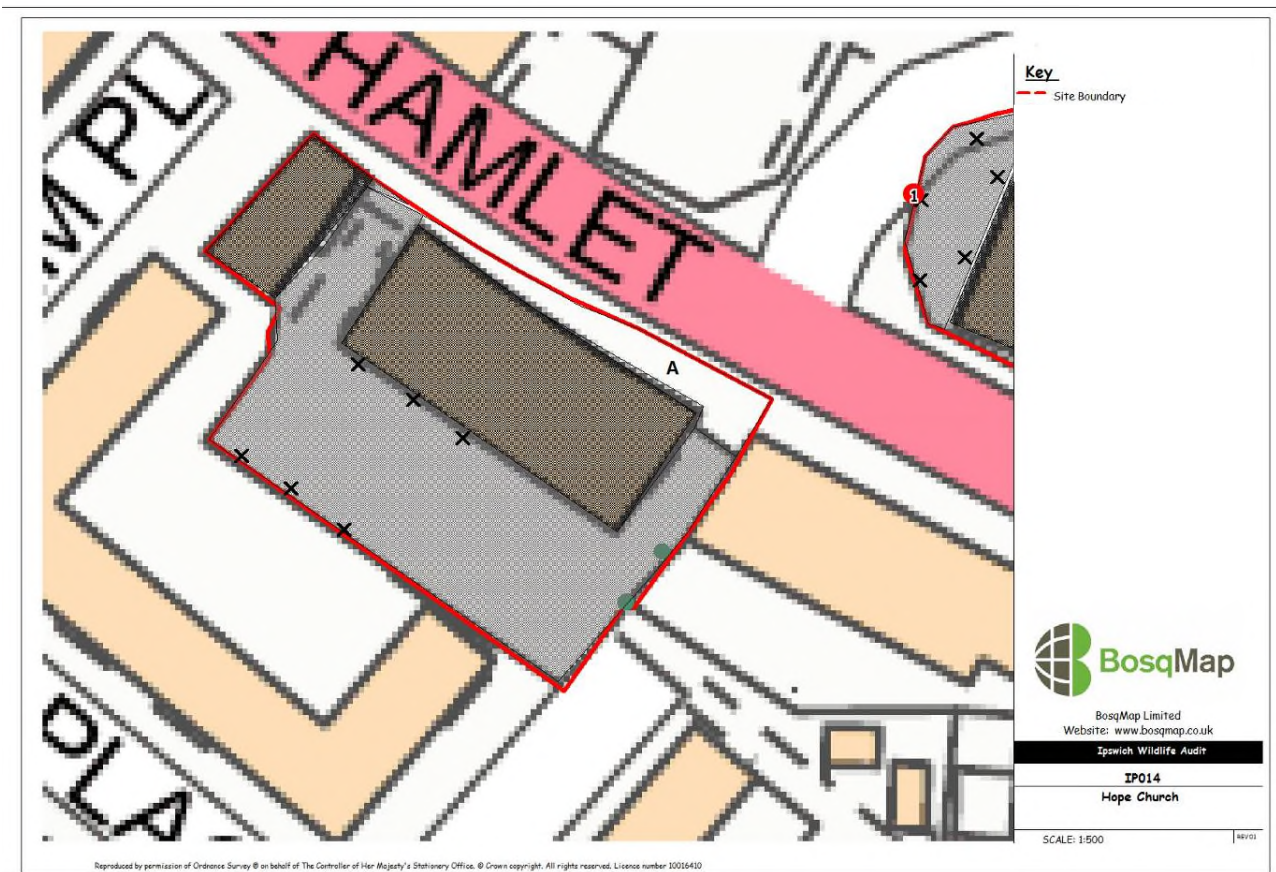


Site name: Hope Church

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.

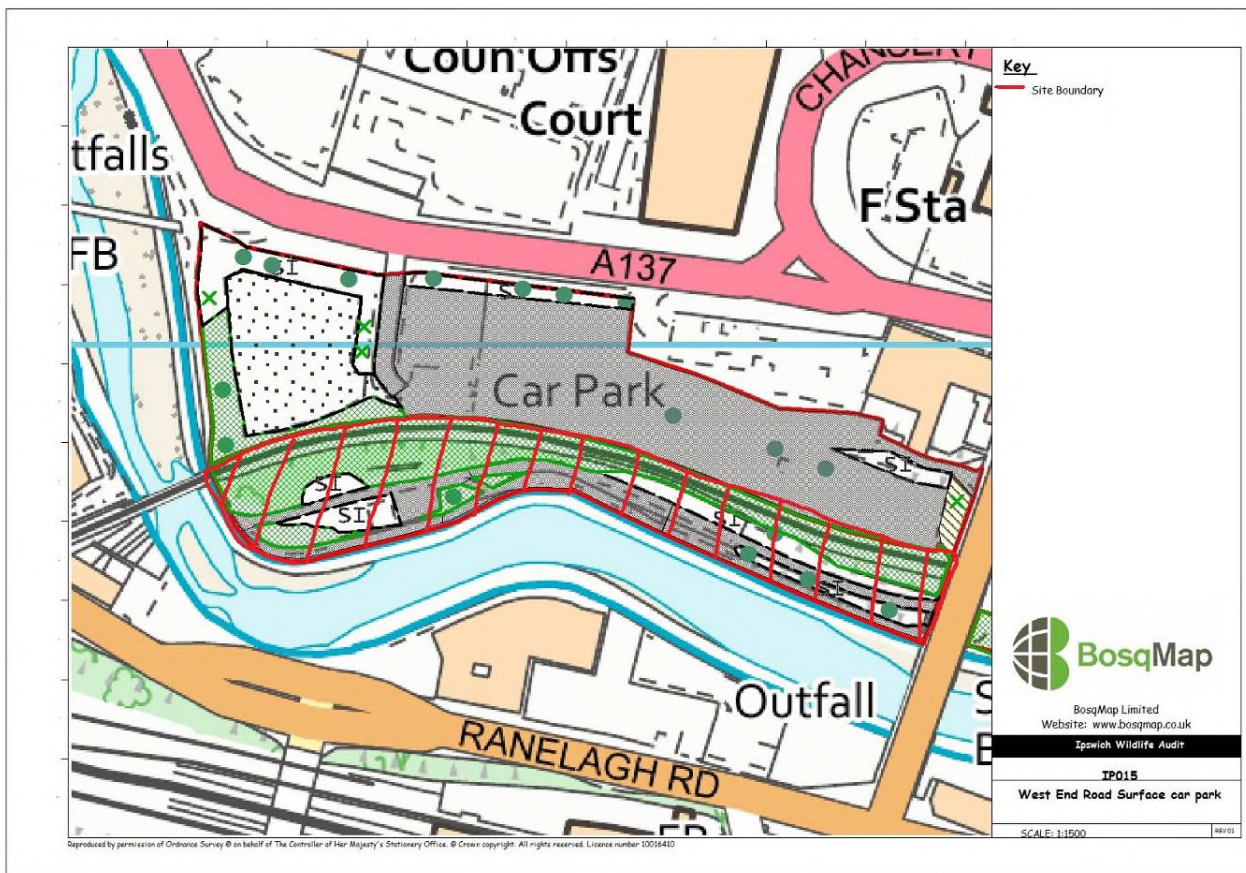
This site is very small and located in a built-up area of the Town, so the opportunities for enhancement are limited. However, any landscaping scheme should include low-maintenance nectar and berry producing shrubs and perennial plants to provide some benefit for birds and invertebrates. Rain gardens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

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.

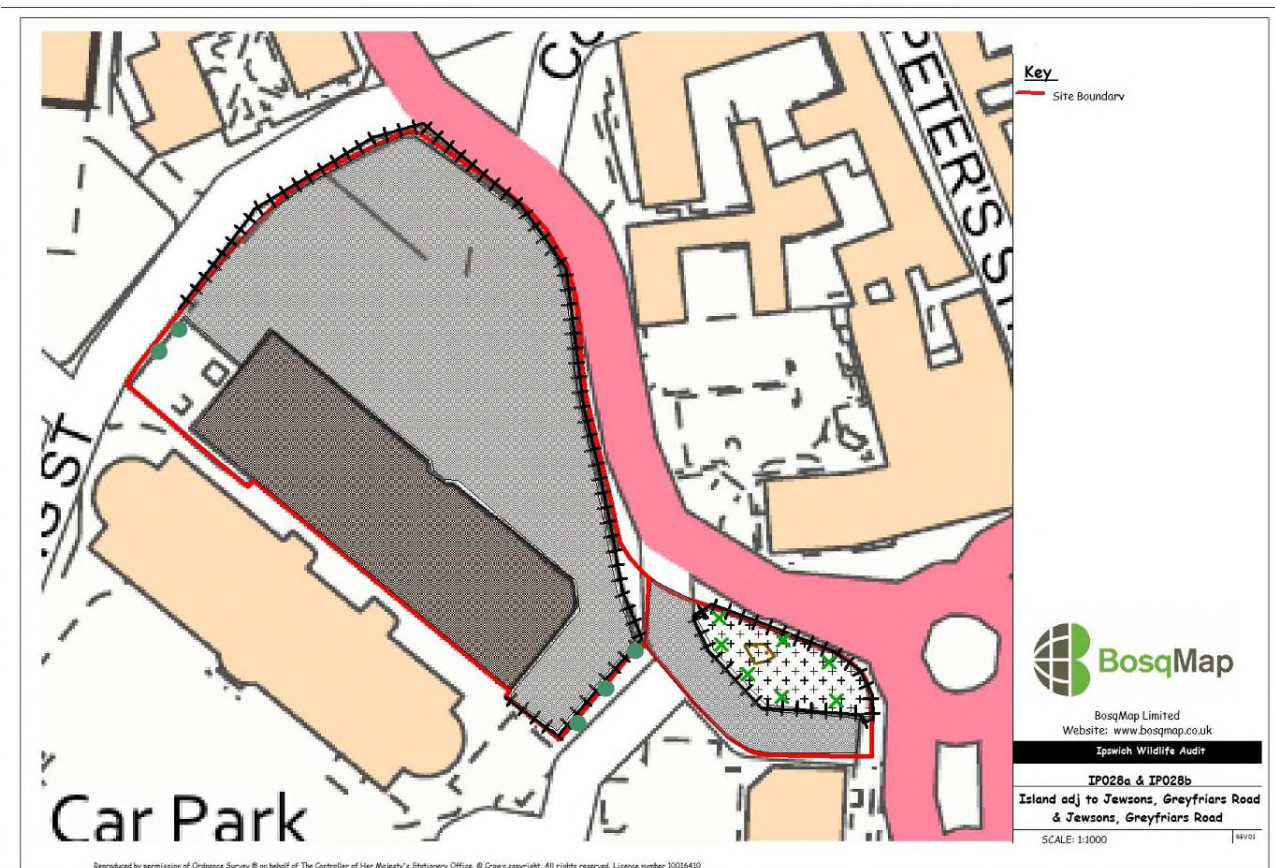
Swifts are a declining migratory species that are almost totally dependent on holes and crevices in buildings for nesting, but leave no mess. Swift boxes should be integrated into new buildings using

'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:



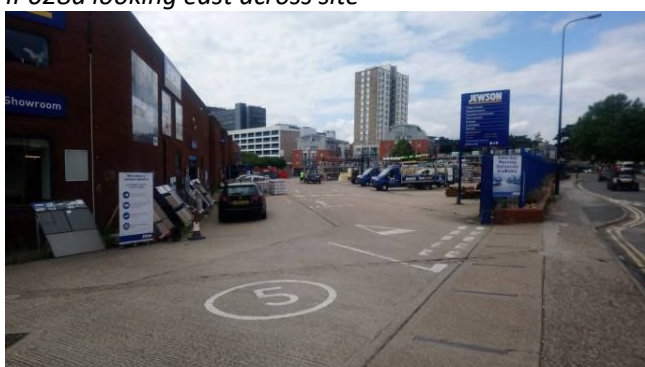
Photos:



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.