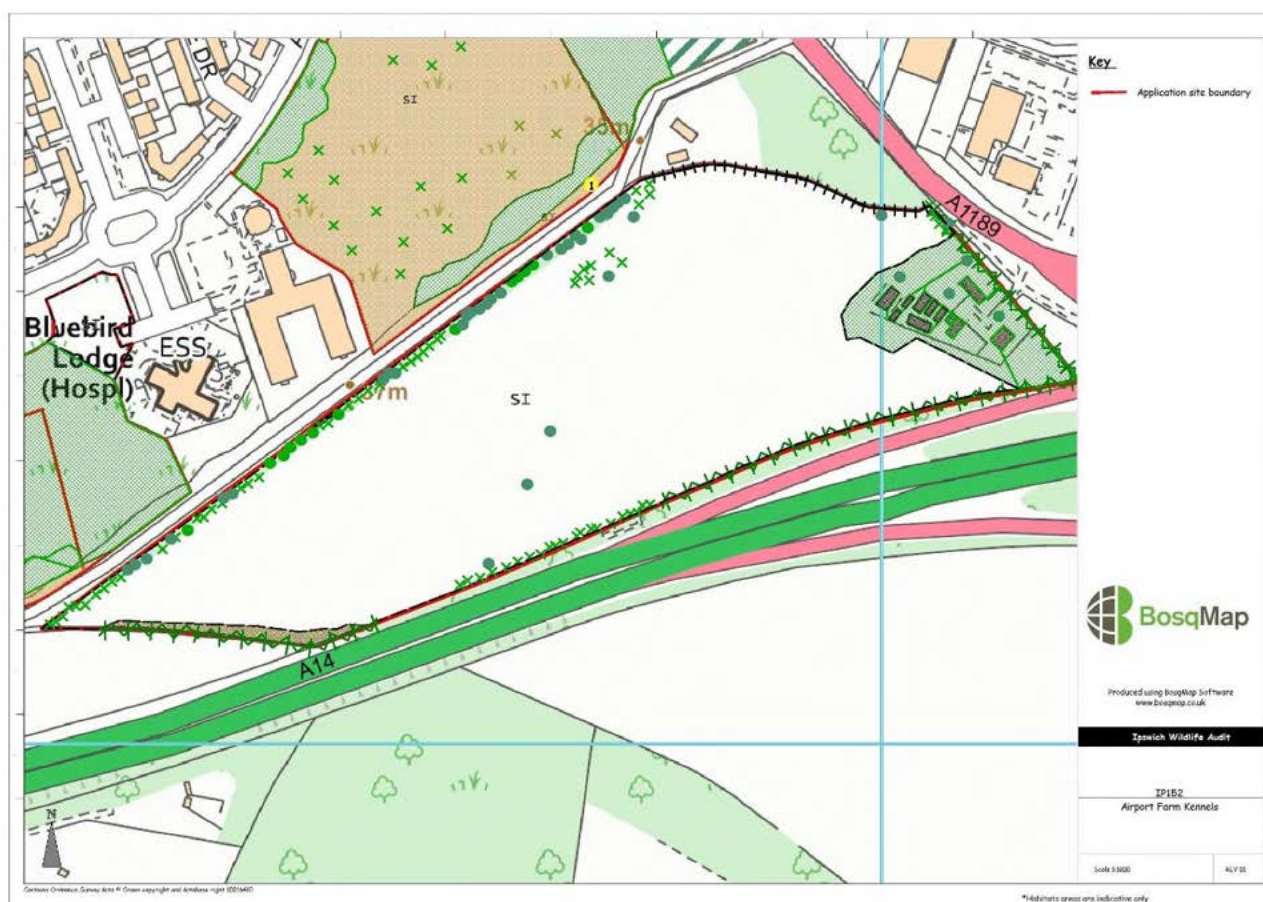
Recorder: J Crighton

Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C

Ranking: 4 (potentially higher following more detailed surveys)

Biodiversity value: Medium

Map:



Photos:



Mature trees on northern boundary



Disused buildings in the south eastern corner



Looking west across the site



Bare ground with burrowing wasp holes on path along northern boundary

Habitat type(s):

Poor semi-improved grassland, dense/continuous scrub, species-rich intact hedgerow with trees, broad-leaved trees, bare ground, bracken

Subsidiary habitats:

Rot holes, stag-horned oak trees, fallen deadwood, brash piles

Site description:

This site lies directly north of the A14 near the Nacton Road roundabout and is bounded to the north by the former airport perimeter road. The land was previously in arable production but is now largely poor semi-improved grassland. There are a number of derelict buildings in the south eastern corner and the site is surrounded by trees, scrub and species-rich intact hedgerow. Some veteran oaks are present throughout the grassland.

Along the A14 edge, there is a large volume of litter from the road.

The site is partially located within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty, with the remainder of the site lying directly adjacent.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Brown long-eared bat
Badger
Barn owl
Grass snake
Slow worm
Common lizard
Adder

Protected species potential:

-

Priority habitats present:

Hedgerow

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Swift (Suffolk Character Species)
Skylark
Song thrush
Dunnock
Linnet
Yellowhammer
Lesser redpoll
Starling
House sparrow
Stag beetle
Small heath butterfly
White admiral butterfly
White letter hairstreak butterfly

Priority species potential:

Cinnabar moth

Connectivity:

This site currently has excellent connectivity with similar habitats in the surrounding area (Site IP150) and lies east of Orwell Country Park, which encompasses Brazier's Wood, Pond Alder Carr and

Meadows County Wildlife Site (CWS) and Bridge Wood (ancient woodland) CWS is located to the south on the other side of the A14.

Structural diversity:

This site has good structural diversity offering a wide diversity of habitat structure, including bare ground with light sandy soil, areas with short and tall forbs and grasses, scrub, hedgerow and mature trees which will support a range of taxonomic groups.

Flora:

The main bulk of the site is occupied by species-poor grassland, including common grasses such as red fescue, false oat, cock's foot and Yorkshire fog. Tall herbs dominated for the most part by large stands of rosebay willowherb, weld, ragwort, Canadian fleabane and creeping thistle are present and scattered amongst these are other typical species of former arable soils such as prickly lettuce, curled dock, black horehound, lesser burdock, white campion, evening primrose, yarrow, bristly ox-tongue, mugwort, prickly sow thistle, spear thistle, teasel, bugloss, wild parsnip, great mullein, common mallow, hedge mustard, common nettle, hogweed and cow parsley. Four veteran oaks with stag-horned branches are situated in a diagonal line across the field.

Towards the edges, where there are rough, overgrown paths, there is a little more diversity including perforate St John's wort, scentless mayweed, hairy tare, common poppy, germander speedwell, rough chervil and white deadnettle as well as some patches of dry, bare ground with hare's foot clover, scarlet pimpernel, common cudweed, selfheal, sheep's sorrel, tormentil (Suffolk Rare Plant), shining crane's bill, common stork's bill, common cat's ear and common bent. Although some of these species, in particular, sheep's sorrel and common bent are more often associated with acid grassland, in this instance they are likely to be more indicative of the parched nature of the ground rather than pH.

Along the disused airport road in the north of the site, there are several mature oak and Corsican pine trees, some of which are ivy covered. There are also some more scrubby species including goat willow, hawthorn, elm, young sycamore, holly with bramble and honeysuckle. Toadflax and knotgrass were frequent along the path in the north, along with some pink wood sorrel (non-native).

On the A14 boundary, species rich hedgerow gives way to overgrown scrub with trees in the south-eastern corner around the derelict buildings which includes leylandii, elder, silver birch and cherry with bracken patches and a number of veteran oaks. The hedgerow comprises hazel, field maple, silver birch, hawthorn, broom, gorse, elder, plum, blackthorn, cherry and some scrubby oaks along with some mature white poplar and Corsican pine.

Avifauna:

It was a sub-optimal time of year for recording this group. However, the site offers good potential nesting sites for skylark and meadow pipit, with a large open expanse of grassland. The surrounding scrub, hedgerow and mature trees also offer additional nesting sites for common species and summer migrants. During the survey, goldfinch, linnet, blackbird and chaffinch were noted but the site is also suitable for species such as house sparrow, starling, dunnock, yellowhammer, song thrush and bullfinch.

Invertebrates:

This habitat is likely to support a rich invertebrate community. Nine species of butterfly were noted during the survey, including peacock, ringlet, painted lady, red admiral, large white, gatekeeper, small white, meadow brown and small skipper. Several day flying moths were also seen and the site is likely to support the Priority species, cinnabar moth, whose larval foodplant is common ragwort which is abundant on site. Ant hills were noted in the west of the site, indicating that the grassland here is relatively dry and undisturbed. In some areas a thick thatch of dead and rotting vegetation has formed which, along with fallen deadwood and brash piles, could support detritus feeding insects. Stag beetle larvae are likely to be present if there is any subterranean dead wood associated with the hedgerows. White letter hairstreak butterflies (Priority Species) could also be present due to the presence of elm on the boundaries.

Several small holes, likely made by ground burrowing bees and wasps were visible along the dry, sandy path along the north of the field. Buff-tailed bumble bee and common carder bee were seen along with a large number of grasshoppers, crickets and spiders.

Herpetofauna:

The long grass and hedgerow edging along with areas of bare ground offer suitable foraging, refuge, hibernation and basking opportunities for common reptiles such as grass snake, common lizard and slow worm and potentially adder, which has a much more restricted range in Suffolk.

The brash piles and fallen deadwood could also offer valuable breeding and hibernation sites.

Mammals:

This site could provide important habitat for foraging and commuting bats. In addition, the veteran trees throughout the site and the perimeter have cracks, crevices and other features that have the potential to support roosting bats. The derelict buildings and a small pillbox on the northern boundary could also support roosting bats, with the latter also potentially providing hibernation habitat.

There are a number of hedgehog records in the immediate area and the combination of grassland, scrub and hedgerow provides good foraging, refuge and hibernation opportunities for them.

Badger latrines were noted near the path along the northern boundary. Badgers are regularly recorded after road traffic accidents along the A14 and although no evidence of setts were observed during the visit, the dense scrub and hedgerow could have concealed any entrances. They are highly likely to use this site.

Rabbit activity in the form of burrows, scrapes and grazed lawns was evident.

Common species of mammal such as fox, deer and grey squirrel are likely to be present on this site. The rough grassland and boundary hedgerows are also likely to support mice, voles and shrews. Small predatory species such as stoat and weasel may also be present.

Comments and recommendations:

This site has been allocated as B1, B2 and B8 use with appropriate employment over an indicative capacity of 20,000 sq m. A secondary option includes discussion over the feasibility of utilising a small section of the site for Park & Ride facilities.

Further detailed surveys should be undertaken to assess the ecological interest of this site, particularly bats, badgers, reptiles, invertebrates and breeding birds, as well as impacts upon priority species.

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on this site, it is likely that future development will require compensation to avoid a biodiversity loss and to deliver net gain. Compensation for habitat loss can be on-site and/or off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, in particular the hedgerows and mature trees along the boundaries. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices.

Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks, therefore the scheme should maintain some open space adjacent to the A14 corridor, but ensure this space is still connected to similar habitat to the west and north via the perimeter.

Lighting schemes should be designed to reduce light spillage into the boundary hedgerows and scrub and any other habitat which may act as a wildlife corridor. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the

system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

Additionally, green roofs can work as part of sustainable drainage options but also be designed to support wildflowers, grasses and sedums and in turn, these can benefit both foraging invertebrates and birds. Living walls can also be created as part of schemes that harvest rainwater or can utilise grey water sources. Aspect is important as shaded walls usually establish quickest. Climbers, such as ivy, are trained on wires or trellis or adapted planters can be used for other species. Green walls provide cover for birds such as house sparrow and shelter and foraging habitat for invertebrates.

In addition to this, action can be taken for individual species such as swifts, bats, reptiles and stag beetles.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

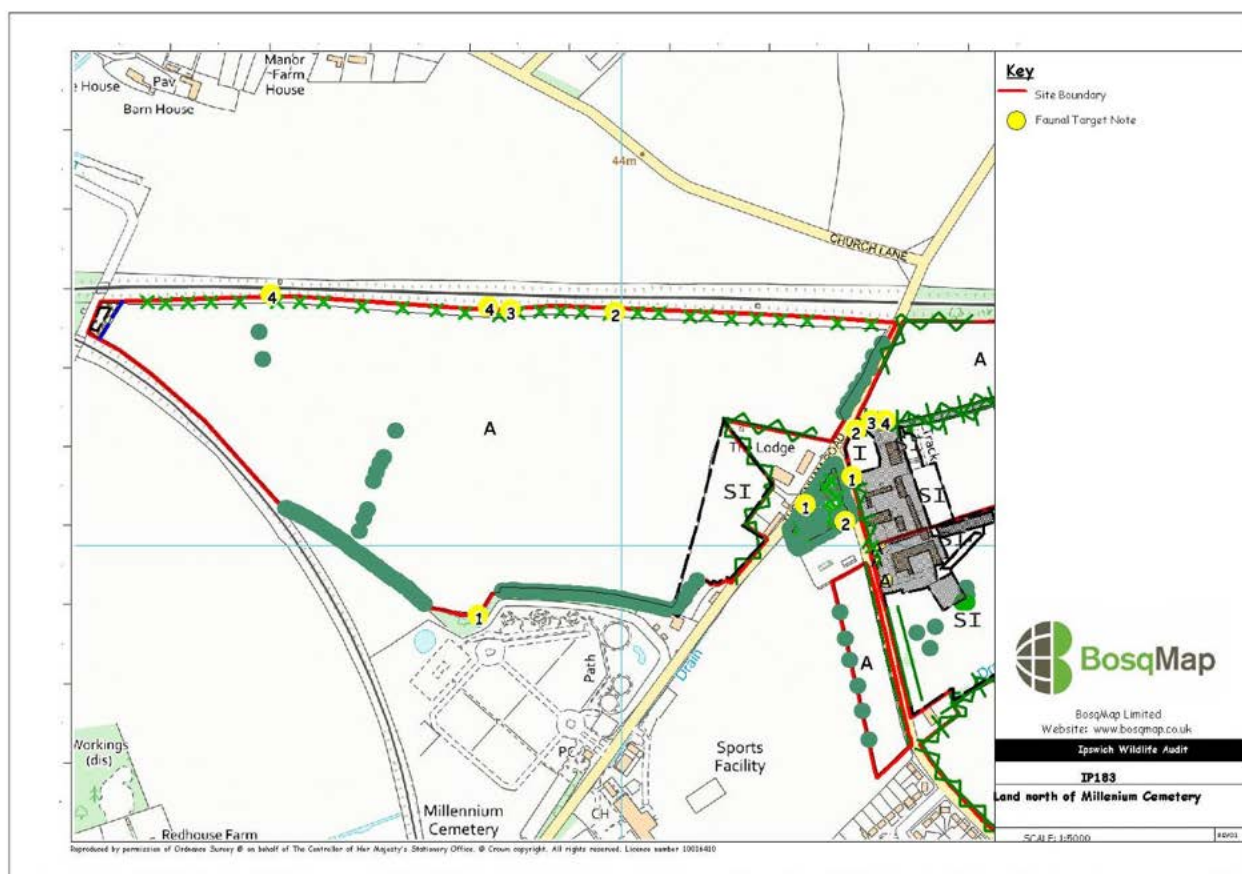
Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

If present, mitigation for impacts on the reptile population will be required and ideally populations should be retained on site in conjunction with additional habitat enhancement. In order to achieve this, log piles for basking reptiles sited over the top of a below-ground hibernacula could be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. These structures could also be used to provide stag beetle habitat if logs are buried to support their larvae.

Site name: Land north of Millennium Cemetery

Site ref: IP183
Site status: No wildlife designation
Grid ref: TM 17850 47103
Area: 21.72 hectares
Date: 23rd August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View westwards along northern boundary



Pill box on Northern boundary (Target Note 4)



View south-westwards toward relic hedgerow trees



Potential bat roosting feature in aspen along southern edge

Habitat type(s):

Arable, poor semi-improved grassland, tree belt, species-poor hedgerow, scattered scrub

Subsidiary habitats:

-

Site description:

This large arable field is bordered by the railway line to the north and south-west. The Millennium Cemetery lies to the south of the site and Tuddenham Road with its associated properties forms the eastern boundary. Within the arable field there are mature trees, which were once part of an old hedge line. In the south-eastern boundary is an area of poor semi-improved grassland. There are two WW2 pill boxes along the northern boundary (Target Note 4).

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat

Barn owl
Badger
Great Crested Newt
Common lizard

Protected species potential:

-

Priority habitats present:

Hedgerows

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Common toad

Brown hare

Small heath butterfly

Wall butterfly

Grayling butterfly

BoCC Red List birds include turtle dove, skylark, house sparrow, starling, yellowhammer, linnet, lapwing, cuckoo, herring gull and lesser redpoll

BoCC Amber List birds include bullfinch, swift (Suffolk Character Species) and song thrush

Priority species potential:

White-letter hairstreak butterfly

Connectivity:

The railway embankments along with the tree belt to the south that borders the cemetery provide excellent connectivity to the wider landscape.

Structural diversity:

The site is almost entirely arable, so the structural diversity is poor. However, the hedgerows and field margins, along with the tree belt to the south and the in-field trees combine to add important structural value to this site.

Flora:

The wooded tree belt bordering the Millennium Cemetery has a good diversity of woody species including oak, ash, sycamore, aspen, hawthorn, blackthorn, field maple, elm, dogwood, dog rose and bramble. Many of the trees are ivy covered.

The arable field margins contain a range of species typical of this habitat type including poppy, scarlet pimpernel, field pansy, field bindweed, scentless mayweed, common field speedwell, spear thistle, creeping thistle, ragwort, perennial sow thistle, hop trefoil, dove's-foot cranesbill, black horehound, black nightshade, yarrow and field scabious (listed as declining on the Suffolk plant register).

There is an area of poor semi-improved grassland in the south-eastern corner of the field. This is dominated by grasses including cock's-foot and false oat with some common forbs including dandelion, bristly ox tongue, creeping buttercup, creeping thistle, spear thistle, cow parsley, ribwort plantain, hogweed, cow parsley and perennial sow thistle. Bracken grows along the railway margins.

Avifauna:

It was a suboptimal time of year for recording this group. The margins of the site and the mature trees provide the most opportunities for nesting, although the large arable field is good for ground nesting birds particularly skylark. Several common species including carrion crow, magpie, green woodpecker, greater spotted woodpecker, buzzard and blackcap were seen or heard during the visit. There are a number of records of Red and Amber listed species in the area which could be present on or use the site including declining farmland birds such as yellowhammer and linnet. Species such as lapwing could also use the field for foraging during the winter.

Invertebrates:

Arable farmland generally represents suboptimal habitat for invertebrate species. However, there will be a range of species associated with the woody features on the boundary and in-field trees. The field margins will provide some habitat for nectar feeding species. Stag beetles (Priority species) are likely to be present around the margins of the site as there is likely to be subterranean dead wood for their larvae. Common species of butterfly were seen during the visit including small white, red admiral, small tortoiseshell and speckled wood. White-letter hairstreak could also be present due to the elm along the boundaries.

Herpetofauna:

Great crested newt is known to breed in a pond within the Millennium Cemetery and there are other records in the area. Common toad is also recorded in this area. There is a very heavily shaded pond on the southern boundary (Target Note 1), but this was dry in summer 2012 and again held no water at the time of this visit. Whether it supports breeding amphibians will depend on if it holds any water in the spring.

A common lizard was seen on the northern field margin adjacent to the railway line (Target Note 3).

Mammals:

There is a record of hazel dormouse approximately 700m to the east and the densely wooded section along the southern boundary is suitable them if they are present within the wider landscape. Bats are highly likely to use the boundary features for foraging and commuting and some of the trees have potential roost features.

An outlier badger sett was recorded in the 2012 Wildlife Audit and this was still present and with a greater degree of activity, with additional holes indicating this may now be a main sett (Target Note 2).

Brown hare may be present, but this is a wide-ranging species.

Common mammal species such as fox, grey squirrel, rabbit and muntjac deer will also be present.

Comments and recommendations:

No information is provided regarding any future proposals for this site.

Development proposals should be informed by detailed ecological surveys, to include various groups but particularly botanicals, bats, hazel dormouse, great crested newt, reptiles, badger and breeding birds.

The scheme should retain the existing habitat on the boundaries and strengthen it by integration with new landscaping proposals to connect with ecological networks in the wider landscape. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and delivery through long-term good habitat management practices.

Careful planning and design can also integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. On a site of this size, there is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. New habitats should be created taking into account local ecology and site conditions.

Action can be undertaken for individual species or groups depending on the nature of the proposal. For example, holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences. There is a pond in the woodland edge on the southern boundary which is heavily shaded and dry most of the year, so largely unsuitable for amphibians. Management work to de-silt this pond and remove some of the canopy to let light in, possibly linked to a sustainable drainage scheme, would benefit this habitat.

Invertebrates should be supported by creation of wildflower meadows or log piles for saproxylic invertebrates such as stag beetle. Swifts are a declining migratory bird species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings such as office blocks or flats using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

The two WW2 pill boxes along the railway line could be adapted to make them suitable for bat hibernation. This would involve putting a locked door on the existing entrance to reduce winter temperature fluctuation and also public access. Roosting features such as tiles and bat bricks would be added inside the pill box to increase the opportunities for bats to roost and hibernate.

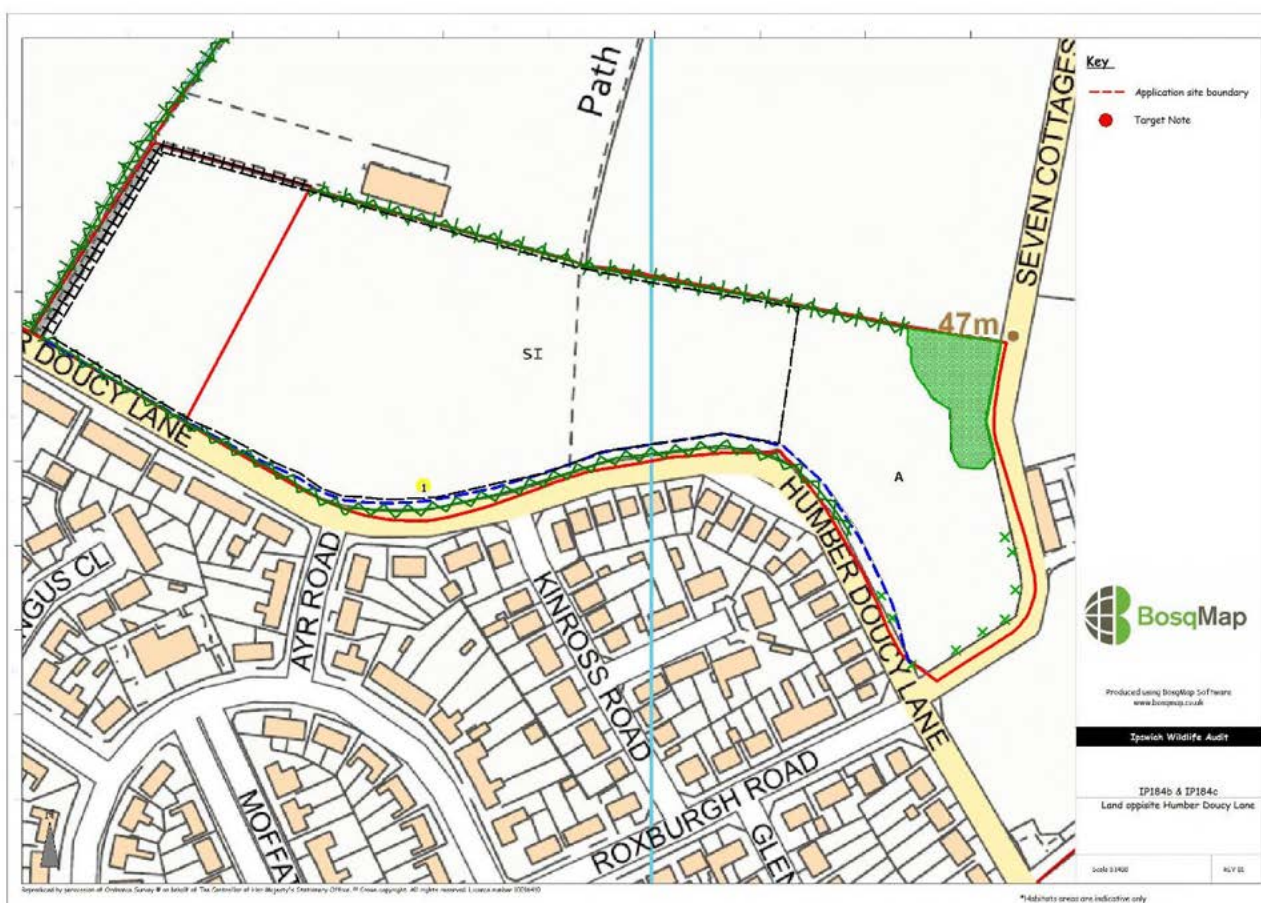
Site name: Land Opposite 341 to 447 Humber Doucy Lane

Site ref: IP184a/IP184b/IP184c
Site status: No wildlife designation
Grid ref: TM 18595 46678/TM 18780 46488/TM 18980 46419
Area: 10.1 hectares/0.85 hectares/3.99 hectares
Date: 24th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 32°C
Ranking: 5, 4, 4
Biodiversity value: Low/Medium

Map:



IP184a



The west of this site is IP184b and IP184c is the larger site in the east

Photos:



IP184a Hedgerow alongside Humber Doucy Lane



IP184b Playing field adjacent Rugby Club



IP184c Arable field adjacent playing field



IP184c Playing field



IP184c Stag-horned trees with bat potential

Habitat type(s):

Arable field, poor semi-improved grassland, intact species-rich hedgerow, intact-species-rich hedgerow with trees, semi-natural broad-leaved woodland, scattered broad-leaved trees, scattered scrub

Subsidiary habitats:

Standing deadwood

Site description:

These sites are located on the north-eastern edge of Ipswich, to the north-east of Humber Doucy Lane. A detailed survey was not undertaken for IP184a as it was inaccessible from the road. It could only be assessed from the track which runs along the south eastern boundary, between the site and IP184b. The site is currently under arable production with a cereal crop present. It is lined with a species-rich hedgerow with trees on its boundary with the track, Humber Doucy Lane and Site IP280

in the north. It is a small section of a much larger arable field.

IP184b is south of the aforementioned track, opposite 367 to 381 Humber Doucy Lane. It is currently used as a sports pitch by Ipswich Rugby Club and therefore is relatively short-mown right up to the perimeter. Despite this, the sward represents a poor semi-improved habitat rather than low value amenity grassland.

IP184c lies directly south of IP184b, opposite 341 to 365 Humber Doucy Lane. The site is mainly used as additional training ground/sports fields for Ipswich Rugby Club, but the southeastern-most section is sown with cereal crop. The sports fields are largely poor semi-improved grassland but towards the southern boundary, there is some evidence of a more species rich sward which may be present throughout if the mowing regime was relaxed (Target Note 1). A small pocket of woodland is present in the north-eastern corner of the site. The northern hedgerow contains some standards and deadwood.

A species-rich hedge runs the length of these three sites along Humber Doucy Lane which is likely to be of ancient origin. Similarly, the hedge along the east of IP184a (west of the track) has a ditch and bank, as does the hedge on the west of this site, so may also represent old field boundaries. This hedge is likely to be classed as 'important' under the Hedgerow Regulations 1997. The north-eastern boundary of these sites is the Rushmere St Andrew parish boundary.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat
Barn owl

Protected species potential:

Badger

Priority habitats present:

Hedgerow

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Common toad
Brown hare
Small heath butterfly
Wall butterfly
Grayling butterfly

BoCC Red List birds include turtle dove, skylark, house sparrow, starling, yellowhammer, linnet, lapwing, cuckoo, herring gull and lesser redpoll

BoCC Amber List birds include bullfinch, swift (Suffolk Character Species) and song thrush

Priority species potential:

White-letter hairstreak butterfly

Connectivity:

These sites have moderate connectivity with similar habitats through a network of field boundaries and hedgerows.

Structural diversity:

The structural diversity of these sites is relatively poor, as the majority of the space is occupied with either arable crop or short-mown grassland. However, some aspects of the site add greater diversity to small areas. These include the dry ditch with scrub, the boundary hedgerows and the small area of woodland which could offer a range of habitats to a number of taxonomic groups.

Flora:

An ancient species-rich hedgerow runs the length of these three sites along Humber Doucy Lane and includes several woody species including field maple, blackthorn, elm, ash, field rose, spindle, elder, hazel, dogwood and ivy. Associated with this hedgerow is a dry ditch, currently heavily overgrown with bramble.

Within the sites, IP184a is an arable field currently sown with a cereal crop, similar in nature to the south-easternmost section of IP184c.

IP184b, although more heavily managed than IP184c, contains similar species within the expanse of mown grassland including red fescue, creeping bent, perennial rye, cock's foot and smaller cat's tail grasses with common forbs such as red and white clover, autumn hawkbit, selfheal cut-leaved crane's bill, dandelion, ribwort and greater plantain, daisy and common mouse ear. The northern perimeter, near the hedgerow was noticeably more parched than the rest of the site and the southern perimeter, close to the hedgerow bounding Humber Doucy Lane was more species-rich with large swathes of bird's foot trefoil with agrimony and field speedwell.

The hedgerow along the northern boundary of IP184c contains a large number of elm trees with hawthorn, blackthorn, dog rose and field maple with oak standards. Some Alexanders, nettle and cow parsley are present amongst the ground flora around the foot of the hedge.

A small pocket of woodland is present in the north-eastern corner of IP184c, adjacent the arable field. It is mainly comprised of ash with field maple but was only viewed from a distance, so a detailed assessment was not carried out.

Avifauna:

It was a sub-optimal time of year for recording this group, and the extreme hot weather meant there was little bird activity noted. However, the hedgerows, scrub and woodland provide good potential nesting and foraging sites with house sparrow, starling, great tit and wood pigeon recorded during the survey.

The sites have potential to support yellowhammer, bullfinch, dunnock and skylark.

Invertebrates:

The majority of these sites were either an arable crop or short mown grassland which provide sub-optimal habitat for invertebrates. However, the mature trees, hedgerows and marginal vegetation (particularly the more species-rich areas around the perimeter of IP184c) adjacent to open grassland offer a range of habitats providing shelter and variable microclimates, which will be very attractive to invertebrates. Within IP184c, gatekeeper, meadow brown and large white butterflies were recorded along with red-tailed bumblebees. The northern boundary hedgerow within this site contains a large number of elms, which are the food plant of the white-letter hairstreak caterpillar (Priority species).

The ancient hedgerow could support stag beetle larvae within any sub-terranean deadwood present. Oak trees support a particularly high insect biomass and the large number of hawthorn, blackthorn and bramble around the perimeter provide an important nectar and pollen source.

Herpetofauna:

There are limited opportunities for this group within these two sites, however the hedgerows, scrub and field margins may be used as transitory habitat for amphibians and reptiles.

Mammals:

The mature trees in this site, most notably the oaks, contain cracks, crevices knot holes and stag-horned trees which offer potential roosting features for bats, which are also likely to commute and forage along the network of hedgerows.

No evidence of a badger sett was found but this did not constitute a detailed survey, and a sett could be present within areas which were inaccessible during the survey. Badgers are also likely to forage around the field boundaries.

A number of hedgehog records exist from Humber Doucy Lane and the associated residential areas, and they are likely to use the hedgerows and field margins for refuge and foraging. The bramble scrub offers attractive prospects for hibernating hedgehogs.

Common species of mammal such as fox, rabbit and deer species are likely to forage on these sites. Mice, voles and shrews are also likely to be present in the field margins, scrub and hedgerows.

Comments and recommendations:

The proposed developments are for residential development on all sites, estimated to be deliverable within 11-15 years.

IP184a and IP184c are part of a larger development around Humber Doucy Lane for the allocation of 496 dwellings (see site allocation ISPA4). IP184b has an indicative capacity of 30 dwellings at low density (35dph).

These developments are subject to consultation with the neighbouring local planning authority (East Suffolk District Council) due to some sites spanning the Borough boundary, and also the provision of replacement facilities for the Rugby Club.

Detailed ecological surveys should be undertaken to inform any future proposals.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, to deliver locally accessible natural greenspace. The hedgerows are an important part of this landscape and should be buffered against development. In addition, any lighting scheme should be designed to prevent light spillage onto these boundary habitats. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks. These actions will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. New planting should seek to use native species typical of the local area.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins, ponds and rain gardens resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

Additionally, there is the opportunity to provide enhancements for individual species such as swifts, hedgehogs, stag beetles, reptiles and invertebrates.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'. Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

As reptiles are likely to be present around the site boundaries, a log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with loose log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. This would also benefit stag beetles.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

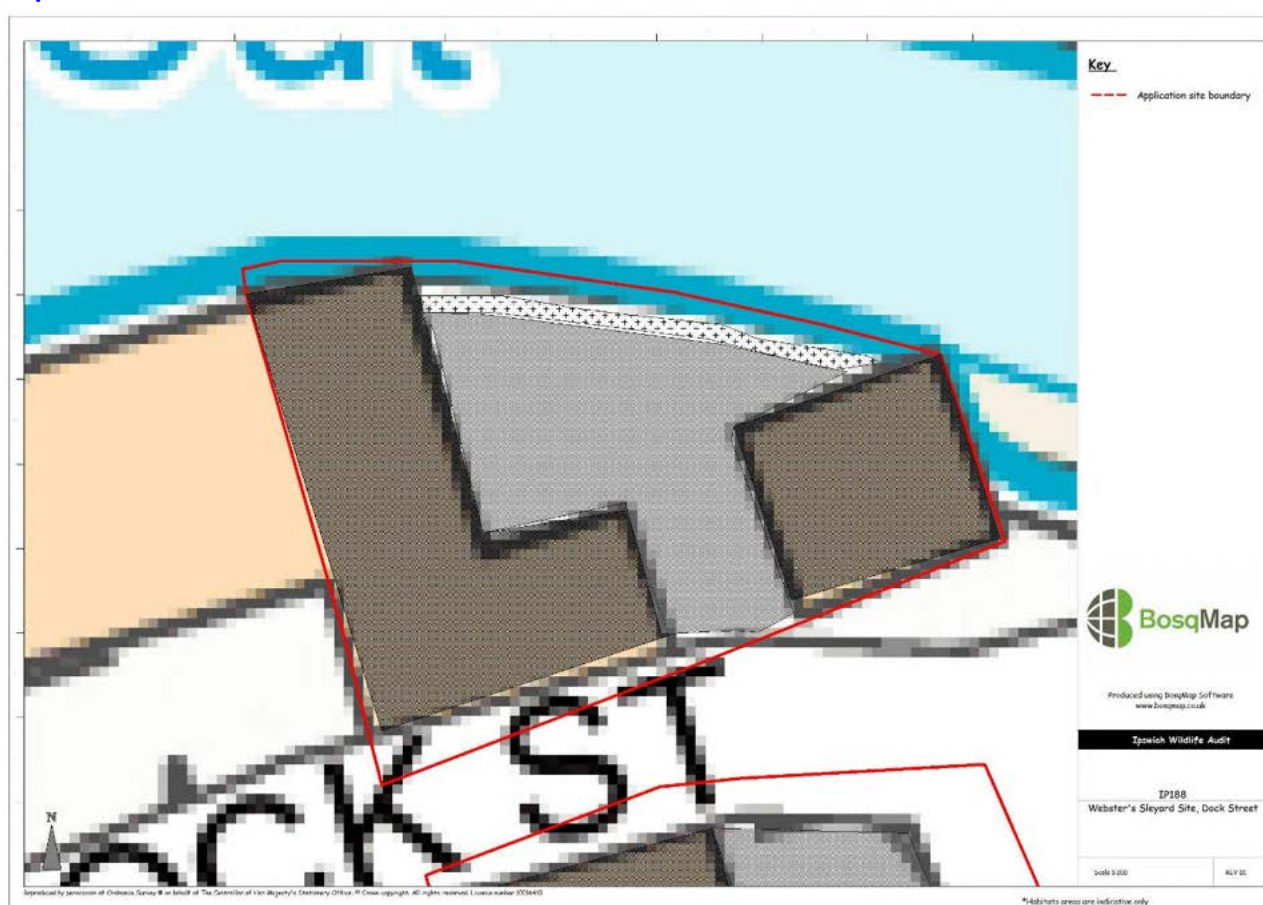
If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing soil conditions, eg. either sandy and free draining or if there are heavier soils. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

In areas of public open space, interpretation panels should be used to showcase the presence of on-site habitats and species and help people understand the needs of wildlife.

Site name: Webster's Sleyard Site, Dock Street

Site ref: IP188
Site status: No wildlife designation
Grid ref: TM 16443 43936
Area: 0.11 hectares
Date: 5th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 24°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



View towards River Orwell

Habitat type(s):

Hard standing, buildings, ephemeral short perennial

Subsidiary habitats:

-

Site description:

This is a small site, located to the north of Dock Street. The majority of the site is occupied by buildings and hard standing, with a very small amount of vegetation colonising along the northern boundary adjacent to the River Orwell County Wildlife Site.

Protected species seen or known:

Species recorded in the area include:

Common seal
Otter
Common porpoise
Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat

Protected species potential:

-

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Species in the area include:

Cinnabar moth

Hedgehog

BoCC Red List birds include herring gull, house sparrow and starling

BoCC Amber List birds include swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The site is very isolated, being surrounded by roads and other industrial units. The River Orwell CWS lies directly adjacent the site, but the existing land-use does not benefit from this connection.

Structural diversity:

The structural diversity is poor, with only a few herbs along the edge of the river.

Flora:

The nature of the site means the flora is limited. Along the river wall a few plants typical of heavily disturbed habitats are present including wall barley, Canadian fleabane, perennial sow thistle, bristly ox-tongue, ragwort, prickly lettuce and herb Robert.

Avifauna:

Feral pigeons, often associated with industrial buildings and town centres, will also nest in the buildings. Gulls may also use the roofs of the buildings for perching and nesting.

Invertebrates:

The site is sub-optimal for this group, although the plants along the river wall provide some limited nectar sources for common species. Cinnabar moth caterpillars (Priority Species) were seen on the ragwort.

Herpetofauna:

There is no suitable habitat for this group.

Mammals:

Bats may roost within the buildings, but this can only be determined by an internal inspection and they are likely to commute and forage along the river.

Comments and recommendations:

This site has planning permission for 9 flats (ref. 19/00173/FUL).

The buildings should be assessed for their bat potential prior to any demolition.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

This site is located adjacent to the River Orwell CWS. Any lighting scheme must be designed to prevent any light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

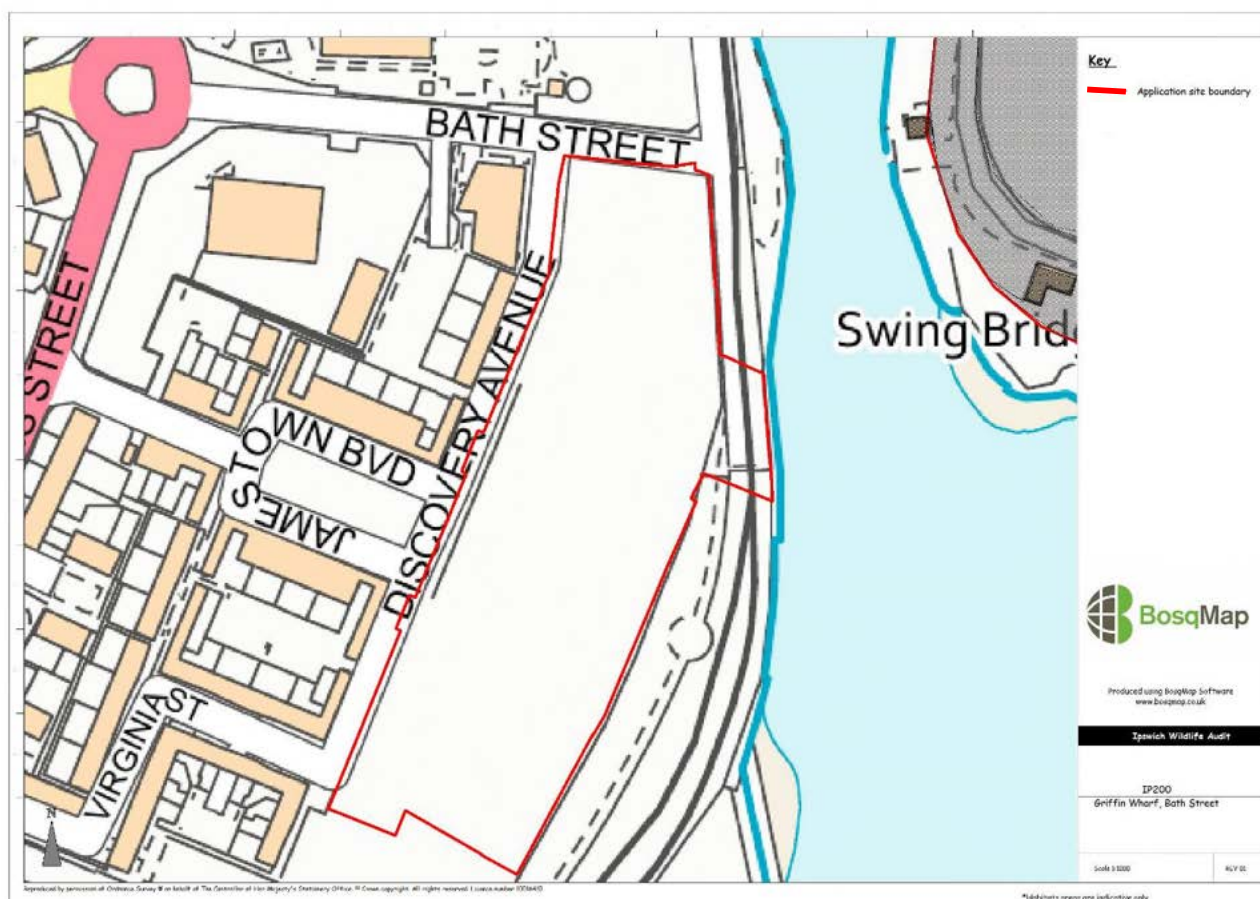
Japanese Knotweed has been recorded close to the site. This species is listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Although no evidence was found on site during the survey, this site assessment does not constitute an invasive species survey and further monitoring of this species is required to ensure it has not spread and colonised the site.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

Site name: Griffin Wharf, Bath Street

Site ref: IP200
Site status: No wildlife designation
Grid ref: TM 16723 43315
Area: 1.59 hectares
Written by: J Crighton
Date written: 30th August 2019
Recorder: Not surveyed
Weather conditions: N/A
Ranking: 5 (Based on available information)
Biodiversity value: Low

Map:



Photos:



Vegetated mound across the centre of the site

Habitat type(s):

Ephemeral short perennial, poor semi-improved grassland, dense scrub, bare ground, hard standing

Subsidiary habitats:

-

Site description:

This site was inaccessible for survey. However, a previous Extended Phase 1 Habitat Survey was undertaken by Delta-Simons Environmental Consultants Ltd in March 2017 in order to inform a planning application for the site.

The site lies directly west of the River Orwell, with Discovery Avenue and associated housing marking the western boundary, Bath Street to the north and industrial buildings to the south. It is currently undergoing development and is fenced off from public access. Part of the site could be viewed from the perimeter and the above photograph shows bare ground with a vegetated bank across the middle of the site. Further south, aerial imagery suggests that there is a large area of hard standing, surrounded on all boundaries with further rank vegetation and scrub typical of brownfield sites.

Protected species seen or known:

Records in the surrounding area include:

Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat

Daubenton's bat
Noctule bat
Serotine bat
Common lizard
Grass snake
Slow worm
European otter
Common porpoise
Common seal

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

BoCC Red List birds include herring gull, house sparrow and starling

BoCC Amber List birds include swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

This site lies directly adjacent to a section of disused railway which extends to the south, providing a potential wildlife corridor in this area. In addition, the River Orwell County Wildlife Site is also east of the site, which provides a further wetland wildlife corridor.

Structural diversity:

This site appears to be largely bare ground and hard standing, however the vegetated spoil bank, grassland and scrub on the perimeter offer moderate structural diversity in a heavily built up area.

Flora:

The flora within this site appears to be typical of brownfield sites, with ephemeral short perennial vegetation colonising spoil heaps and buddleia scrub with bramble on the perimeter. A few plants were observed from the boundaries including wild carrot, evening primrose, Canadian fleabane, yarrow, ox-eye daisy, mugwort and poppy.

Avifauna:

The scrub around the perimeter offers some nesting opportunities for common bird species including potential habitat for ground nesting birds. The site may support a good invertebrate biomass which will provide foraging opportunities.

Invertebrates:

Brownfield sites are known to support rich invertebrate communities, often with interesting species assemblages. The bare ground and ephemeral vegetation adjacent to tall buffering patches of scrub provides shelter, sunny hotspots and variable microclimates.

Herpetofauna:

The report by Delta Simmons commented that although there was some suitable habitat on site it was currently too isolated to support reptiles. However, the presence of the railway corridor could allow colonisation by a small population in future, particularly if the habitat were to improve.

The site is largely unsuitable for amphibians and there are no ponds nearby.

Mammals:

This site could potentially be visited by foraging and commuting bats using the railway and riverine corridor.

Although there are records of otter from the River Orwell, they are unlikely to use the site for refuge or holt building, particularly as there is a steep drop to the water level.

There are a number of hedgehog records in the immediate area and there is some foraging and refuge opportunities for them.

The site is also likely to be frequented by common urban species such as fox, and the perimeter scrubby habitat is likely to support mice, voles and shrews.

Comments and recommendations:

This site is currently undergoing works by Persimmon Homes, with the Delta-Simons report indicating a total of 113 dwellings to be erected.

Any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

As this site is located next to the railway corridor and the River Orwell, the lighting scheme should be designed to prevent light spillage into these areas. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Japanese knotweed and Himalayan balsam have been recorded close to the train station and these species are listed as invasive on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This assessment does not constitute an invasive species survey and further monitoring of these species is required to ensure they have not spread and colonised the site.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can

also be integrated into landscaping schemes. There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

In addition to this, action can be taken for individual species such as swifts, bats, stag beetles and other invertebrates.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of public interference or light spillage.

Although a declining species, this area of the county is a stronghold for stag beetles which can often be found in relatively small garden habitats around Ipswich. A habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of greenspace to benefit this species.

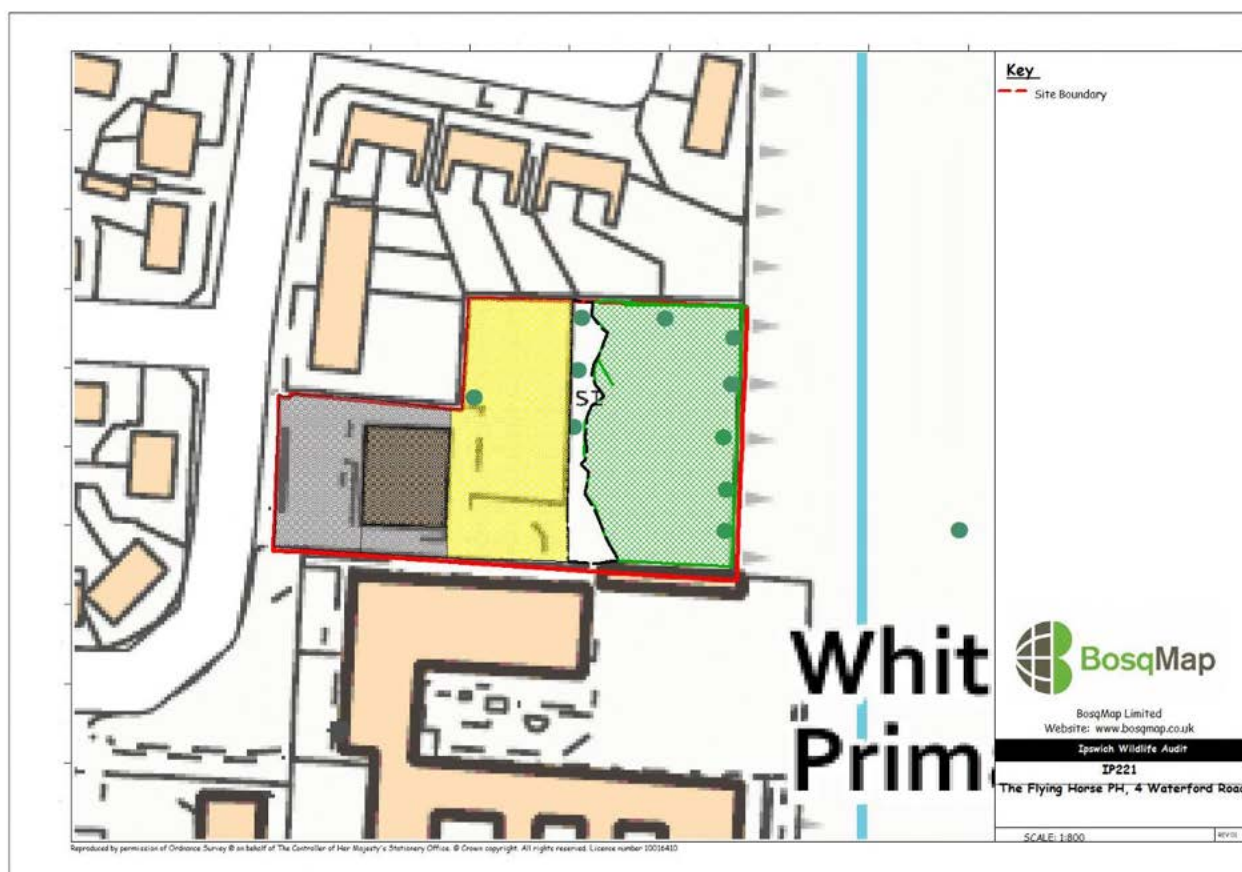
References:

Hicks, A. (2017) *Extended Phase 1 Habitat Survey, Griffin Wharf Ipswich Phase 2 for Persimmon Homes (Essex)*. Delta-Simons Environmental Consultants Ltd, Lincoln

Site name: The Flying Horse Public House, 4 Waterford Road

Site ref: IP221
Site status: No wildlife designation
Grid ref: TM 13934 46534
Area: 0.35 hectares
Date: 22nd July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 29°C
Ranking: 4
Biodiversity value: Medium

Map:



Photos:



Dense scrub and mature trees in the eastern part of the site

Habitat type(s):

Amenity grassland, dense scrub, scattered trees, poor semi-improved grassland

Subsidiary habitats:

Hard standing, building

Site description:

This site is currently a public house, situated on Waterford Road. It includes the pub car park, a strip of garden to the rear of the property and an area dominated by dense scrub behind. The Westbourne Academy playing fields lie to the east.

Protected species seen or known:

Species recorded in the surrounding area include:

Badger
Common pipistrelle bat
Soprano pipistrelle bat
Serotine bat
Great Crested Newt
Slow worm
Grass snake

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species recorded in the area include:

Hedgehog,

Common Toad

Stag beetle

BoCC Red List birds including house sparrow and starling

BoCC Amber List birds including dunnock and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

Although the site is located in a residential area of the town, the eastern boundary is adjacent to the Westbourne Academy playing fields. The playing fields link to the Norwich Road recreation ground to the north and also via the Bramford Road Allotments to the east which in turn links to the railway line.

Structural diversity:

Although only a small site, it does have good structural diversity with short mown grassland, scrub and mature trees.

Flora:

The short-mown amenity grassland to the rear of the pub contains species typical of this habitat including daisy, dandelion, ribwort plantain, greater plantain and black medick. A large weeping willow tree was present in the grassland.

The area of dense scrub is dominated by bramble with occasional dog rose. The scattered trees around the margins include oak, sycamore, silver birch, sweet chestnut, horse chestnut and elder.

Avifauna:

It was a sub-optimal time of year and weather conditions for recording this group, however blackbird and dunnock (Priority species) were recorded during the visit. The dense scrub provides excellent foraging, roosting and nesting opportunities for a range of bird species including summer migrants such as whitethroat and blackcap.

The current public house building has potential to support nesting swifts (Suffolk Character Species) and there are several records of them breeding in the area.

Invertebrates:

The scrub and mature trees provide good habitat for invertebrates. Gatekeeper, meadow brown and small white butterflies were recorded during the visit as well as some grasshoppers and crickets. Other common invertebrate species are likely to be present during the year. This site also has the potential to support stag beetles if there is subterranean dead wood to support their larvae.

Herpetofauna:

A slow worm was seen during the visit. Toad may also be present.

Mammals:

There are records of hedgehog in the area and the site provides good foraging and nesting opportunities for them. In particular the dense scrub provides excellent habitat for hibernation and therefore a significant proportion of the local hedgehog population could use this site over winter.

Other common mammal species are likely to be present including the small mammals such as mice, voles and shrews as well as larger mammals such as deer and foxes.

Comments and recommendations:

This site is proposed for low density housing, whilst maintaining the existing pub.

Further surveys should be undertaken for reptiles to inform a mitigation strategy, as slow worm is known to be on site. Consideration should also be given to the likely impact of vegetation clearance upon the local hedgehog population and ideally some of the scrub should be retained to preserve the local opportunities for hibernation. Holes in fences for hedgehog should be part of this new housing proposals, to continue to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

The scrub should not be cleared during the bird nesting season due to the likely impacts upon nesting birds. In addition, a survey by a suitably qualified ecologist should be undertaken during the bird breeding season to assess whether swifts are nesting in the public house. Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting. New swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

As this site is located adjacent to existing open space which in turn links to the wider ecological network, there is an opportunity to strengthen the local ecological network by retention and enhancement of on-site habitats adjacent to this feature. This would also ensure retention of features which support hedgehog and slow worm (both Priority species).

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on this site, if all of the site were to be developed then it is likely that future development will require compensation to avoid a biodiversity loss and to deliver net gain.

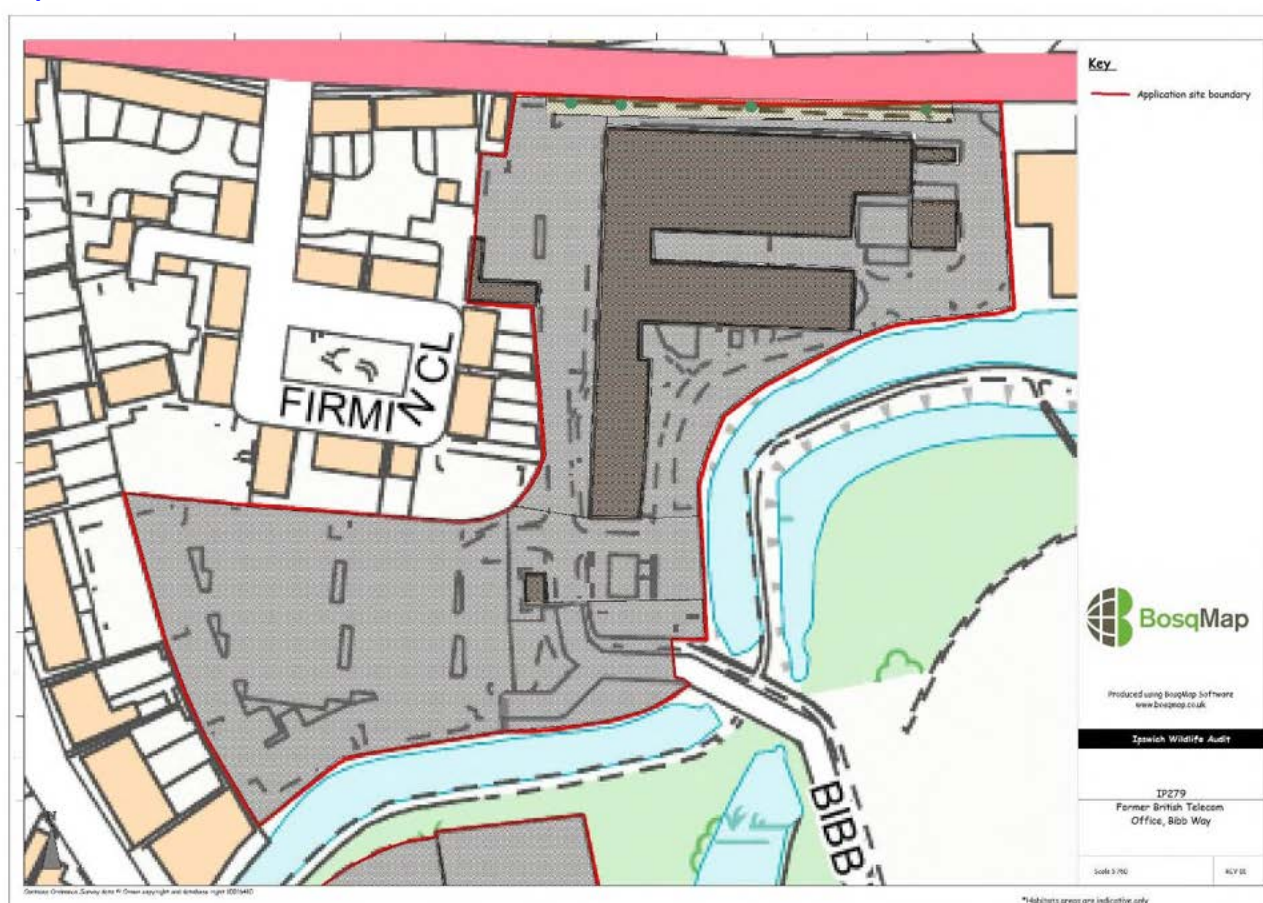
Compensation for habitat loss can be off-site and is delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Site name: Former British Telecom Office, Bibb Way

Site ref: IP279
Site status: No wildlife designation
Grid ref: 615376 244503
Area: 1.66 hectares
Date: 25th July 2019
Recorder: J Crighton
Weather conditions: Clear sky with slight breeze, ca. 30°C
Ranking: 6
Biodiversity value: Low

Map:



Photos:



Former BT offices

Habitat type(s):

Hard standing, building, scattered scrub, scattered trees, introduced shrub

Subsidiary habitats:

Raised flower beds

Site description:

This site is occupied for the most part by a large modern building, now mostly vacant, but previously the British Telecom Office. The building is surrounded by hard standing car park, with some areas which have been planted with introduced shrubs along with scattered trees and scrub.

The site lies between Handford Road in the north and Alderman Canal County Wildlife Site (CWS) to the south. It is surrounded by high fencing and there is a controlled entry gate system. Access was not possible, so the site was viewed from the perimeter. It was not possible to view the canal-side.

Protected species seen or known:

Records in the surrounding area include:

Badger

Otter

Water vole

Common pipistrelle bat

Soprano pipistrelle bat

Daubenton's bat

Natterer's bat
Noctule bat
Great crested newt
Grass snake
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Common toad
House sparrow
Starling
Swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The Alderman Canal and its riparian corridor to the south of the site offer excellent connectivity, although the habitat within the site itself is poor.

Structural diversity:

The structural diversity within the site is generally poor with only a small area dedicated to trees and raised beds with sparse vegetation. The buildings offer another limited habitat, but they are relatively modern with flat roofs.

Flora:

The flora on this site is very limited with only a scattering of mature trees on the northern perimeter, including sycamore, lime and ash, and some introduced shrub planted areas with cotoneaster and mahonia. Also present are some laurel, buddleia, rowan and hawthorn.

Avifauna:

It was a sub-optimal time of year for recording this group. The trees and buildings on site offer some potential nesting habitat for common bird assemblages but the main interest would lie outside the site, associated with the Alderman Canal where migrant bird species such as reed warbler and sedge warbler are likely to be found. Wood pigeon, great tit and house sparrow were recorded during the survey.

Invertebrates:

This site has limited opportunities for this group, although some butterflies associated with the buddleia were noted including large white and peacock. Due to the close proximity of the canal, dragonflies and damselflies are likely to be seen on the site but there is a lack of suitable vegetation or habitat to support any populations.

Herpetofauna:

The main body of the site is unlikely to support any amphibians or reptiles. However, it lies directly adjacent to Alderman Canal which, along with its riparian corridor is likely to support grass snake, therefore they may also be found on the site's southern perimeter.

Mammals:

Although the main body of the site is likely to be largely unsuitable for mammals, there is the potential for hedgehog to seek refuge in the scrub around the southern boundary.

The trees along the canal banks could support roosting bats. The building appears unsuitable for roosting bats, but this has not been fully assessed.

There are records of water vole and otter from the adjacent canal.

Comments and recommendations:

This site has been allocated for residential development with an indicative capacity of 151 dwellings.

This site contains cotoneaster and members of this group are listed on Schedule 9 of the Wildlife & Countryside Act 1981, as amended, because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. If this plant is removed as part of a vegetation clearance programme then it should be disposed of in a way as not to contravene the legislation. As this site was not accessed the presence of other invasive species should be assessed.

As the bankside trees are potentially suitable for roosting bats and no detailed assessment has been undertaken of the building, we recommend further surveys. We also recommend a survey for reptiles if any suitable bankside habitat is to be impacted by development.

Due to the sensitive location of the site, the lighting scheme should be designed to prevent light spillage into the canal, or its riparian corridor. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Irrespective of the above, any clearance of woody vegetation should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check.

This site is located adjacent to the Alderman Canal. There is an opportunity to strengthen the local ecological network by creation of new habitat as part of greenspace allocation adjacent to this feature. The Alderman Canal CWS also encompasses an area of wet grassland south of the canal, west of Bibb's Way, supporting a large number of southern marsh orchids. Similar habitat features including woodland, scrub and grassland should be integrated into new open space provision adjacent to the canal within this proposed development site. Any public open space could benefit from the installation of interpretation panels in order to showcase the presence of on-site habitats and species and help people understand the needs of wildlife, particularly highlighting the importance of the Canal habitat.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins, ponds, or rain gardens resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions, and in this instance, correctly designed SUDs will protect the Alderman Canal CWS from surface run-off.

In addition to this, action can be taken for individual species such as swifts, bats, hedgehogs, reptiles and stag beetles along with other invertebrates.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of the allocated greenspace.

If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing soil conditions, eg. either sandy and free draining or if there are heavier soils. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

Site name: Westerfield House, Humber Doucy Lane

Site ref: IP280
Site status: No wildlife designation
Grid ref: TM 18383 46932
Area: 3.41 hectares
Date: 23rd August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View south towards cedar and leylandii trees



View south-east across recent excavations with oak and pine trees



View east across recent excavations and new construction towards line of pines on boundary



Westerfield House from Humber Doucy Lane

Habitat type(s):

Pine belt, species-poor hedgerow, scattered trees, poor semi-improved grassland, buildings, hard standing

Subsidiary habitats:

-

Site description:

The site is located on the eastern side of Humber Doucy Lane and includes Westerfield House (a Grade II listed former manor house) and grounds, as well as open grassland to the south which is currently short mown. The building is currently a residential care home with an approved planning application (18/00526/OUT) for a 'Care Village' on the site.

At the time of the visit, the majority of the land to the east and south was fenced off as a construction site and no access was available to this area. Significant excavation work had recently been undertaken east of the house for the purpose of construction of a cellar beneath one of the new buildings. Linear mounds of spoil were piled up along the eastern and southern boundaries. New buildings had also been recently constructed east of the house towards the northern boundary.

The boundary with the road is marked by a thick hedge with a second hedge planted behind this, with a narrow walkway between the two. The eastern boundary is defined by a tree belt dominated by pine trees. There are two groups of mature trees within the site which are to be retained as part of the proposals.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat
Barn owl
Badger

Protected species potential:

Common lizard

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Common toad
Brown hare
Small heath butterfly
Wall butterfly
Grayling butterfly
BoCC Red List birds include turtle dove, skylark, house sparrow, starling, yellowhammer, linnet, lapwing, cuckoo, herring gull and lesser redpoll
BoCC Amber List birds include bullfinch, swift (Suffolk Character Species) and song thrush

Priority species potential:

-

Connectivity:

The site is poorly connected, being situated within a largely arable landscape. Although the site has hedges and tree belts on the boundaries the links to a wider ecological network are poor.

Structural diversity:

This is very limited with the majority of the site either built, disturbed ground or short mown grass. The hedges and trees make the greatest contribution to structural diversity.

Flora:

Due to lack of access this could not be fully assessed. Species recorded in what could be assessed of the grassland include cock's-foot and false oat grass with creeping thistle, spear thistle and prickly lettuce. A Phase 1 habitat survey was undertaken in 2018 by James Blake Associates.

The hedge along the road was species-poor being dominated by elm with prunus spp, holly and traveler's joy. Ivy was also dominant within the hedge. The second hedge planted behind this appeared to be largely dominated by beech.

Amongst the trees being retained on site were a massive cedar tree, as well as sycamore, copper beech and leylandii. A pine line is present along the northern boundary.

Avifauna:

The timing of the survey was suboptimal for this group. Common bird species may nest in the hedgerows and hole nesting birds may utilise cavities in the larger trees. A magpie was seen during the visit.

Invertebrates:

The invertebrate interest on this is largely confined to the mature trees and hedgerows. Stag beetle is known to be present in the area and could be on site if there is any subterranean dead wood associated with the mature trees.

Herpetofauna:

A reptile survey took place in 2018, when the habitats on site were reported to be more suitable for this group, but no reptile species were recorded. The site is currently unsuitable for amphibians.

Mammals:

The mature trees may have potential bat roosting features but this could not be assessed due to lack of access. The historic building also has features which may support roosting bats.

Due to the current levels of disturbance the site is largely unsuitable for mammals, with the exception of the boundary features. Any hedgehog activity in this area will be confined to these features.

Comments and recommendations:

The site is proposed to expand as a 'Care Village'. Consequently, the design is already fixed and there is less scope to influence the scheme by making recommendations for net gain. It appears that work has commenced on this site with the construction area securely fenced and excavation underway.

The general principals are that new development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme. In this scheme the mature trees and hedgerows are being retained. In the Design and Access statement it is stated that 'the wider site will be subject to a detailed landscape assessment and final design. A co-ordinated, sustainable and appropriate landscape design will be a key element in the final proposals'. This landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates. If there was a commitment to regular maintenance, then a wildflower area could also be sown to benefit invertebrates. The mix should include species typical of

the prevailing soil conditions. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September. Where appropriate, interpretation panels can be used to showcase the presence of on-site habitats and species and help residents appreciate their local wildlife.

The Design, Access and Heritage Statement indicates that surface water will be disposed by a permeable surface and self-draining sub-base and engineered soakaways. Underground storage tanks will also be constructed to provide 'green water' for horticultural use. However, careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. Rain gardens would be a suitable sustainable drainage feature for this scheme. These are most effective when larger in size and slow down run-off from downpipes or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not listed as invasive. They can provide attractive habitat in a landscaped setting.

References

Design, Access & Heritage Statement. Westerfield House care Home, Humber Doucy Lane, Ipswich. KLH Architects. 4th June 2018.

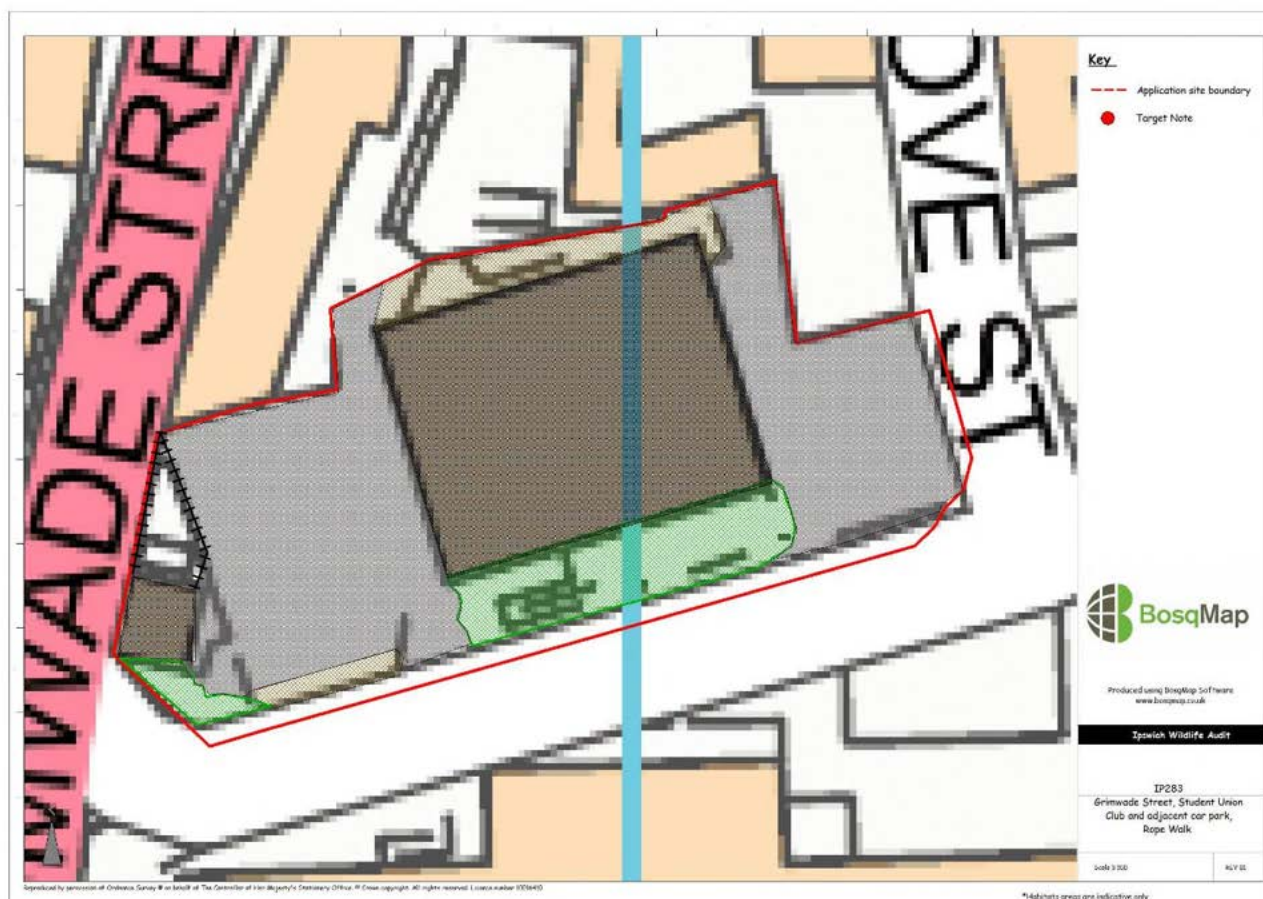
Phase 1 Habitat Survey of Land at Westerfield House, Humber Doucy Lane. James Blake Associates April 2018.

Reptile Survey of Land at Westerfield House, Humber Doucy Lane. James Blake Associates. September 2018.

Site name: Grimwade Street, Student Union Club and adjacent car park, Rope Walk

Site ref: IP283
Site status: No wildlife designation
Grid ref: TM 16991 44456
Area: 0.27 hectares
Date: 2nd August 2019
Recorder: J Crighton
Weather conditions: Bright with moderate wind, ca. 80% cloud cover, 21°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Dense scrub on the corner of Grimwade Street



Herras fenced area fronting Rope Walk



Russian vine to the north of the building

Habitat type(s):

Buildings, hard standing, dense continuous scrub, scattered broad-leaved trees

Subsidiary habitats:

Wall surfaces

Site description:

This is a small site located between Grimwade Street and Dove Lane, fronting Rope Walk. It is adjacent to a conservation area and an Area of Archaeological Importance. It contains a vacant flat-roofed building previously used as a social club and to the east and west of the building are two areas of car parking. A vacant brick dwelling is present on the western boundary.

The majority of the site is occupied by hard standing and building, but there are some areas of dense scrub and some planted sections along Rope Walk.

Protected species seen or known:

Records in the surrounding area include:

Badger
Brown long-eared bat
Common pipistrelle bat
Soprano pipistrelle bat
Daubenton's bat
Natterer's bat
Noctule bat
Common lizard
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog records
Stag beetle
Swift (Suffolk Character Species)
Common toad
House sparrow
Starling

Priority species potential:

-

Connectivity:

A degree of connectivity is provided by the landscaped areas associated with Suffolk New College, leading out towards Alexandra Park to the south east.

Structural diversity:

There is moderate structural diversity albeit limited by the small size of the site.

Flora:

On the corner of Grimwade Street and Rope Walk, there is a raised bed planted with dense scrub, which includes hazel, cherry, buddleia, cotoneaster and bramble.

Narrow raised beds separate Rope Walk from the western car park which have been planted with some ornamental species, but a lack of management has resulted in colonization by typical species such as redshank, knotgrass, creeping thistle, hedge bindweed, wall barley, prickly sow thistle, dandelion, hedge mustard and Canadian fleabane which have also encroached across cracks in the hard standing.

Along the southern edge of the building, there is more buddleia scrub with some variegated maple and silver birch. And behind the building, the invasive species Russian vine dominates the entire area.

Avifauna:

It was a sub-optimal time of year for recording this group. However, there are nesting opportunities for common assemblages of birds associated with the scrub.

Invertebrates:

This site is likely to support a small number of common invertebrates, including flying insects such as butterflies, particularly around the buddleia.

Herpetofauna:

There are no opportunities for this group within this site.

Mammals:

The vacant brick dwelling within the site has features which could support roosting bats.

The scrub within the site could provide refuge and hibernation opportunities for hedgehogs. Common small mammals such as mice, voles and shrews are also likely to be present.

Comments and recommendations:

Proposals for this site include 14 dwellings at medium density (45 dph).

The building on the western boundary could support bats and consequently further surveys are recommended.

This site contains cotoneaster and members of this group are listed on Schedule 9 of the Wildlife & Countryside Act 1981, as amended, because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. If this plant is removed as part of a vegetation clearance programme then it should be disposed of in a way as not to contravene the legislation. In addition, although not listed on Schedule 9 of the Wildlife & Countryside Act, 1981, as amended, Russian vine is a non-native very fast-growing species and can spread quickly. It can cover native trees and shrubs and reduce biodiversity by shading out other species. It can be difficult to eradicate. This assessment did not constitute an invasive species survey, so it is recommended that this is undertaken particularly to investigate whether other non-native species are present.

This site is small and in a built-up area of the Town, so the opportunities for enhancement are limited. However, a perimeter landscaping scheme which includes low-maintenance nectar and berry producing shrubs and perennial plants would provide some benefit for birds and invertebrates.

In addition to this, action can be taken for individual species such as swifts, hedgehogs and stag beetles.

Swifts are a declining migratory species that is almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Holes in fences for hedgehog should be part of any new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Although a declining species, this area of the County is a stronghold for stag beetles which can often be found in relatively small garden habitats around Ipswich. A habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of greenspace to benefit this species.

Site name: Land at Rushmere (Ramsey, area inside IBC)

Site ref: IP302
Site status: No wildlife designation
Grid ref: TM 19299 46146
Area: 1.56 hectares
Date: 24th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 32°C
Ranking: 4
Biodiversity value: Medium

Map:



Photos:



IP302 Gap in the hedgerow to access site



IP302 Looking north from the southern boundary

Habitat type(s):

Arable field, species-rich intact hedgerow with trees, dense/continuous scrub, scattered broad-leaved trees

Subsidiary habitats:

Bare ground, field margins

Site description:

This site is the south-western section of a much larger arable field currently sown with wheat crop. It lies north-east of Humber Doucy Lane, between the road and the Rushmere St Andrew parish boundary. An ancient hedgerow with mature standards that are associated with a low bank separates the road from the site, with a bare ground access point near the centre. These hedges are likely to be classed as 'important' under the Hedgerow Regulations 1997.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat
Barn owl

Protected species potential:

Badger
Common lizard

Priority habitats present:

Hedgerow

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Grayling butterfly

Small heath butterfly

BoCC Red List birds include turtle dove, cuckoo, house sparrow, starling, yellowhammer, song thrush, linnet, herring gull, skylark and lapwing

BoCC Amber List birds include bullfinch, dunnock and swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

This site has limited connectivity with the only link to other similar habitats being the hedgerow along the south western boundary.

Structural diversity:

The site has limited structural diversity with the only significant features being the hedgerow and mature trees.

Flora:

The hedgerow comprises blackthorn, elm, field maple, hawthorn, elder, bramble, ivy and hop with some ash and oak standards. Around the access point there are dense thickets of bramble on either side.

The field margins are very narrow but contain a mix of forbs including creeping thistle, common mallow, ragwort, black horehound and prickly lettuce, with false oat, Yorkshire fog, cock's foot and perennial rye grasses.

Avifauna:

It was a sub-optimal time of year for recording this group, and the extreme hot weather meant there was not much bird activity noted. However, the hedgerows provide good potential nesting and foraging sites. There is the potential for birds associated with farmland hedgerows such as yellowhammer, bullfinch and dunnock, as well as more open ground suitable for breeding skylark.

Invertebrates:

Although the majority of this site is a monoculture of arable crop which provides sub-optimal habitat for invertebrates, the hedgerows and field margins offer some opportunities for a range of species. In particular, the ancient hedgerow could support stag beetle larvae within subterranean deadwood. Oak trees also support a high insect biomass.

Herpetofauna:

There are limited opportunities for this group within this site, however the hedgerow and field margin may be used as transitory habitat for amphibians and reptiles, particularly common lizard.

Mammals:

Some of the mature trees on the south-western boundary of this site, contain features which could support roosting bats, which are also likely to commute and forage along the hedgerow.

A number of hedgehog records exist from Humber Doucy Lane and the associated residential areas, and they are likely to use the hedgerow and field margin for refuge and foraging.

No evidence of a badger sett was found but this did not constitute a detailed survey, and a sett could be present within areas which were inaccessible during the survey. Badgers are also likely to forage around the field boundaries.

Common species of mammal such as fox, rabbit and deer species are likely to forage on this site. Mice, voles and shrews are also likely to be present in the field margins and hedgerows.

Comments and recommendations:

The roadside hedgerow should be retained and enhanced by additional planting on other boundaries. Woody species typical of the area should be used and protected from browsing mammals until they establish.

There are opportunities to enhance biodiversity on this site, potentially through providing land for off-site compensatory habitat for other developments. Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. However, due to the nature of the existing habitats on some of the other sites, it is likely that future development at these locations will require off-site compensation to avoid a biodiversity loss and to deliver net gain.

Compensation for habitat loss can be delivered through the creation of new habitat, restoring or enhancing existing habitats or occasionally, by accelerating successional processes. Off-site compensation habitat should be located as close as possible to the site and should seek to replicate the characteristics of the habitat(s) to be lost, taking account of the structure and species composition to provide local distinctiveness. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than habitats lost and wherever possible, should contribute to the wider ecological network. They should also be subject to long-term good habitat management practices.

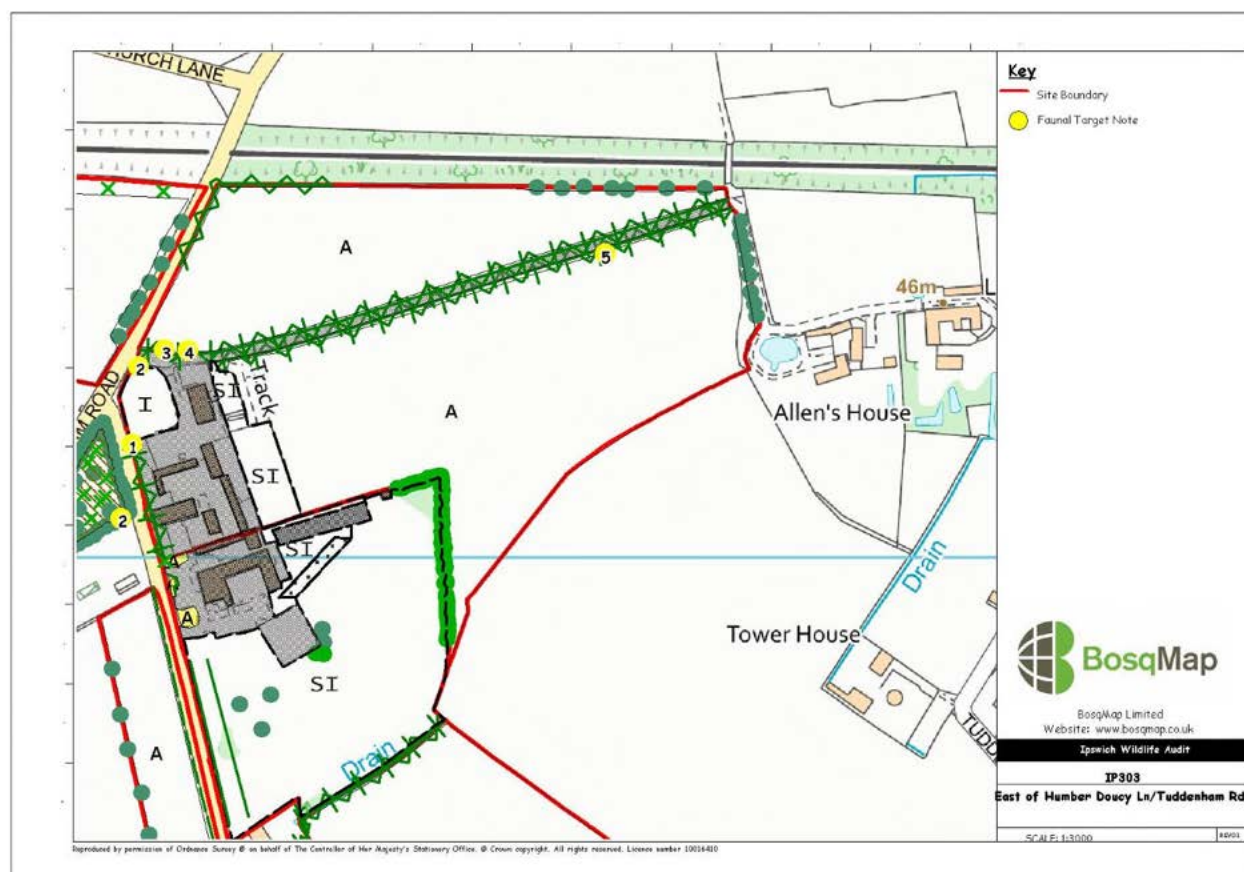
Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

If this site were to become available as public open space, interpretation panels should be used to showcase the presence of on-site habitats and species.

Site name: East Corner of Humber Doucy Lane/Tuddenham Road

Site ref: IP303
Site status: No wildlife designation
Grid ref: TM 18475 47088
Area: 8.59 hectares
Date: 23rd August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



Farm buildings off Humber Doucy Lane



Farmhouse off Humber Doucy Lane



Mature oak tree in hedge bordering track, one of many such trees



View south-east across arable field towards mature hedgerow trees on eastern boundary

Habitat type(s):

Arable, poor semi-improved grassland, improved grassland, species-rich hedgerows

Subsidiary habitats:

-

Site description:

This site is situated east of the Tuddenham Road and north of Humber Doucy Lane. The northern boundary is defined by a section of the Ipswich to Lowestoft rail corridor. Most of the southern boundary crosses a larger arable field. In the south-west corner are a series of farm buildings including a house and a number of barns and sheds of different ages. There are small paddocks west

and east of the buildings, the latter with an array of solar panels.

There is a low hedge bordering Humber Doucy Lane with a veteran oak (Target Note 1). A well-defined track with a public footpath runs from Tuddenham Road in a north-easterly direction. The track is thickly hedged on both sides and has a series of mature trees interspersed along its length. The largest of these have been shown as Target Notes 2-5. These hedges are likely to be classed as 'important' under the Hedgerow Regulations 1997. This site abuts IP280 to the south, with a belt of trees, mainly pines, defining the boundary between the two sites.

The field south of the railway is arable and bordered by a gappy hedge adjacent to Tuddenham Road. Woody species also form a gappy margin along the northern boundary.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat
Barn owl
Badger

Protected species potential:

Common lizard
Great Crested Newt
Hazel Dormouse

Priority habitats present:

Hedgerow

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Common toad
Brown hare
Small heath butterfly
Wall butterfly
Grayling butterfly

BoCC Red List birds include turtle dove, skylark, house sparrow, starling, yellowhammer, linnet, lapwing, cuckoo, herring gull and lesser redpoll

BoCC Amber List birds include bullfinch, swift (Suffolk Character Species) and song thrush

Priority species potential:

White-letter hairstreak butterfly

Connectivity:

The proximity of the railway line means that this site is well connected to the wider ecological network. The mature hedgerows bisecting the site also provide an internal wildlife corridor.

Structural diversity:

The areas of short grass and arable fields are low in structural diversity, with the hedgerows and trees as the most significant features within this site.

Flora:

The hedgerows along the roadside and either side of the track heading towards the railway line are species-rich with a good diversity of woody species including oak, ash, sycamore, hawthorn, midland hawthorn, blackthorn, field maple, elm, dogwood, dog rose, hazel, spindle, bramble and travelers joy. Many of the large trees were ivy covered. It was a sub-optimal time of year for recording ground flora but false wood brome, curled dock and black horehound were noted.

The areas of grassland were species-poor being dominated by grasses with occasional common herbs including bristly ox tongue, smooth hawk's-beard, dandelion, ribwort plantain and scentless mayweed.

Avifauna:

The farmhouse is suitable for nesting swifts and the farm buildings are suitable for nesting swallows. The hedgerows and associated trees also provide good foraging, roosting and nesting habitat for a range of bird species including declining farmland birds such as yellowhammer. The large arable fields will also support ground nesting birds such as skylark.

Invertebrates:

The invertebrate interest will be largely associated with the trees and hedgerows. A number of very large dead stumps were noted along the hedgerows. This provides excellent habitat for stag beetles (Priority Species) as the larvae require subterranean dead wood. The presence of large amounts of elm in the hedgerows provides good habitat for white-letter hairstreak butterflies (Priority Species). Other species will be present and a good number of common butterflies were seen during the visit including large white, small white, peacock, speckled wood, and red admiral. A southern hawker dragonfly was also seen as well as numerous bees and hoverflies. The ivy in particular provides good nectar sources for this group.

Herpetofauna:

Common lizard may be present in the field margin adjacent to the railway line. Great crested newts have been recorded in the area and there is a pond cluster immediately east of the site boundary which has the potential to support this species. Great crested newts could use the hedgerows and associated ditch network during the terrestrial phase of their lives and could hibernate in the base of the hedgerows on site. Toads have also been recorded in the area and the hedgerows provide good habitat for them.

Mammals:

The farm buildings and farmhouse are suitable for roosting bats. A bat box is present on the end wall

of one of the barns. Some of the larger trees have potential bat roost features. Hazel dormice have been recorded in the hedgerow network to the west and the hedgerows on site provide good habitat for this species.

Hedgehog may forage and potentially nest along the hedgerows and other boundary features. Larger mammals are likely to live or move through the site, including badger, fox, brown hare and deer species. The boundary adjacent to the railway was not accessed and this bank could support a badger sett.

Comments and recommendations:

This site is proposed for residential development as part of a larger allocation (IPSA4) for 496 dwellings. These would be subject to traffic and other infrastructure provision as part of a wider comprehensive master plan.

Further detailed and up-to date surveys will be required to assess the wildlife interest including bats, hazel dormice, and great crested newt, badger, reptiles and breeding birds (including the likelihood of nesting birds within any of the buildings).

Planning policy supports the mitigation hierarchy of avoid, minimise, remediate and only as a last resort, compensate. New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, in particular the hedgerows. This will help retain the local biodiversity resource, with enhancement through additional habitat creation and long-term good habitat management practices. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks, therefore the scheme should maintain some open space adjacent to the railway line corridors.

The residential lighting scheme should be designed to prevent light spillage into areas specifically retained for wildlife. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

Delivering net gain is independent of any wider requirements of planning policy or the need to comply with legislation relating to nature conservation or biodiversity.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. In addition, swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats

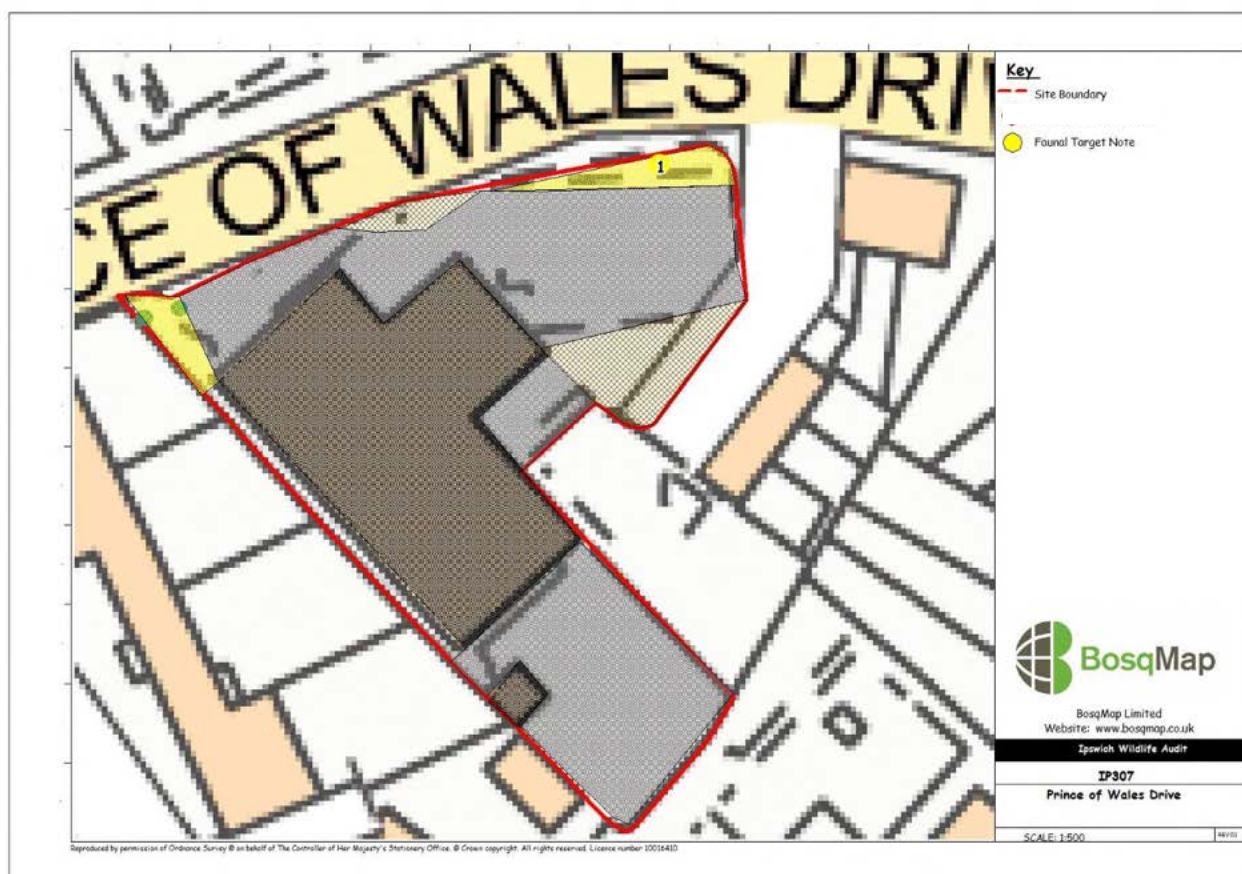
should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed within a corner of the allocated greenspace.

Site name: Prince of Wales Drive

Site ref: IP307
Site status: No wildlife designation
Grid ref: TM 15633 42785
Area: 0.27 hectares
Date: 8th August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



View across car park



Holes made by ground nesting bees and wasps (Target Note 1)

Habitat type(s):

Buildings, hard standing, introduced shrub, amenity grassland, scattered trees

Subsidiary habitats:

-

Site description:

This is a small site on the corner of Prince of Wales Drive and Aberdare Close. It consists of a shop with a small car park, some introduced shrub provided as a landscaping scheme and a small area of amenity grassland adjacent to the verge.

Protected species seen or known:

Species recorded in the area include:

Common pipistrelle bat

Soprano pipistrelle bat

Brown long eared bat

Noctule bat

Grass snake

Slow worm

Common lizard

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Species in the area include:

Hedgehog

Common toad

Stag beetle

House sparrow

Starling

Priority species potential:

-

Connectivity:

The connectivity of this site is very poor, being surrounded by roads and residential housing.

Structural diversity:

The structural diversity is poor, apart from the introduced shrubs.

Flora:

Due to the nature of this site the flora is very limited.

The area of amenity grassland had a more interesting mix of species than is typical of this habitat. Species recorded include rye grass, wall barley, Canadian fleabane, smooth hawk's-beard, autumn hawkbit, gallant-soldier, petty spurge, black medick, common cat's-ear, swine-cress, fat-hen and groundsel.

The areas of introduced shrub contained primarily ornamental species with occasional fern grass, creeping thistle, rosebay willowherb, ragwort and Canadian fleabane. Occasional buddleia is also present.

There are a few scattered trees including wild cherry.

Avifauna:

The majority of the habitat is sub-optimal for this group, although the introduced shrubs provide some foraging and nesting opportunities for common species.

Invertebrates:

The short grass bank along the road has areas of bare ground which provides good habitat for ground nesting bees and wasps. An active colony of bee wolf which was preying on pantaloons bees were noted in the grassland (Target Note 1). Other common species including small white and painted lady butterflies were also seen.

Herpetofauna:

There is no habitat suitable for this group.

Mammals:

The majority of the habitat is sub-optimal for this group.

Comments and recommendations:

This site is proposed for residential housing for 12 dwellings at medium density.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates. As ground nesting bees and wasps are less common invertebrates, retention of a patch of short, sparse grassy habitat on site would be beneficial.

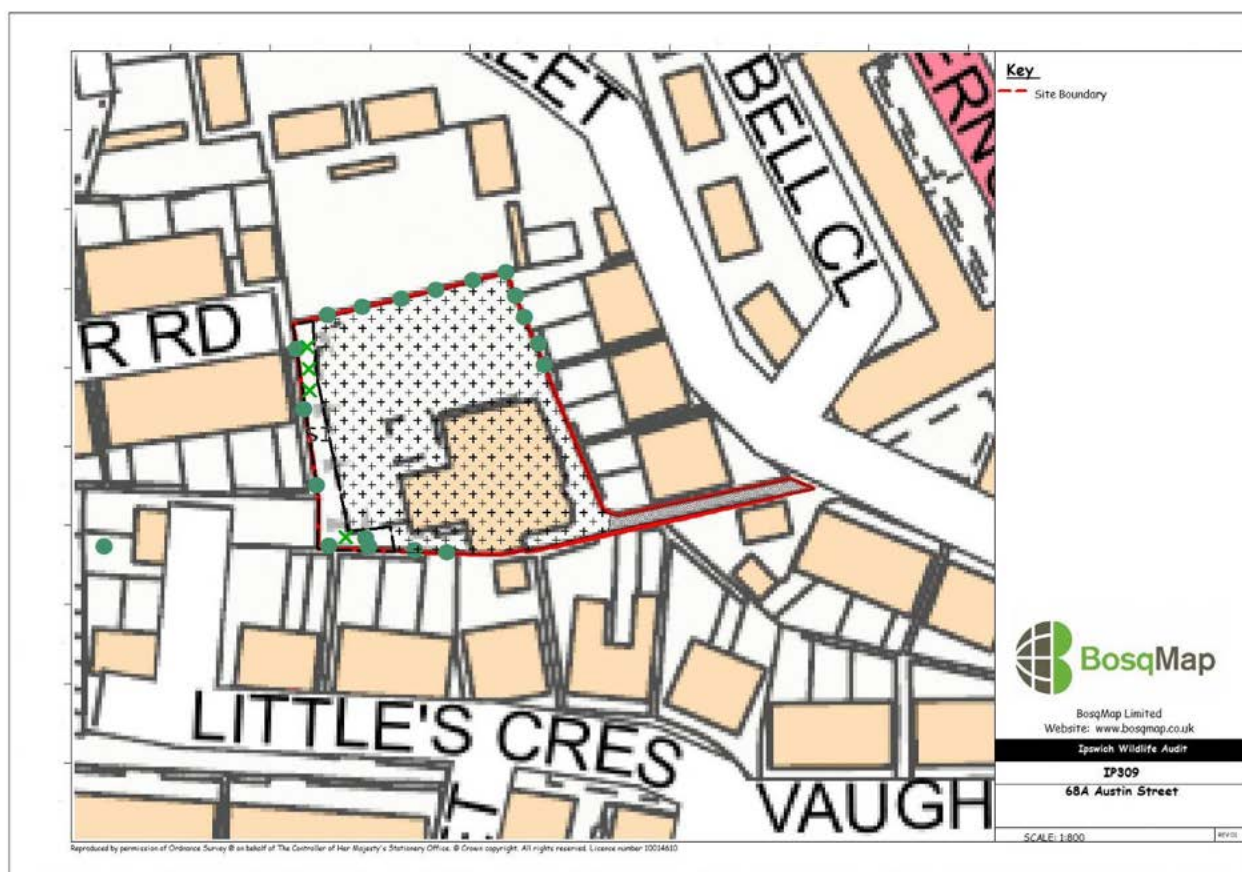
Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

It is unknown if houses or flats are proposed for this site. Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

Site name: 68A Austin Street

Site ref: IP309
Site status: No wildlife designation
Grid ref: TM 16370 43680
Area: 0.23 hectares
Date: 3rd September 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 21°C
Ranking: 4
Biodiversity value: Medium

Map:



Photos:



View east showing developing vegetation and bare ground mosaic



Bank with rough grassland and scattered scrub

Habitat type(s):

Buildings, hard standing, ephemeral short perennial, poor semi-improved grassland, scattered scrub, scattered trees

Subsidiary habitats:

-

Site description:

This is a small site accessed via a narrow lane off Austin Road. It is surrounded by the gardens of the residential dwellings fronting Little's Crescent, Austin Street and Seymour Road. The former Bridgewood Social Club building was demolished in March 2018 and the site has subsequently been colonised by ephemeral short perennial vegetation. Although this site contains a mixture of plant species typical of the Priority Habitat 'Open Mosaic Habitats on Previously Developed Land' (Brownfield), the small size of the site means that it is unable to qualify. There are a number of patches of bare ground. A low bank with rough grassland and scrub is present on the southern and western boundaries and there are scattered trees around the margins.

Protected species seen or known:

Records in the surrounding area include:

Common pipistrelle bat
Soprano pipistrelle bat
Brown long eared bat
Natterer's bat
Daubenton's bat
Noctule bat

Protected species potential:

Slow worm

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

BoCC Red List birds include: house sparrow and starling

BoCC Amber List birds include: dunnock and swift (Suffolk Character Species)

Cinnabar moth

Priority species potential:

-

Connectivity:

A limited degree of connectivity is provided by the surrounding residential gardens, although in general it is isolated by roads.

Structural diversity:

For a small site it currently has a good structural diversity with a mosaic of bare ground patches, short and taller vegetation, grasses, scrub and mature trees.

Flora:

For a small site this has a very good diversity of plants typical of disturbed ground. Species recorded include wall barley, false oat, cock's-foot, red fescue, Yorkshire fog, common couch and barren brome grasses with a good range of annual and perennial plants including sedge spp, Canadian fleabane, purple toadflax, wild parsnip, dandelion, ragwort, fine-leaved ragwort, perennial sow thistle, common cat's-ear, smooth hawk's-beard, rough hawkbit, bristly ox-tongue, prickly lettuce, hop trefoil, black medick, mouse-ear hawkweed, rosebay willowherb, great mullein, feverfew, scented mayweed, scentless mayweed, mugwort, spear thistle, common thistle, common stork's-bill, cut-leaved cranesbill, dove's-foot cranesbill, ribwort plantain, greater plantain, buck's-horn plantain, swine cress, sweet Alison, petty spurge, caper spurge, white clover, alsike clover, black horehound, poppy, white dead nettle, hedge bindweed, yarrow, common mouse ear, procumbent yellow sorrel, green alkanet, weld, broad-leaved dock, curled dock, fool's parsley, scarlet pimpernel, flaxweed, fat hen, many seeded goosefoot and common orache. Moss was also noted in the area of the former building. Although the site is small, the species composition is suggestive of that of the Priority Habitat Open Mosaic Habitat on Previously Developed Land.

The trees and scrub surrounding the margins includes a mix of native species such as ash, sycamore, lime, blackthorn, elder, elm, willow and bramble along with some garden escapes including cotoneaster, privet and fuchsia. Considerable patches of ivy were noted along the boundaries.

Avifauna:

It was a sub-optimal time of year for recording this group. The margins of the site will provide some

foraging and nesting habitat for a range of common species and the ephemeral vegetation will also provide foraging opportunities for seed and insect eating species.

Invertebrates:

Brownfield sites are known to support rich invertebrate communities, often with interesting species assemblages. The patchy mosaic of vegetation and habitat types, structural diversity and edge habitats adjacent to open habitat provides shelter, sunny hotspots and variable microclimates. Cinnabar moths (Priority Species) larvae feed exclusively on ragwort which is present in a reasonable quantity on this site. A number of invertebrates were noted during the survey including small white, red admiral and meadow brown butterflies, several species of bee and hoverfly and crickets and grasshoppers. This site could also offer potential habitat for stag beetles (Priority Species), if there is any subterranean deadwood on the boundaries suitable for supporting their larvae as there are records of them in the vicinity.

Herpetofauna:

Although much of the site provides sub-optimal habitat for this group, the rough grassland and scattered scrub on the boundary banks provide potential habitat, particularly for slow worm. It could also provide hibernation habitat for them. Although relatively isolated, the presence of the surrounding gardens increases the likelihood that they could be present in small numbers.

Mammals:

The mature trees on the margins were generally considered to have a low suitability for roosting bats, however if any of these trees are affected by the development further assessment should take place. There are numerous hedgehog records in the area (Priority Species) and hedgehogs could access the site through holes in the fences alongside the neighboring gardens. The bramble scrub on the banks provides potential nesting and hibernation opportunities for them. Other common mammal species will also be present including grey squirrel and small mammals such as mice, voles and shrews.

Comments and recommendations:

This site is allocated for residential use with an indicative capacity of 15 dwellings at medium density (54dph) provided the site is no longer needed for community uses.

The wildlife interest of this site is improving as time progresses. Prior to any development a Preliminary Ecological Appraisal should be undertaken alongside any specific detailed surveys recommended in that report which may include, but not be limited to, botanical, reptiles and invertebrates. Due to the nature of the site, the report should also include the potential for invasive species.

Although further surveys for bats are not recommended, if any trees are to be felled or reduced in size a precautionary method of felling should be adopted and if any evidence of bats is found, then work must stop immediately and a suitably qualified ecologist be consulted.

Although currently there are only small amounts of woody vegetation, any clearance should only take place outside the main bird nesting season (March - August inclusive) or immediately preceded by a nesting bird check. Consideration should also be given to the likely impact of vegetation clearance

upon the local hedgehog population. Holes in fences for hedgehog should be part of this new housing proposal, to deliver landscape permeability for this wide-ranging, declining species.

This site contains cotoneaster and members of this group are listed on Schedule 9 of the Wildlife & Countryside Act 1981, as amended, because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. If this plant is removed as part of a vegetation clearance programme then it should be disposed of in a way as not to contravene the legislation.

This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

It is unknown if houses or flats are proposed for this site. Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

A stag beetle habitat pile, created by burying stumps in an upright position, rather like a cluster of organ-pipes, should be constructed on the perimeter.

If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing sandy and free draining soil conditions. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

Rain gardens should also be incorporated into the landscape design as part of a sustainable drainage scheme. They are most effective when larger in size and slow down run-off from down-piped or paved areas. They require free-draining soils in trenches and can be planted with nectar producing species, which can be non-native as long as they are not invasive. They can provide important stepping-stone habitat in urban areas.

Site name: Land north of 447 and fronting Humber Doucy Lane

Site ref: IP344
Site status: No wildlife designation
Grid ref: TM 18286 46857
Area: 1.02 hectares
Date: 24th July 2019
Recorder: J Crighton
Weather conditions: Clear sky, no wind, *ca.* 32°C
Ranking: 5
Biodiversity value: Low

Map:



Photos:



IP344 Northern boundary



IP344 looking to the south west, poplars on western boundary

Habitat type(s):

Arable field, defunct species-poor hedgerow, scattered broad-leaved trees

Subsidiary habitats:

-

Site description:

This site lies to the west of Humber Doucy Lane. It was previously playing field but has not been in use since 2013. It is currently managed as a hay meadow, which had been topped and dried prior to this survey so any plant identification within the meadow was difficult. The western boundary is lined with a row of poplars amongst other species and to the north and south, there are small areas of scrub. There is a defunct hedgerow along the boundary with Humber Doucy Lane, which is associated with a dry ditch and is in a slightly elevated position compared to the site.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat
Barn owl

Protected species potential:

Badger
Common lizard

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog

Stag beetle

Common toad

Brown hare

Small heath butterfly

Wall butterfly

Grayling butterfly

BoCC Red List birds include turtle dove, skylark, house sparrow, starling, yellowhammer, linnet, lapwing, cuckoo, herring gull and lesser redpoll

BoCC Amber List birds include bullfinch, swift (Suffolk Character Species) and song thrush

Priority species potential:

-

Connectivity:

This site has moderate connectivity with surrounding habitat, via the hedgerow and the scrubby woodland abutting the site on both the northern and southern boundaries.

Structural diversity:

Although limited at time of survey, prior to cutting the longer grass and forbs would have provided a higher degree of structural diversity. Currently the main features are the defunct hedgerow and line of trees.

Flora:

Along the eastern boundary of the site, on the road verge, a species-poor mix of false oat, mugwort, prickly lettuce and common mallow are evident. The defunct hedgerow is predominantly hawthorn and elm with some cut-back sycamore and traveler's joy

On the eastern boundary, the mature trees include several white poplar with some silver birch, blackthorn and field maple.

Avifauna:

It was a sub-optimal time of year for recording this group, and the extreme hot weather meant there was little bird activity noted. However, the mature trees offer some nesting potential and seed-eating and insectivorous birds are likely to forage in the meadow.

Invertebrates:

Although this site had been recently mown at time of survey, the long grass would likely support a range of common invertebrates such as butterflies, spiders, grasshoppers and crickets. If there is any subterranean deadwood in the boundary features suitable for supporting their larvae, stag beetle could be present.

Herpetofauna:

There are limited opportunities for this group within this site, however the hedgerow and field margin may be used as transitory habitat for reptiles and amphibians, including common toad and common lizard.

Mammals:

The adjacent habitats may support roosting bats and therefore they are likely to use the linear corridor of trees for commuting, and potentially forage over the site.

A number of hedgehog records exist from Humber Doucy Lane and the associated residential areas, and they are likely to use the hedgerow and field margin for refuge and foraging.

No evidence of a sett was seen during the assessment, but badgers may forage around the field boundaries.

Other mammals such as fox, rabbit, brown hare and deer species are likely to move through this site. Common small mammals including mice, voles and shrews are also likely to be present in the field margins and hedgerows.

Comments and recommendations:

This site forms part of a larger allocation (IPSA4) for 496 homes.

New development should retain as much of the existing habitat as possible and integrate it within a landscaping scheme, to deliver locally accessible natural greenspace. For example, the defunct hedgerow could be infilled with native species similar to those in the hedgerows to the south of the site. With long term good management practices, this will help retain and enhance the local biodiversity resource. Greenspaces should be interlinked to provide functional ecological corridors for a range of species and as much as possible they should connect with wider off-site ecological networks. New planting should seek to use native species typical of the local area.

Careful planning and design can integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes. There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species.

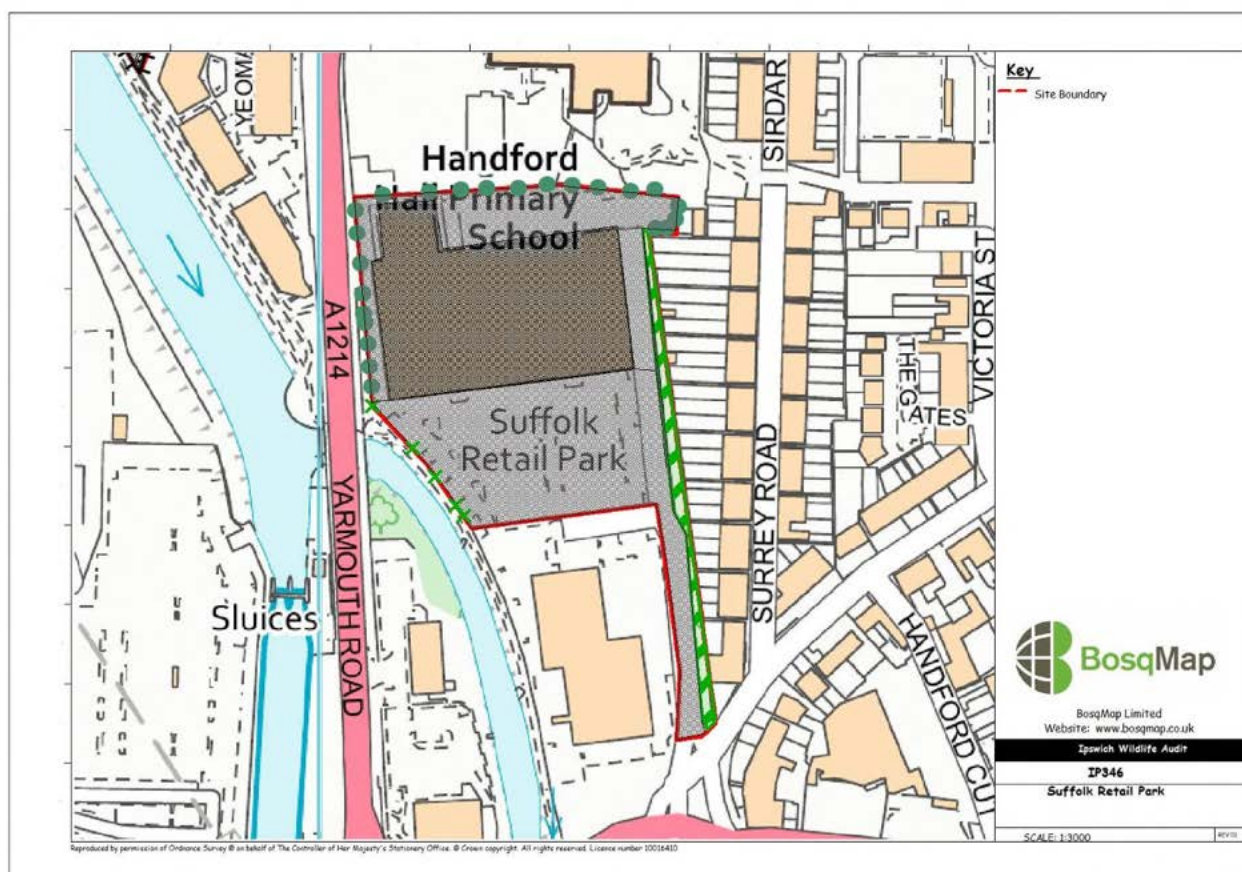
New habitats should be created taking into account local ecology and site conditions. If there was a commitment to regular maintenance, then a wildflower area could be sown to benefit invertebrates. The mix should include species typical of the prevailing soil conditions. Wildflower areas are left uncut until mid-July/August and then cut, with a second cut in September.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Site name: Suffolk Retail Park

Site ref: IP346
Site status: No wildlife designation
Grid ref: TM 15098 44785
Area: 2.1 hectares
Date: 22nd July 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 29°C
Ranking: 6
Biodiversity value: Low

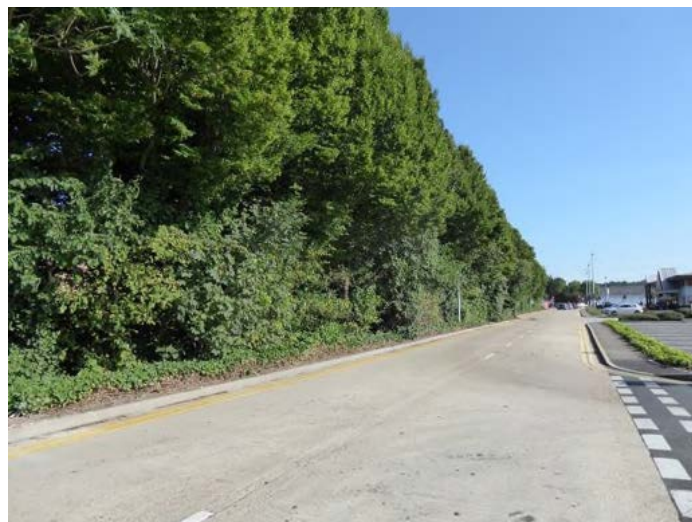
Map:



Photos:



View from river path adjacent to site



Tree belt along eastern boundary

Habitat type(s):

Hard standing, buildings, plantation woodland, scattered broadleaved trees, scattered scrub, introduced shrub

Subsidiary habitats:

-

Site description:

This site is part of the Suffolk Retail Park and currently houses a large retail store and its car park. The western boundary is adjacent to the River Gipping which is a County Wildlife Site. There is a narrow belt of planted trees along the eastern boundary and a line of sycamore trees along the western edge of the building. To the north are the Handford Primary School playing fields. There is a short stretch of hornbeam hedge close to the river corridor and occasional patches of introduced shrub within the car park.

Protected species seen or known:

Species recorded in the surrounding area include:

Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Daubentons bat
Grass snake
Slow worm
Otter
Water vole

Protected species potential:

-

Priority habitats present:

River (adjacent to site)

Priority species seen or known:

Species included in the area include:

Hedgehog

Stag beetle

Common toad

BoCC Red List birds including herring gull, house sparrow and starling

BoCC Amber List birds including swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

This site is adjacent to the River Gipping which provides good connectivity for a range of species. The school playing fields to the north of the site also provide some degree of connectivity.

Structural diversity:

The structural diversity is poor, except for the margins.

Flora:

Due to the nature of this site the flora is limited.

Along the river corridor are species typical of this habitat type including cock's-foot and false oat grass with nettle, curled dock, mallow, horseradish and green alkanet with occasional cotoneaster, buddleia and sycamore bushes. There is also a short section of hornbeam hedge at the north-western end of the car park.

There is a line of sycamore trees, with occasional elder, along the western side of the building.

The tree belt on the eastern boundary is dominated by sycamore with beech, ash, hazel, elder, tamarisk and laurel also present.

Avifauna:

The habitat is sub-optimal for this group, however herring gull (Priority species) and greater black backed gull were observed on the roof of the building. Carrion crow and swift (Suffolk Character species) were also seen. The trees provide limited foraging and nesting opportunities for this group.

Invertebrates:

The habitat is sub-optimal for this group, although some common species may be present around the margins of the site, particularly the river corridor. Large white and meadow brown butterflies were seen during the visit. The tree belt along the eastern boundary provides habitat for stag beetles (Priority species).

Herpetofauna:

The habitat is not suitable for this group.

Mammals:

The habitat is sub-optimal for this group, although bats are likely to forage along the river corridor. Otter has also been recorded along the river although there is little suitable habitat for them to den or shelter adjacent to the site.

Comments and recommendations:

We have no information regarding proposals for site IP346.

This site contains cotoneaster and members of this group are listed on Schedule 9 of the Wildlife & Countryside Act 1981, as amended, because they can become dominant to the detriment of other species. As such, it is an offence to plant or otherwise cause these species to grow in the wild. If this plant is removed as part of a vegetation clearance programme then it should be disposed of in a way as not to contravene the legislation. There is also a record of Japanese knotweed (another Schedule 9 highly invasive species) about 75m to the south. This site assessment does not constitute an invasive species survey so more detailed surveys are advisable to check that this species has not colonised this site.

As this site is located next to the River Gipping CWS, the lighting scheme should be designed to prevent light spillage into this area. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

There is an opportunity to strengthen the local ecological network by creation of new habitat adjacent to the river as part of a greenspace allocation. Careful planning and design can also integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

Rainwater run-off can be channelled through and temporarily stored within surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions and should use native planting local to the area.

In addition, action can be taken for individual species such as swifts, bats and hedgehogs.

Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting but leave no mess. Swift boxes should be integrated into taller new buildings using 'swift bricks' or 'swift blocks'. Externally mounted boxes can also be used but have a shorter life span than integrated features. Both types are most effective at attracting swifts when used with a swift 'call system'.

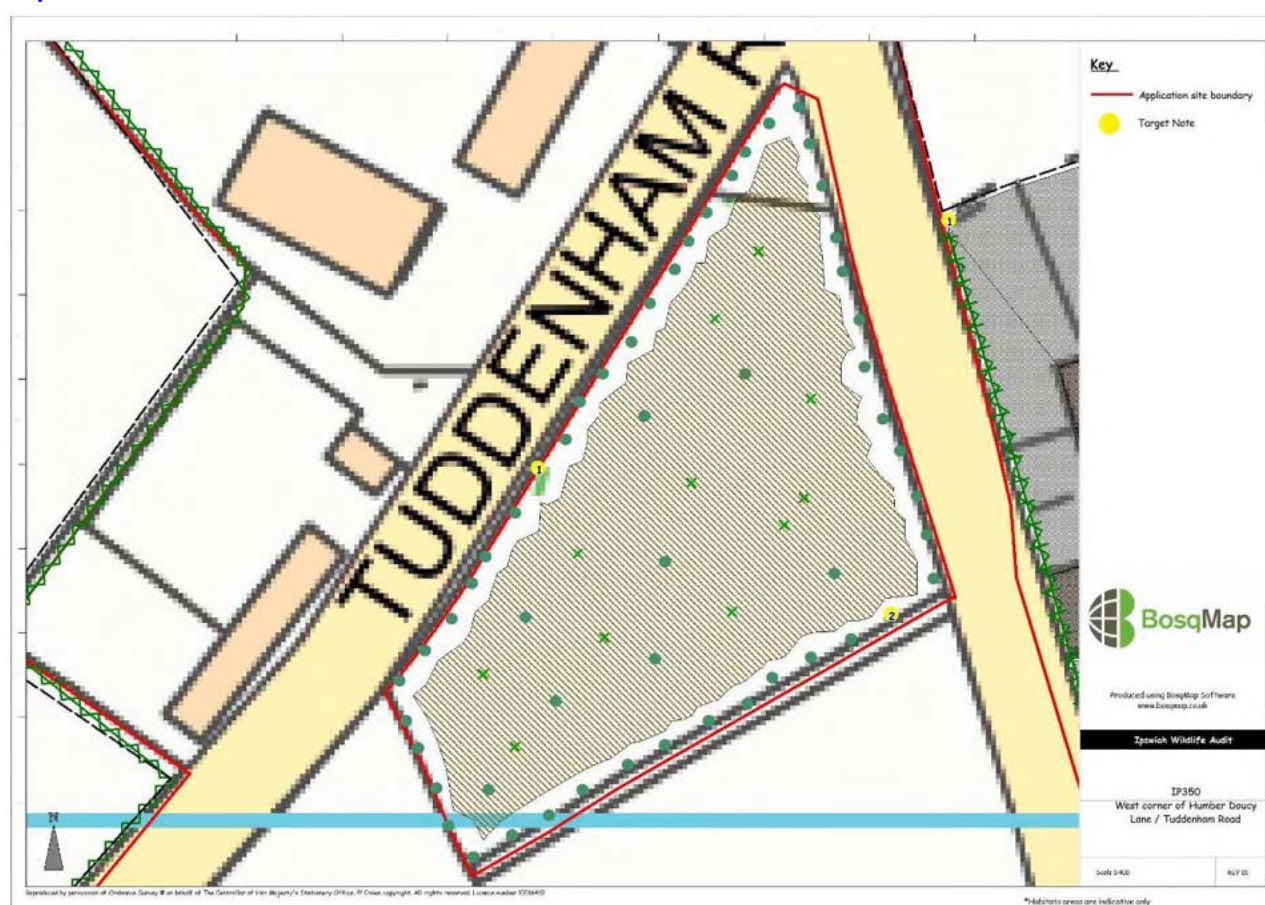
Bat boxes should also be integrated into any new buildings, or durable boxes placed on trees where there is a low risk of interference.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.

Site name: West Corner of Humber Doucy Lane/Tuddenham Road

Site ref: IP350
Site status: No wildlife designation
Grid ref: TM 18228 47045
Area: 0.36 hectares
Date: 23rd August 2019
Recorder: A Looser
Weather conditions: Hot and sunny, 26°C
Ranking: 4
Biodiversity value: Medium

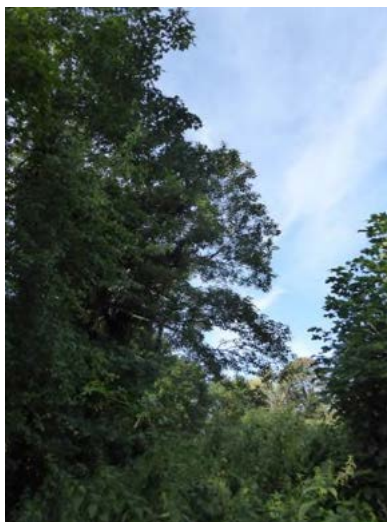
Map:



Photos:



View across site from Tuddenham Road



View across site from north-east corner showing mature trees on boundary



Veteran Oak on Tuddenham Road (Target Note 1)



Veteran crab apple on southern boundary (Target Note 2)

Habitat type(s):

Tall ruderal, scattered scrub, species poor hedgerows, scattered trees

Subsidiary habitats:

-

Site description:

This small field is situated on the corner of Tuddenham Road and Humber Doucy Lane. It is surrounded by mature trees and a gappy hedgerow on the road boundaries with a notable veteran

oak tree adjacent to Tuddenham Road (Target Note 1). Tall trees define the southern boundary along a ditch and bank, which along with a very old, mature crab apple tree (Target Note 2) implies that this may be derived from an ancient species-rich hedgerow that has been unmanaged for many years. There are also tall trees marking the western boundary.

The interior of the site is dominated by tall ruderal with scattered scrub starting to develop and was largely impenetrable. The history of the site is unknown, but the current species are indicative of previously disturbed ground. It is possible that this site had a brownfield use previously.

Protected species seen or known:

Records in the surrounding area include:

Soprano pipistrelle bat
Common pipistrelle bat
Noctule bat
Serotine bat
Barn owl
Badger

Protected species potential:

Slow worm

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:

Hedgehog
Stag beetle
Common toad
Brown hare
Small heath butterfly
Wall butterfly
Grayling butterfly
BoCC Red List birds include turtle dove, skylark, house sparrow, starling, yellowhammer, linnet, lapwing, cuckoo, herring gull and lesser redpoll
BoCC Amber List birds include bullfinch, swift (Suffolk Character Species) and song thrush

Priority species potential:

-

Connectivity:

Connectivity is limited to the boundary features as this site is located within a largely arable landscape and is separated by roads to the north-west and north-east.

Structural diversity:

The combination of tall trees on the perimeter and tall ruderal and scattered scrub means that

structural diversity is reasonably good.

Flora:

The tall ruderal species are dominated by nettle, lesser burdock, hogweed and hedge bindweed with creeping thistle, spear thistle, green alkanet and willowherb spp. Some bramble and sycamore scrub is also present.

The roadside trees include oaks (including a large veteran oak on Tuddenham Road Target Note 1) and sycamore.

The roadside hedgerows are gappy, although there is a reasonable diversity of species including hawthorn, blackthorn, hazel, elm, dogwood, elder, and buddleia along with traveler's joy and black bryony. The hedgerows are infilled with sprawling ivy. Midland hawthorn is also present on Humber Doucy Road which is indicative of an old hedge. There is a damson growing in the northern corner, but there is no record of there ever being an orchard on this site.

The southern and western tree belts include tall sycamores, although the southern is more diverse including a very old crab apple tree (Target Note 2).

Avifauna:

The survey took place at a sub-optimal time of year for this group. The mature trees are likely to provide nesting opportunities for hole-nesting birds. If there are significant patches of bramble scrub within the site then these will be utilised by a range of bird species for nesting. A blackcap was heard calling.

Invertebrates:

Ruderal species can support a range of common invertebrates. Small white and speckled wood butterflies were seen during the visit.

Herpetofauna:

The dense vegetation of the site was suboptimal for reptiles, but slow worm could be present in low numbers, particularly if there are occasional more open patches in the vegetation to enable basking.

Mammals:

This site will provide nesting habitat for hedgehog and is particularly suitable for hibernation. Suitable hibernation sites can be a limiting factor for hedgehogs and patches of suitable habitat can therefore be used by a number of animals in the winter. Consequently, the loss of such features can have a significant impact upon the local population.

The mature trees are likely to have potential bat roosting features and the site may also be used by commuting and foraging bats.

As this site was difficult to access and a large proportion was not assessed, it is possible that badger may be present.

Other common species of mammal will be present such as grey squirrel, fox and muntjac deer.

Comments and recommendations:

The site now forms part of a larger allocation for 496 homes, see site allocation ISPA4.

Further detailed surveys for bats, reptiles, badger, breeding birds and priority species should be undertaken. Given the nature of the site, invasive plant surveys should also be carried out.

The boundary trees and hedgerow shrubs should be retained and the significant trees protected during construction through a root protection zone. Any lighting scheme should be designed to prevent light spillage onto these features. Bats are particularly sensitive to increased light levels, so it is important to maintain dark corridors to support local ecological networks.

The proposals indicate that only part of the site may be residential. Consequently, there are opportunities for greenspace provision and careful planning and design can also integrate the requirement for sustainable drainage systems with the creation of new wildlife habitat. Such places can also create aesthetically pleasing features which can also be integrated into landscaping schemes.

There is the opportunity to channel and store run-off through surface features such as swales, retention basins and ponds, resulting either in temporary or permanent water features. The design should incorporate a variety of features to maximise potential habitats niches and any planting should utilise native species. Where possible, existing habitats should be retained and integrated into the system as this will result in greater species diversity. New habitats should be created taking into account local ecology and site conditions.

Reptiles are associated with the nearby railway line corridor and potentially could be on site in low numbers. A log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) with log sections. This should be covered with topsoil and turf, allowing access opportunities so that reptiles can easily enter the hibernacula at the appropriate time. This feature can also benefit stag beetle larvae who will feed on the logs once they start to decay.

Holes in fences for hedgehog should be part of new housing proposals, to deliver landscape permeability for this wide-ranging, declining species. Toad, another UK Priority species, will also benefit from holes in garden fences.

Site name: 79 Hutland Road/Sidegate Lane

Site ref: IP356

Site status: No wildlife designation

Grid ref: TM 18026 45337

Area: 0.09 hectares

Date: 29th July 2019

Recorder: J Crighton

Weather conditions: Warm, clear skies with moderate breeze, *ca.* 24°C

Ranking: 4/5

Biodiversity value: Medium/Low

Map:



Photos:



Looking north-east across site



Dwelling on site



Outbuilding with potential bat roosting features

Habitat type(s):

Amenity grassland, scattered trees, dense continuous scrub, buildings

Subsidiary habitats:

Rubble piles, log piles, bare ground, ivy covered trees/wall, compost heap

Site description:

This site was previously an employment site with a small vacant property, an outbuilding and several sheds. It lies on the corner between Hutland Road and Sidegate Lane in a residential area in the west of Ipswich. The majority of the site is short-mown amenity grassland but also contains some trees and dense scrub. A local resident maintains the site on a bi-weekly basis, cutting grass and general tidying. The site also contains a water tank and oil tank.

Protected species seen or known:

Records in the surrounding area include:

Badger

Common pipistrelle bat
Soprano pipistrelle bat
Noctule bat
Serotine bat
Slow worm

Protected species potential:

-

Priority habitats present:

-

Priority species seen or known:

Records in the surrounding area include:
Female stag beetle found and several records in the area
Hedgehog
Common toad
House sparrow
Starling
Swift (Suffolk Character Species)

Priority species potential:

-

Connectivity:

The surrounding gardens offer a degree of connectivity to this site.

Structural diversity:

Although the site is small and largely short-mown, there are a number of features which offer some structural diversity including mature fruiting trees, scrub, buildings, bare ground and piles of differing substrates.

Flora:

The amenity grassland on the site is heavily dominated by mouse-ear hawkweed in dense swathes, typical of mown, dry grassland. Other species present include autumn hawkbit, white clover, daisy, dandelion, common cat's ear, yarrow, lesser trefoil, ribwort and greater plantain and occasional dove's foot crane's bill. Some more sparse areas have buckthorn plantain and bryophyte cover. Around the edges of the garden, alongside the brick wall boundaries and scrub areas there is taller vegetation including common poppy, wood avens, greater celandine, wall barley, smooth sow thistle and sun spurge. There is also some ornamental planting with lesser periwinkle encroaching into the garden. Around the foot of the buildings pellitory-of-the-wall and green alkanet are present.

The trees on site include plum, hazel and holly, several of which are covered with ivy and in some of the corners, an ornamental bramble species is growing.

Avifauna:

The areas of scrub and open grassland provide moderate foraging, nesting and roosting opportunities for a range of common bird species in this built up environment.

Invertebrates:

Although this site is not particularly botanically diverse, there are a range of habitats offering variable microclimates and refuge areas and a large number of invertebrates were noted during the survey. These included painted lady caterpillars, red admiral, ladybirds, spiders and grasshoppers. A dead female stag beetle was also found.

Herpetofauna:

This site contains some limited features which could be used by slow worm, which are known to be found in the area. The rubble piles provide basking and hibernation opportunities and the long vegetation on the edge, wood piles and compost heap are also particularly attractive.

Mammals:

Although the buildings on site had no external signs of bat activity, such as droppings or staining, they did contain features which could be used by roosting bats.

The short-mown grassland provides foraging habitat for hedgehogs, and the log piles and scrub patches offer nesting and hibernation sites. There are a number of records of hedgehog from the surrounding area.

The site is also likely to be visited by common species of mammal such as fox and grey squirrel.

Comments and recommendations:

We have no information regarding proposals for this site.

The outbuilding and dwelling could support roosting bats and consequently further surveys are recommended. A reptile survey is also recommended.

Although a declining species in the UK, this area of the County is a stronghold for stag beetles which can often be found in relatively small garden habitats around Ipswich. As a stag beetle was found on site a habitat pile in a corner of the site should be created by burying stumps in an upright position, rather like a cluster of organ-pipes. Any larvae discovered during excavation can be reburied beneath this structure under the supervision of an ecologist.

The site is relatively small and located in a built-up residential area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates.

Holes in fences for hedgehog should be part of this new housing proposals, to deliver landscape permeability for this wide-ranging, declining species.