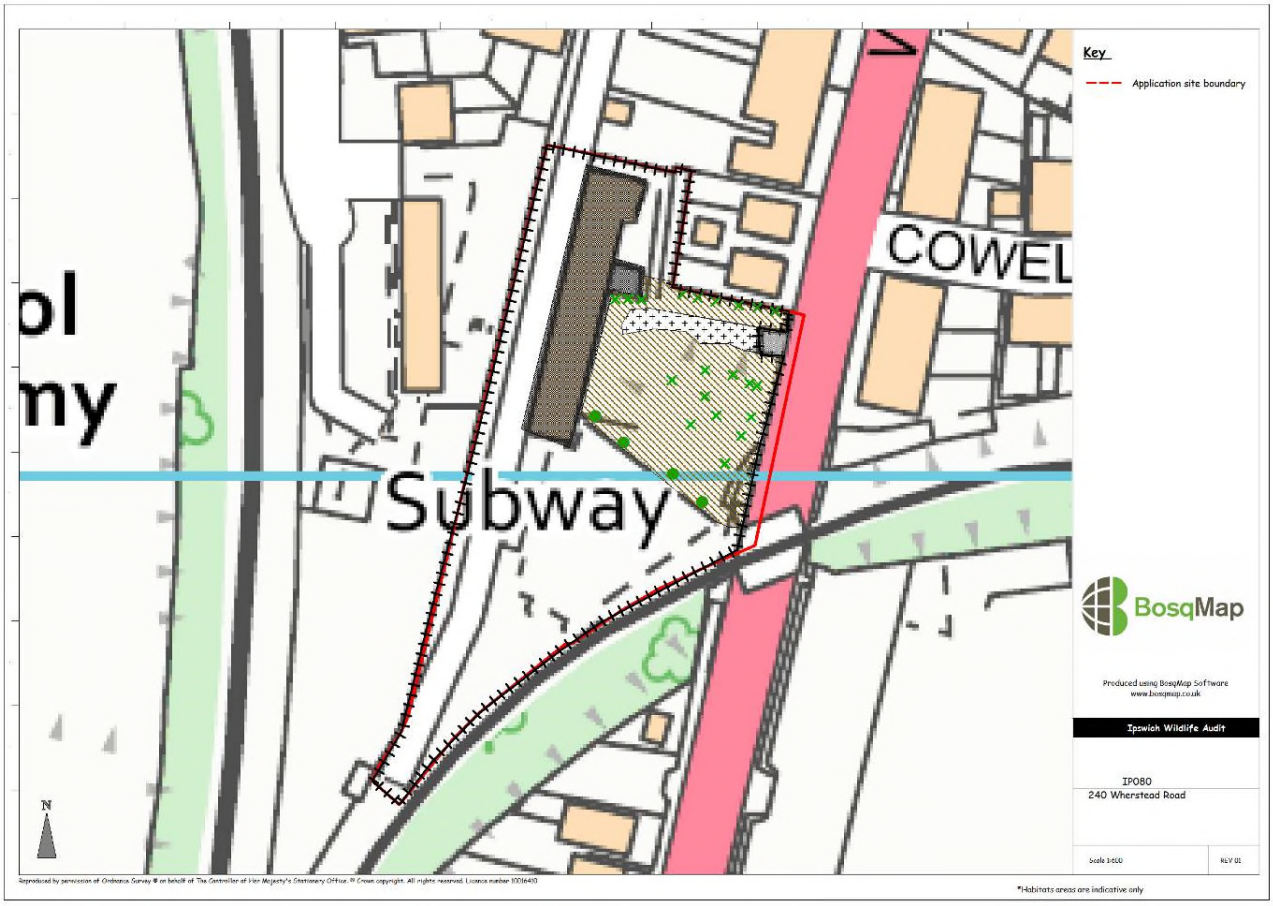
Site name: 240 Wherstead Road

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 dunnock 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.

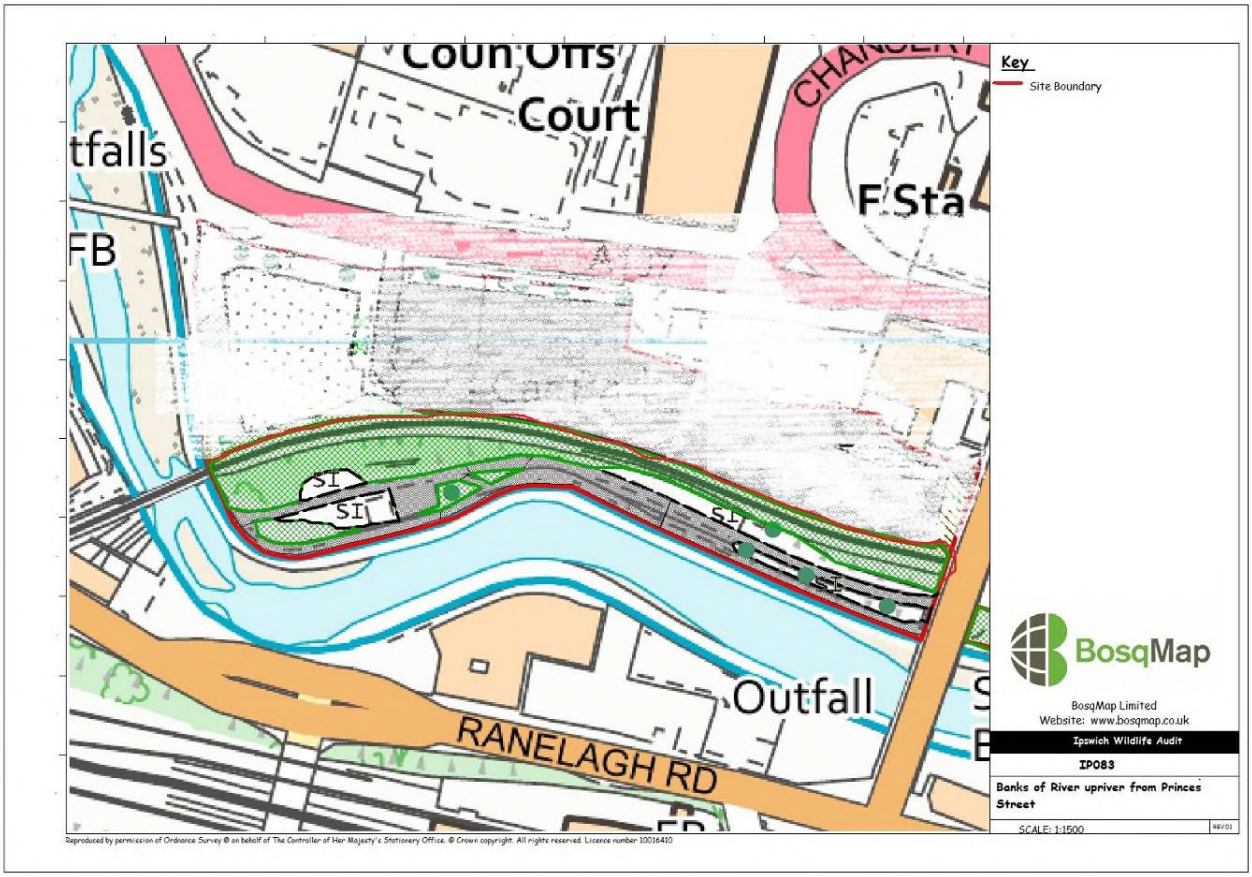
As reptiles are highly likely to be present on or adjacent to the site, a log pile for basking reptiles over the top of a below-ground hibernacula should be incorporated into an undisturbed area of greenspace. Hibernacula can be created by filling holes (minimum 2m long by 1m wide, and up to 50cm deep) 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 dunnock.

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 dunnock 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'.

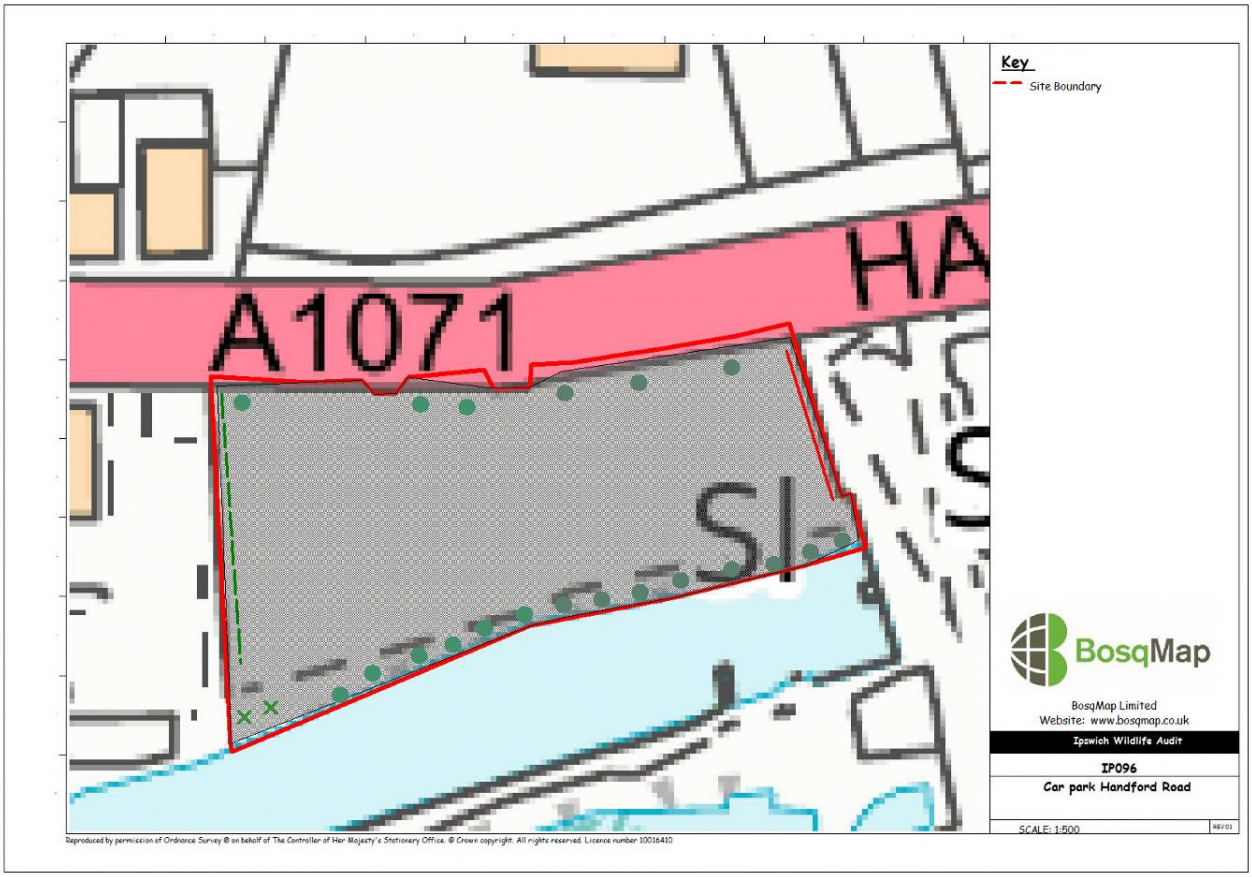
Bat boxes should also be integrated into new buildings, or durable boxes placed on trees where there is a low risk of interference.

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 dunnock 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.