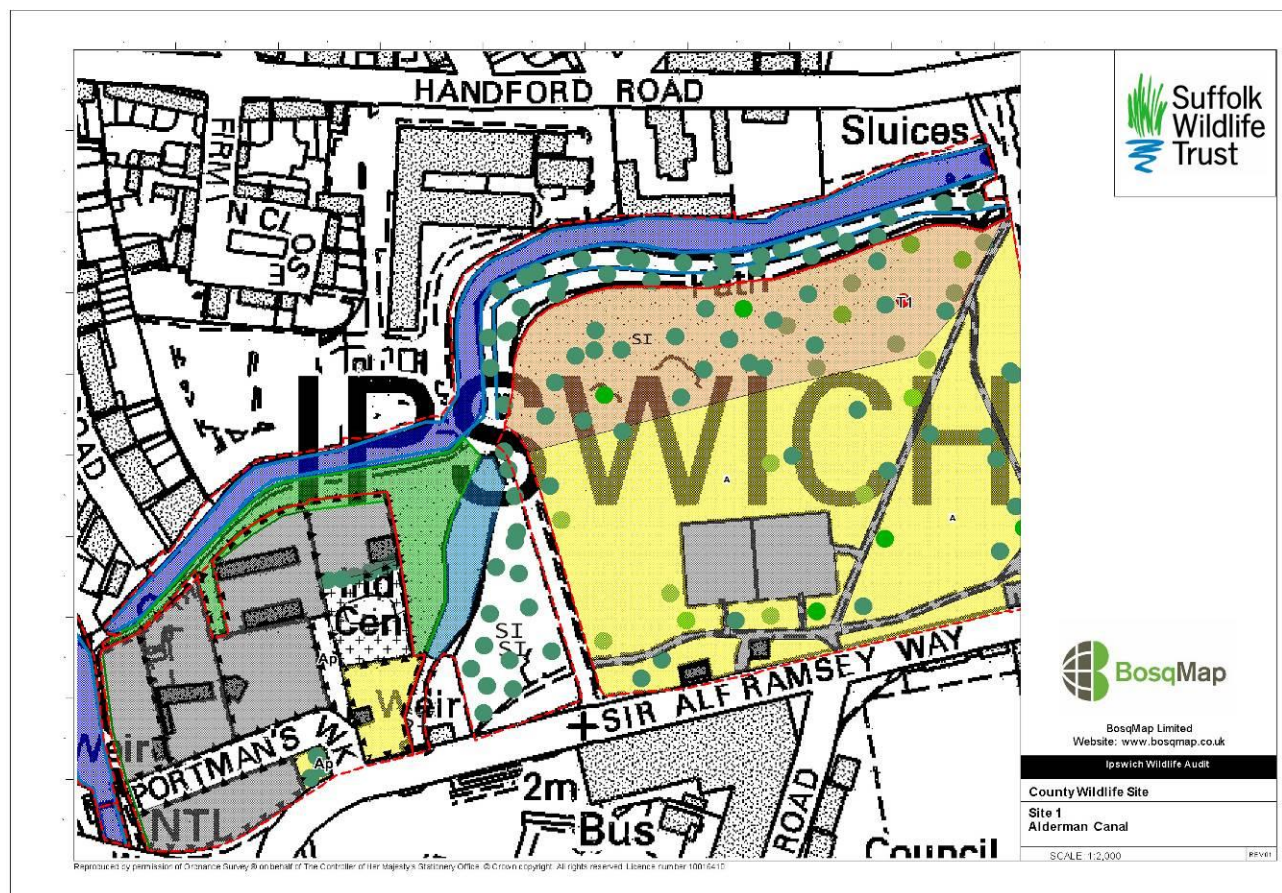


Site name Site reference 1 – Alderman Canal CWS

IBC Ref: W1
Site status: County Wildlife Site & Local Nature Reserve
Grid ref: TM 15447 44445
Area: 2.06 Hectares
Date: 19 June 2013
Recorder: A Looser
Weather conditions: Sunny, 25°C
Ranking: 2
Biodiversity value: High

Map:



Photos:



Looking east along canal



Reed bed area looking south



Boardwalk next to the canal

Habitat type(s):

River and marginal habitat, scrub, rough grassland, reedbed

Subsidiary habitats:

Scattered trees, tall ruderal

Site description:

This site represents the Alderman Canal from where it joins the River Gipping as far as the Alderman Road. The remainder of Site 1 to the south-east is not designated as CWS and has been covered in a separate report under Category 2 Sites. The Canal is bordered by lush bankside vegetation with scattered trees. There is also a small section running south from the Canal which contains a good habitat mosaic with scrub, scattered trees, reed bed and tall grasses.

Protected species:

Otter (2004 and 2007)

Water vole (2007)

Bats (Pipistrelle 2011)

Protected species potential:

Reptiles (grass snake and slow worm)

BAP habitats present:

River
Reedbed

BAP species seen:

-

BAP species known:

-

BAP species potential:

Reptiles (grass snake and slow worm)
Hedgehog
Stag beetle

Connectivity:

This site is directly connected to the River Gipping corridor which provides excellent connectivity for wildlife and contributes to the overall ecological network of the Town.

Structural diversity:

The site has good structural diversity with river, bankside vegetation, tall grass, reed bed, scrub and trees.

Flora:

There is a good floral diversity on the river banks with cock's foot, false oat and rye grass with common reed, great willowherb, meadow buttercup, hedge bindweed, cow parsley, sedge spp, white clover, garlic mustard, green alkanet, burdock and ribwort plantain.

The emergent vegetation included a good range of species with common reed, lesser water parsnip, yellow iris, reedmace and water dock.

The area of scattered trees included the following woody species: sycamore, willow, bramble, hawthorn, dog rose, clematis, oak, gorse, alder and fig. The scrub to the south of the river comprised ash, elder, buddleia, willow, hawthorn, sycamore, lime and bramble.

The species in the tall grass area to the south were largely cock's foot, Yorkshire fog and false oat grass, with yarrow, green alkanet, creeping thistle, spear thistle, creeping cinquefoil, common mouse ear, bush vetch, nettle, cow parsley, great willowherb, mugwort and mallow.

Japanese knotweed (non-native invasive species) was also discovered near the point of connection to the River Gipping, behind the waste recycling area.

Avifauna:

The river provides excellent habitat for a range of bird species and a good number of species were observed during the visit. Blue tit, great tit, chaffinch, greenfinch, blackbird, magpie, robin, moorhen, mallard, reed warbler, sedge warbler, herring gull, greater black backed gull and black headed gull were all observed during the visit.

Invertebrates:

There is a good habitat mosaic for invertebrates with a good diversity of plant species on this site. This provides a good nectar source for butterflies and moths so there are likely to be a range of common

species throughout the year. In addition the water provides good habitat for dragonflies and damselflies. Small white butterflies were seen during the visit as well as banded demoiselles. There is some standing dead wood along the river which provides good habitat for a range of invertebrate species. Dead tree stumps also provide good habitat for stag beetles as the larvae require subterranean dead wood and there are several records of stag beetle from the immediate area.

Herpetofauna:

The habitat is suitable for reptiles and the river provides a good corridor for wildlife, particularly reptiles to move along. There are reports of grass snake swimming in the River Gipping which the Alderman Canal feeds into.

Mammals:

The habitat along the river is excellent for a range of mammals. The long vegetation on the banks provides excellent cover for a variety of small mammals including mice, voles and shrews. There are fairly recent records of water vole along the Alderman Canal (2007) and the habitat is very good for them. The habitat is also suitable for otters and there are several fairly recent records (2004 and 2007). Bats will use the river to feed on the insects as well as navigating along it to find other sites. Some of the trees in the area are mature enough to be used as roosting sites by bats. There is also a recent record of a dead pipistrelle being found on the footpath along the Alderman Canal (2011). There are several reports of hedgehogs in the vicinity so it is likely they will utilize the river and associated habitat.

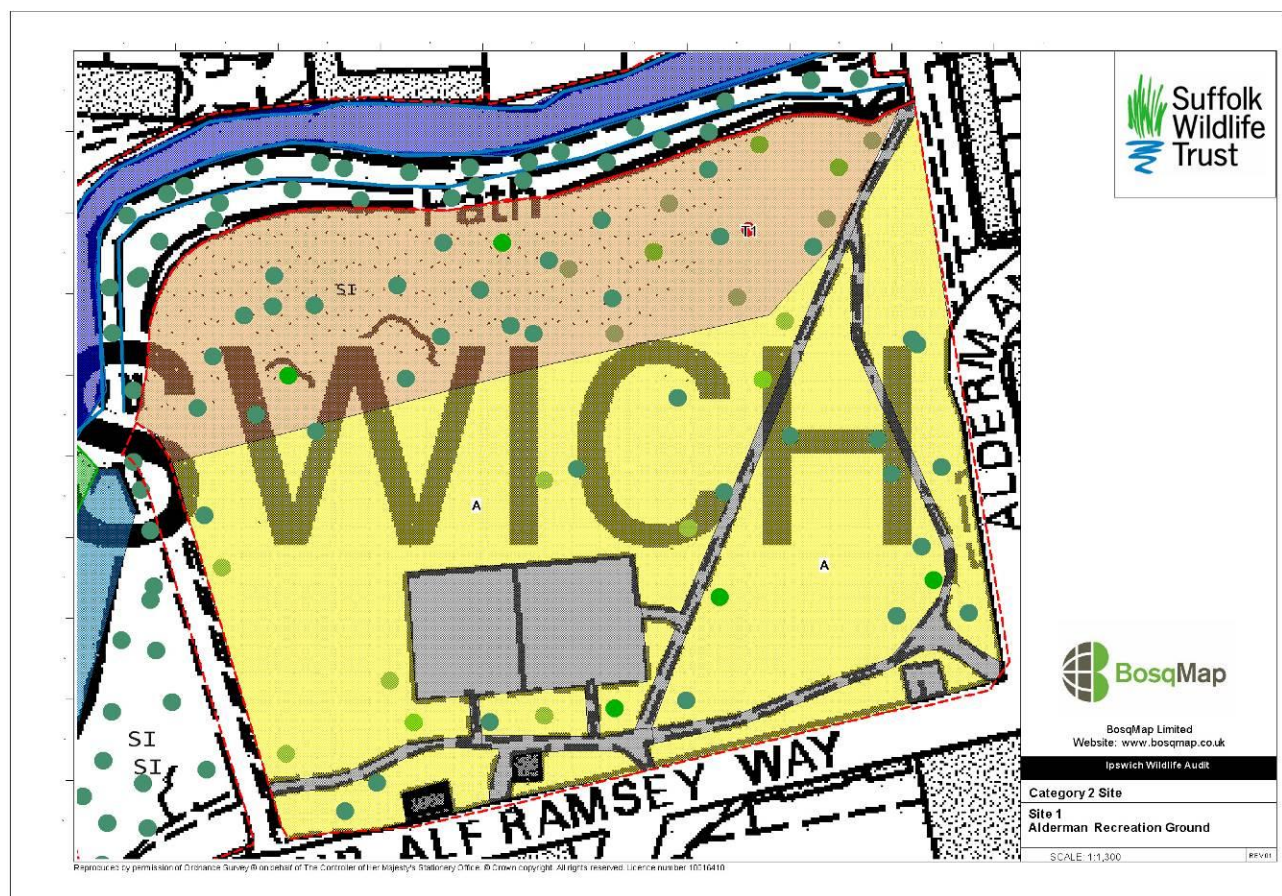
Comments and recommendations:

The Japanese knotweed could become a problem if it spreads along the river corridor and advice should be sought regarding the best course of action. It must not be strimmed as this will cause it to spread faster.

Site name **Site reference 1 – Alderman Road Recreation Ground (area outside CWS)**

IBC Ref: W1
Site status: No wildlife designation
Grid ref: TM 15562 41646
Area: 3.94 hectares
Date: 19 June 2013
Recorder: A Looser
Weather conditions: Sunny 24°C
Ranking: 3 (specifically for areas adjacent to CWS)
Biodiversity value: Medium

Map:



Photos:



View across site



Orchid area at northern end of site

Habitat type(s):

Amenity grassland, scattered trees, semi-improved neutral grassland

Subsidiary habitats:

Individual specimen trees

Site description:

This site is situated along Alderman Road and Sir Alf Ramsey Way. The bulk of the area is amenity grassland with scattered trees, but there is an area of rough grassland at the northern end of the site with good numbers of southern marsh orchids and also bee orchids. The Alderman Canal runs along the northern boundary of the site and this section, along with its riparian habitat, is designated as a County Wildlife Site and Local Nature Reserve.

Protected species:

.-

Protected species potential:

Grass snake, slow worm

Bats

BAP habitats present:

-

BAP species seen:

-

BAP species known:

-

BAP species potential:

Grass snake, slow worm

Hedgehog

Bats

Connectivity:

This site has good connectivity as it is part of the River Gipping and Alderman Canal network. The Alderman Canal CWS (Site 1) is adjacent to this site along its northern and western boundaries. It is also close to the River Orwell (Site 16) and the River Gipping CWS (Site 15).

Structural diversity:

The site has reasonable structural diversity with amenity grassland, longer grass and trees.

Flora:

The majority of the site is short mown amenity grassland. Species in this include rye grass with clover, dandelion, daisy, ribwort plantain, yarrow and black medick.

The areas of longer grass along the northern edge were more diverse, with species including rye grass, Yorkshire fog, cock's foot and rough meadow grass with creeping buttercup, cut leafed cranesbill, lesser stitchwort, creeping thistle, spear thistle, curled dock, silver weed, autumn hawkbit, soft rush, bee orchid and good numbers of southern marsh orchid (Target Note). The presence of the latter plant indicates that there is impeded drainage in this area.

The scattered trees on site are a mixture of ash, lime, oak, holm oak, London plane, Scot's pine, rowan

and silver birch. The northern section was dominated by willow.

Avifauna:

The visit took place after the bird breeding season, so this was a suboptimal time of year for recording this group. However, the site provides limited opportunities for birds except for foraging and only magpie and blackbird were observed during the visit.

Invertebrates:

The area of longer grass in the northern section of the site provides a variety of food sources for species such as butterflies and this is complemented by the trees within the park. Speckled wood butterflies were seen during the visit. There are likely to be a range of common invertebrate species present throughout the year.

Herpetofauna:

The rough area at the northern end of the site could be suitable for reptiles, particularly as it borders the Alderman Canal. However the willow trees in this area mean that this grassland is quite shady, which reduces the likelihood of reptiles being present. Grass snake and slow worm are the two possible species which may occur. Similarly, the rough grassland and trees bordering the canal may support amphibians.

Mammals:

Common species of mammal such as grey squirrel are likely to use the site. The area of long grass close to the river provides good habitat for a range of small mammals including mice, voles and shrews. The site does provide good foraging habitat for hedgehogs so they may be present in small numbers. One of the large ash trees at the northern end of the site has suitable holes for bats to use as roosting sites. Bats are likely to forage over the site as it is so close to the canal.

Comments and recommendations:

Thinning out a few of the willow trees from the northern end of the site will improve its potential to support reptiles as well as improving the floristic diversity of the site. The grassland also needs to be cut once per year in late summer/early autumn, with the cuttings removed to improve the floristic diversity of the area.

One of the young ash trees which has been planted on site appears to have ash dieback disease.

Consideration should be given to amending the CWS boundary to include the areas of neutral semi-natural grassland containing the southern marsh orchid community.

Site name Site reference 10 – Holywells Park

IBC Ref: W11
Site status: County Wildlife Site
Grid ref: TM 13912 44048
Area: 21.10 Hectares
Date: 11 July 2013
Recorder: S Bullion
Weather conditions: Hot and sunny 26 °C
Ranking: 2
Biodiversity value: High

Map:



Photos:



View southwards across park



Kissing Gate Meadow with log pile in grass on left hand side of photo



View across 'Big Pond'



Natural spring in east of park

Habitat type(s):

Mixed woodland, scrub, rough grassland, short mown grassland, streams, ponds and marsh, tall ruderals

Subsidiary habitats:

Mature specimen trees, fallen and standing deadwood

Site description:

There is an excellent habitat mosaic within this historic park. Natural springs rise in the east of the park, which are then channelled through a series of centrally-located ponds into a watercourse running along the western boundary known as 'The Canal'. These waterbodies are varied, depending on size, water depth, the level of shading and degree of colonisation by emergent vegetation. There is also a separate pond within the woodland known as 'Dell Pond' which is heavily shaded with no emergent vegetation and several items of domestic rubbish. There is a stream within the Orchard which runs towards The Canal.

Mixed coniferous and deciduous woodland is a major feature of the park, with large amounts on the eastern side as well as the western and northern boundaries of the park and the south-western corner. There is also a good mix of rough grass areas interspersed with areas of short-mown amenity grassland. In the south-west corner is an area known as Kissing Gate Meadow, which is believed to have been sown with a wildflower mix sometime in the past, but which is becoming overgrown with more ruderal species. Common lizards and slow worms were released here in 2011. There is also a recently created orchard with planted trees and shrubs north of the meadow. This is a very well-recorded site and there are good desktop records for many groups.

Protected species:

Common pipistrelle (2004)

Grass snake (2011), slow worm and common lizard (released into Kissing Gate Meadow 2011)

Protected species potential:

Various bat species

BAP habitats present:

Eutrophic standing water

BAP species seen:

-

BAP species known:

Mammals: Noctule bat (1985), hedgehog (1990)

Reptiles and amphibians: Grass snake (2011) slow worm and common lizard (2011), toad (2011)

Birds: bullfinch (2011), spotted flycatcher (2011), wood warbler (2010), song thrush (2011), lesser spotted woodpecker (1995), starling (2011), turtle dove (2011), common cuckoo (2011)

Butterflies: silver studded blue (2009), white letter hairstreak (2006) wall (2009),

Moths: white ermine (1995), buff ermine (2011), oak hook-tip (1996), small phoenix (1975), September thorn (1975), small emerald (1994), dark barred twin-spot carpet (1975), ghost moth (1996), lackey (1995), grey dagger (2003), garden dart (1996), white-line dart (1975), rustic (1994), dot moth (1996), rosy minor (1975)

Other invertebrates: Five banded weevil-wasp (2008), bee wolf (2010) golden hoverfly (2005), stag beetle (1996)

BAP species potential:

-

Connectivity:

The park is surrounded by employment land, housing and roads, so it is not connected to any wildlife corridors. However, immediately to the south of Cliff Lane lies the linear north-western extension of Landseer Park, so there are large tracts of other semi-natural habitat in the immediate vicinity. The combined areas of the two parks amount to over 38 hectares, so this represents a large tract of valuable wildlife habitat within this part of Ipswich.

Structural diversity:

Structural diversity is excellent with a mixture of short and rough grassland with specimen trees, woodland, scrub, springs and a variety of water bodies. Standing and fallen deadwood provide valuable microhabitats for invertebrates.

Flora:

In the rough, un-mown areas of grassland a reasonable range of grasses are present: Yorkshire fog, false oat, cock's foot, sweet vernal grass, meadow foxtail and common bent. Herbs include ribwort plantain, common sorrel, yarrow, black knapweed, lesser stitchwort, ragwort, common cat's ear. Pignut is also present in rough grassland near the centre of the park.

Kissing Gate meadow was dominated by very tall grasses such as cock's foot and false oat grass, but also common bent, Yorkshire fog and sweet vernal grass. Rough stalked meadow grass was present in more shaded areas. There was a good mix of herbaceous species, as would be expected in a sown meadow, including red clover, meadow crane's bill, red campion, black knapweed, greater knapweed, tufted vetch, tansy, ox-eye daisy, greater bird's foot trefoil and also dropwort (a species normally associated with chalky grassland but it can also be a garden escape). At the eastern end of the meadow the sward is very rank and colonised by a dense stand of creeping thistle.

Areas of short-mown amenity grassland typically included both greater and ribwort plantains, daisy, common mouse-ear, yarrow and white clover.

The Canal was lined by mature alder and willows, but further east the woodland was more diverse with ash, poplar, beech, goat willow, sweet chestnut, dogwood and hazel. The ground flora was quite diverse with hedge woundwort, wood avens, square-stalked St John's wort, red campion, hedge bindweed, male fern. North of the Big Pond, the woodland was more mixed, with Scot's pine, yew, ash, horse chestnut and suckering elm. The mature woodland north of the car park on Cliff Lane again included some large trees, with Scot's pine, oak, ash, horse chestnut with holly and elder. Bramble provides valuable habitat along the woodland edges. The Orchard contains an excellent mix of woody species with many of the above listed as well as wayfaring tree, rowan and hornbeam. There are some superb specimen trees with a central avenue of limes and some very large beech trees.

Wetland species associated with the water bodies included brooklime near Big Pond, common reed, reed mace, hairy willowherb, pendulous sedge and horsetails, which are particularly abundant in damp or inundated areas.. Fool's water cress grows in some of the springs on the eastern side. Hemlock water dropwort is associated with Paddling Pool pond, but this was not observed during the site visit.

There are good fungal records for this site.

Avifauna:

The birds are very well recorded by local experts. There is likely to be a good range locally common

garden bird species breeding in good numbers in the park. The larger ponds are good for various wildfowl, with mallard, gadwall, tufted duck, shelduck, teal and wood duck amongst some of the records. Kingfisher has been regularly recorded and water rail is another interesting record. The park will provide excellent habitat for over-wintering birds and there are good records of brambling, siskin, redpoll, redwing, fieldfare and brambling. Summer migrant warblers are also well recorded, with wood warbler and yellow-browed warbler being unusual records. SBRC records indicate one nightingale was recorded in 1993 and it would be useful to know if there are more recent records. The Turtle dove record in 2011 is notable as this is a severely declining species. Lesser spotted woodpecker has not been recorded since 1995 and is likely to be extinct.

Invertebrates:

The woodland/grassland mosaic will be important for a wide range of invertebrates. There is fallen and standing deadwood within the park providing excellent opportunities for saprophytic invertebrates, including stag beetle.

Few butterflies were recorded but it started as a poor year for this group. Dragonflies and damselflies were flying over the 'Big Pond' including southern hawker and common blue damselfly. This large pond was dipped and was found to be reasonably rich in invertebrates, including flatworms, pond snail, great water boatman, hoglouse and a large leech (Order Rhynchobdellae, family Glossiphoniidae).

There are excellent hymenoptera, butterfly, moth, dragonfly and damselfly records for the site, as provided by SBRC.

The five-banded weevil-wasp was recorded in Kissing Gate Meadow in 2009. This species like bare ground exposures in which to excavate a tunnel.

Herpetofauna:

Although there are only anecdotal records for grass snake, the habitat mosaic with numerous ponds provides good habitat for this species. However a recent amphibian survey of the ponds revealed the presence of fish (stickleback and pike, with rudd also in the big pond) with only few smooth newt and frogs, which are the principal prey species for the grass snake (Sudbury Ecological Field Services 2011). Two grass snakes (an adult and an immature were recorded during a reptile survey (Sudbury Ecological Field Services 2011) and the population was described as low. Toad was also recorded during this survey although there is a Registered Toad Crossing on Cliff Lane. As a result of a development project close to Ipswich (thought to be in Rushmere), Kissing Gate Meadow was selected as a receptor site and 175 common lizards were released here 2011, along with 22 slow worms, 26 common toad and 27 common frogs.

Mammals:

The site will support common mammals such as muntjac deer, grey squirrel, rabbit, mole, fox and various small mammals and wood mouse, bank vole and common shrew have been recorded on several occasions. A stoat record in 2003 is unusual. The habitat is suitable for hedgehog and may be an important site for this declining mammal, although there are no recent records. Common pipistrelle was recorded using a bat detector in 2004. The very large, mature trees within the park offer superb roosting opportunities for bats and there are several known roosts. There is a coypu record for 1983 which is notable as this species is now extinct in Britain following an eradication process (last Suffolk record 1989).

Comments and recommendations:

Kissing gate Meadow is becoming very overgrown with a dominance of thistles at the eastern end. It is recommended that a third of the meadow should be cut on rotation and the cuttings removed. If this cut took place at the end of October/early November, this would limit impacts upon reptiles, which have been released here. By cutting only a section of the meadow each year, this will ensure that there is always tall habitat to provide shelter for overwintering invertebrates. If a path is close mown each year, this will ensure there is a very close sward and potentially bare ground areas which are required by the five-banded weevil wasp.

It is recommended that a follow-up reptile survey should be undertaken to assess the success of the translocation.

There is a proposal to restore the pond network within the park as part of a Heritage Lottery Grant. The work should seek to maximize the habitat mosaic and if fish were removed from the upper parts of the chain of ponds, this could benefit amphibians.

The non-native invasive species, Himalayan Balsam, which is quick to colonise and dominate bankside vegetation due to its explosive seed pods, was noted by The Canal.

References

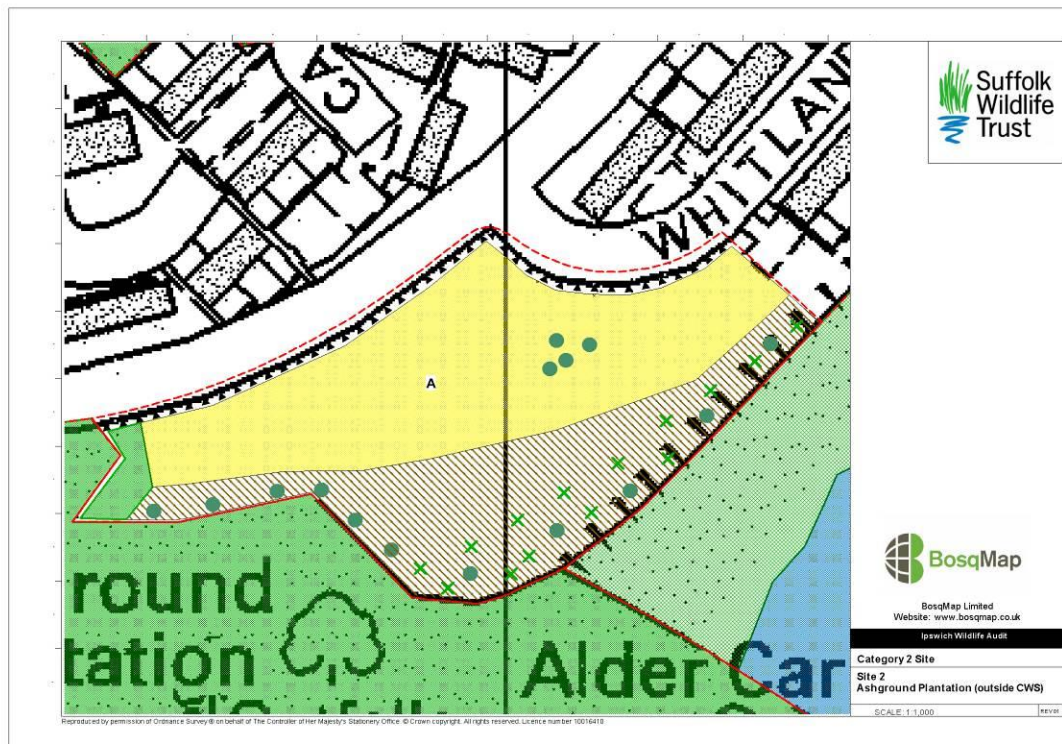
Holywells Park Pond Report (2011) Sudbury Ecological Field Services
Holywells Park Reptile Survey (2011) Sudbury Ecological Field Services

Site name:

**Site reference 2 – Ashground Plantation
(non-CWS area)**

IBC ref:	W2
Site status:	No designation
Grid ref:	TM 14991 41620
Area:	1.09 hectares
Date:	21 August 2013
Recorder:	A Looser
Weather conditions:	Warm sunny conditions, 27°C
Ranking:	4
Biodiversity value:	Medium

Map:



Photos:



Southern boundary

Habitat type(s):

Amenity grassland, tall ruderal,

Subsidiary habitat:

-

Site description:

This site is a small recreation ground along Stoke Park Drive which backs onto the remainder of Site 2 - Ashground Plantation County Wildlife Site. It is dominated by amenity grassland with a small circle of trees in the centre. The southern boundary is dominated by tall ruderal vegetation with woodland.

Protected species:

-

Protected species potential:

Bats

BAP habitats present:

-

BAP species seen:

-

BAP species known:

-

BAP species potential:

Stag Beetle
Hedgehog

Connectivity:

This site has very good connectivity to the south as it is adjacent to the County Wildlife Site section of the rest of Site 2 and also Bourne Park Reedbed (Site 5) which links to other semi-natural habitat associated with Spring and Millennium Woods and Kiln Meadow (Site 18).

Structural diversity:

There is reasonable structural diversity with amenity grassland, tall ruderal vegetation and woodland.

Flora:

The majority of the site is amenity grassland with the usual species being dominated by rye grass with dandelion, daisy, yarrow, ribwort plantain and creeping cinquefoil.

The southern boundary was tall ruderal vegetation consisting of common reed, great willowherb, creeping thistle, bramble, nettle and hogweed.

The trees along the southern boundary included elder, oak, sycamore, bramble, ash, goat willow, hawthorn, gorse, hazel and alder.

Avifauna:

The southern boundary will provide good habitat for a range of common birds.

Invertebrates:

The tall ruderal vegetation will provide some habitat for a range of common invertebrate species such as spiders and grasshoppers. Stag beetles could be present if there is any subterranean dead wood habitat in the woodland.

Herpetofauna:

Most of the habitat is unsuitable for reptiles, however grass snakes could occasionally bask on the edge of the site if they are present in the surrounding area.

Mammals:

Common species of mammals such as grey squirrels are likely to use the site. The rough area at the southern end of the site will also support populations of small mammals such as mice and voles. Some of the trees on the southern boundary could support temporary bat roosts and they are likely to feed over the site as it is close to the Belstead Brook.

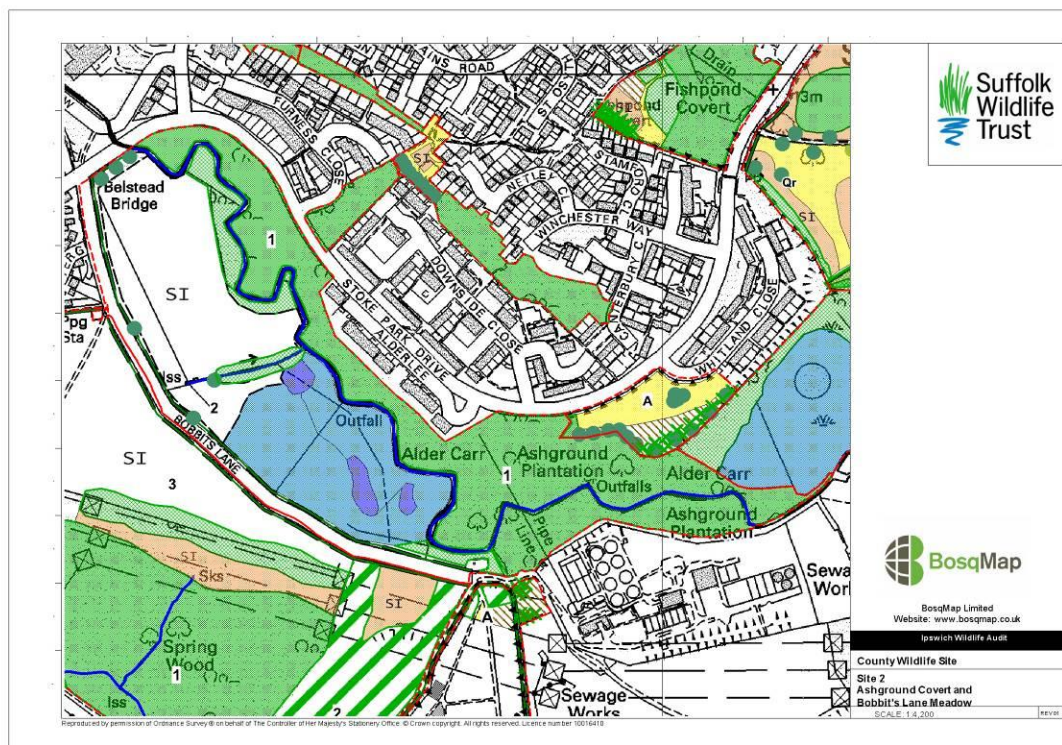
Comments and recommendations:

Less frequent mowing along the southern edge would improve a nectar source for invertebrates, but this would need to be cut at least annually as nettles will rapidly encroach into these areas otherwise.

Site name: **Site reference 2 – Ashground Covert and Bobbitts Lane Meadows (part outside IBC)**

IBC ref: W2
Site status: County Wildlife Site & Local Nature Reserve
Grid ref: TM 14644 41646
Area: 15.38 hectares
Date: 8 July 2013
Recorder: M Wright
Weather conditions: Warm sunny conditions
Ranking: 2
Biodiversity value: High

Map:



Photos:



Open water south of Bobbits Lane with extensive areas of reed mace



The western end of the meadow



Mature, species-rich hedgerows along Bobbits Lane



Ashground Plantation



Belstead Brook and Ashground Plantation

Habitat type(s):

Herb rich and rough grass meadows, fen, semi-natural woodland, seasonal wet woodland, scrub, hedgerow, stream and ponds

Subsidiary habitat:

Deadwood and individual trees with holes

Site description:

The meadows and wetland of Bobbits lane, Ashground Covert and the adjacent alder carr, located to the west of Bourne Park reedbed on the southern fringe of Ipswich, are bisected by Belstead Brook.

In 2008, the CWS designation was extended to include the wetlands to the west bordered by the Belstead Brook on one side and Bobbits Lane to the south. In 2010 the CWS designation was further extended to include the hedges on either side of Bobbits Lane for their importance to dormice.

The site has two public viewing areas and a boardwalk.

Area 1. Ashground plantation and adjacent alder carr

Area 2. Bobbits lane hedgerow, meadows and wetland

Area 1. Ashground plantation and adjacent alder carr

Mature ash and alder dominate the wood, with oak regularly occurring throughout. Although the wood lacks a varied age structure the structure is reasonable due to the variety of trees present.

Belstead Brook, which runs through the site, is extremely important for wildlife as it provides additional habitats, which supports an aquatic fauna, marginal vegetation and associated scrub.

Area 2. Bobbits Lane hedgerow, meadows and wetland

The western area includes tall grassland with a number of small patches of scrub. There is a shallow stream that runs from Bobbits Lane to Belstead Brook, which for the most part is engulfed in scrub. In the eastern portion of this site there is a mosaic of swamp and open water, dominated by reed mace. Either side of Bobbits Lane are mature hedges, with some sections of hedge meeting overhead with the hedge on the opposite side of the lane.

Protected species:

Dormouse (Bobbits Lane 2010), bats, grass snake (2011), common lizard (2011), otter (2009) water vole (2009), bats (common pipistrelle, soprano pipistrelle, noctule, brown long-eared 2010)

Protected species potential:

Slow worm

BAP habitats present:

Ancient species-rich hedgerow (Bobbits Lane hedges including the south side bordering Kiln Meadow)

River

Eutrophic standing water (ponds)

Wet woodland

BAP species seen:

Toad

Water vole (feeding remains and droppings)

Dunnock

BAP species known:

Toad (2013) lesser spotted woodpecker (2005), lesser redpoll (2008), stag beetle, otter, water vole, grass snake, common lizard, bats

BAP species potential:

Hedgehog, harvest mouse, bullfinch, starling, house sparrow, song thrush, slow worm

Connectivity:

This is an integral part of the Belstead Brook chain of sites and contributes to an important green corridor around southern Ipswich buffering the Brook and the carr woodland

Structural diversity:

The structural diversity of the whole site is excellent. There is variety of tree and shrub species of varying ages found throughout the tree belt. The mosaic of grassland types in conjunction with the scrub, wet and fen areas of the woodland areas improves the structural diversity still further.

Flora:

Area 1. Ashground plantation and adjacent alder carr

The wood supports an interesting flora, which includes thin-spiked wood sedge, a rare Suffolk plant, which was not found during the site visit. Observations included bramble, field maple, hawthorn, blackthorn, hazel, willow, elder, crack willow, mature oak, alder and horse chestnut, angelica, bittersweet, bristly oxtongue, broad-leaved dock, celery-leaved buttercup, cocksfoot, cow parsley, creeping buttercup, enchanter's nightshade, false oat-grass, false brome, garlic mustard, gipsywort, greater stitchwort, great willowherb, hard rush, hogweed, hemlock, herb Bennet, herb Robert, nipplewort, red campion, reed canary grass, rough chervil, rough meadow-grass, spear thistle, yellow iris, water speedwell and Yorkshire fog. Thin-spiked wood sedge, a rare Suffolk plant, has been recorded in the wood.

Area 2. Bobbits Lane hedgerow, meadows and wetland

The variety of habitats associated with Bobbits Lane meadows supports a wide range of plants. The aquatic and marginal plants associated with the ditches, ponds and marshy areas include stands of common reed, bulrush, reed canary grass and branched bur-reed. Other plants include gipsywort, water mint, brooklime, yellow iris, marsh marigold and greater pond sedge. Two black poplars have been planted in this area.

On the southern perimeter of the meadows there is a broad mature hedgerow, which provides important shelter and food source for a variety of mammals, birds and insects. The mixed mature woodland fringe, north of Belstead Brook, provides another range of important habitats. Bisecting the meadows and bordering the main drain is a scrub hedge with willows and blackthorn. The species associated with these areas include bramble, field maple, hawthorn, blackthorn, hazel, dogwood, willow, broom, elder, crack willow, mature oak, alder and horse chestnut.

The ground flora of the meadows is varied and includes meadow foxtail, cocksfoot, false oat-grass, Yorkshire fog, hairy brome, soft brome, false brome, rough meadow-grass, hard rush, bittersweet, dittander (nationally scarce), greater stitchwort, red campion, great willowherb, spear thistle, hogweed, garlic mustard, ground elder, angelica, cow parsley, hemlock, herb Robert, broad-leaved dock, curled dock, bristly oxtongue, meadow buttercup and enchanter's nightshade.

During the site visit southern marsh orchids were not seen (see Appendix 1 for full list of species recorded during the surveys in 2009 and 2013).

Avifauna:

The rich variety of habitats found at this site will be supporting very important and varied bird communities throughout the year from wintering thrushes and finches to breeding summer migrants. The site is likely to support a number of BAP bird species. Lesser spotted woodpecker was recorded in 2005 and was believed to be nesting on site, but this is now a very scarce species and may no longer be present. Lesser redpoll was recorded in 2008.

Observations during the site visit included little egret, blackbird, blackcap, blue tit, carrion crow, chaffinch, chiffchaff, whitethroat, collared dove, great tit, goldfinch, magpie, moorhen, robin, reed warbler, sedge warbler and wren. Dunnock was the only BAP species observed.

Invertebrates:

The rich variety of habitats, plant and shrub communities found at this site will be supporting very rich and diverse invertebrate assemblages.

Butterflies: There were 13 species of butterfly recorded during the site visit; comma, peacock, small tortoiseshell, gatekeeper, meadow brown, ringlet, speckled wood, Essex skipper, large skipper, large white, green-veined white and common blue. However, additional species will be present on the site; butterflies that have been recorded at this site in the last five years include red admiral, holly blue, orange tip, painted lady and small white.

Dragonflies: There were seven species of dragonflies recorded during the survey: common darter, blue-tailed damselfly, common blue damselfly, azure damselfly, banded demoiselle, brown hawker and emperor dragonfly. However, more species will use the site and those that have been recorded within the last five years include emerald damselfly, small red-eyed damselfly and ruddy darter.

The site is known to support stag beetles (unpublished record).

Herpetofauna:

The site is important breeding habitat for huge numbers of toads, which migrate across the lane each spring (Registered Toad Crossing). Between 2006 and 2013 inclusively, a group of volunteers have organized a toad patrol at Bobbits Lane. In 2009, almost 5,500 toads were removed from the road and safely transported to the meadows (D. Fincham *unpub. rep.*).

Mammals:

Dormice were first discovered in 2010 in Millennium Wood and since then have been found in neighboring sites including the hedgerow alongside Bobbits Lane. Evidence of water voles was seen (feeding remains and droppings) and otters are present on Belstead brook. The following bat species have been recorded in the locality: common pipistrelle, soprano pipistrelle, noctule bat and brown long-eared bat (M Regnault *pers. comm.*). The variety of habitats associated with the meadows and woodland are likely to support small mammals, grey squirrel and fox. Hedgehog is also likely to be present.

Comments and recommendations:

Restoration work has been carried out in recent years. However, there are still some areas which require further work for example the viewing area. It is recommended that reedmace, which is encroaching into areas of open water, should be removed to ensure areas of water remain open.

Giant hogweed was recorded on site. This is an invasive weed under the Wildlife & Countryside Act 1981 (Schedule 9) and advice should be sought on its control.

References:

Fincham D. 2009 Results of Bobbit's Toad Patrol Survey (*unpub. rep.*)

Appendix 1

Plant list

		Bobbits Lane Meadows 2013	Ashground Plantation 2013
field maple	<i>Acer campestre</i>	*	*
sycamore	<i>Acer psuedoplatanus</i>	*	*
yarrow	<i>Achillea millefolium</i>	*	*
ground elder	<i>Aegopodium podagraria</i>	*	*
horse chestnut	<i>Aesculus hippocastanum</i>	*	*
agrimony	<i>Agrimonia eupatoria</i>		*
garlic mustard	<i>Alliaria petiolata</i>	*	*
alder	<i>Alnus glutinosa</i>	*	*
meadow foxtail	<i>Alopecurus pratensis</i>	*	
angelica	<i>Angelica sylvestris</i> ,	*	
cow parsley	<i>Anthriscus sylvestris</i>	*	*
mugwort	<i>Artemisia vulgaris</i>	*	*
lesser burdock	<i>Arctium minus</i>	*	*
false oat-grass	<i>Arrhenatherum elatius</i>	*	*
wintercress	<i>Barbarea vulgaris</i>		
daisy	<i>Bellis perennis</i>	*	*
false brome	<i>Brachypodium sylvaticum</i>	*	*
soft brome	<i>Bromus hordeaceus</i>	*	
hairy brome	<i>Bromus ramosus</i>	*	
white bryony	<i>Bryonia dioica</i>	*	*
marsh marigold	<i>Caltha palustris</i>	*	
shepherd's purse	<i>Capsella bursa-pastoris</i>	*	*
large bittercress	<i>Cardamine amara</i>		
greater pond sedge	<i>Carex riparia</i>	*	
thin-spiked wood sedge	<i>Carex strigosa</i>		*
rough chervil	<i>Chaerophyllum temulum</i>		*
good King Henry	<i>Chenopodium bonus-henricus</i>		*
enchanter's nightshade	<i>Circaea lutetiana</i>	*	*
creeping thistle	<i>Cirsium arvense</i>	*	*
spear thistle	<i>Cirsium vulgare</i>	*	*
dogwood	<i>Cornus sanguinea</i>	*	
hemlock	<i>Conium maculatum</i>	*	*
hazel	<i>Corylus avellana</i>	*	*
hawthorn	<i>Crataegus monogyna</i>	*	*
smooth hawksbeard	<i>Crepis capillaris</i>	*	
crosswort	<i>Cruciata laevipes</i>	*	
broom	<i>Cytisus scoparius</i>	*	
cocksfoot	<i>Dactylis glomerata</i>	*	*

southern marsh orchid	<i>Dactylorhiza praetermissa</i>		
broad buckler fern	<i>Dryopteris dilatata</i>		*
teasel	<i>Dipsacus fullonum</i>	*	
American willowherb	<i>Epilobium ciliatum</i>	*	
great willowherb	<i>Epilobium hirsutum</i>	*	*
hemp agimony	<i>Eupatorium cannabinum</i>	*	
black-bindweed	<i>Fallopia convolvulus</i>	*	
ash	<i>Fraxinus excelsior</i>	*	*
cleavers	<i>Galium aparine</i>	*	*
cut-leaved cranesbill	<i>Geranium dissectum</i>	*	
herb Robert	<i>Geranium robertianum</i>	*	*
herb Bennet	<i>Geum urbanum</i>		*
Ground ivy	<i>Glechoma hederacea</i>	*	*
reed sweet grass	<i>Glyceria maxima</i>	*	
ivy	<i>Hedera helix</i>	*	*
giant hogweed	<i>Heracleum manegazzianum</i>		
hogweed	<i>Heracleum sphondylium</i>	*	
marestail	<i>Hippuris vulgaris</i>		
Yorkshire fog	<i>Holcus lanatus</i>	*	*
wall barley	<i>Hordeum murinum</i>	*	
catsear	<i>Hypochaeris radicata</i>	*	*
yellow iris	<i>Iris pseudacorus</i>	*	*
soft rush	<i>Juncus effuses</i>	*	
hard rush	<i>Juncus inflexus</i>	*	*
prickly lettuce	<i>Lactuca serriola</i>	*	
white dead nettle	<i>Lamium album</i>	*	
red dead-nettle	<i>Lamium purpureum</i>	*	
common duckweed	<i>Lemna minor</i>	*	
nipplewort	<i>Lapsana communis</i>		*
dittander	<i>Lepidium latifolium</i>	*	
perennial rye grass	<i>Lolium perenne</i>	*	
gipsywort	<i>Lycopus europaeus</i>	*	
mallow	<i>Malvus sylvestris</i>	*	*
pineappleweed	<i>matricaria discoidea</i>	*	
water mint	<i>Mentha aquatica</i>	*	
water pepper	<i>Persicaria hydropiper</i>	*	
redleg	<i>persicaria maculosa</i>		*
reed canary grass	<i>Phalaris arundinacea</i>	*	
timothy	<i>Phleum pratense</i>	*	
reed	<i>Phragmites australis</i>	*	
bristly oxtongue	<i>Picris echioides</i>	*	
Scots pine	<i>Pinus sylvestris</i>	*	
ribwort plantain	<i>Plantago lanceolata</i>	*	
greater plantain	<i>Plantago major</i>	*	
rough meadow-grass	<i>Poa trivialis</i>	*	*

self heal	<i>Prunella vulgaris</i>	*	
blackthorn	<i>Prunus spinosa</i>	*	*
mature oak	<i>Quercus robur</i>	*	*
meadow buttercup	<i>Ranunculus acris</i>	*	
creeping buttercup	<i>Ranunculus repens</i>	*	*
celery-leaved buttercup	<i>Ranunculus sceleratus</i>		*
dog rose	<i>Rosa canina</i>	*	*
bramble sp	<i>Rubus sp.</i>	*	*
curled dock	<i>Rumex crispus</i>	*	
broad-leaved dock	<i>Rumex obtusifolius</i>	*	
white willow	<i>Salix alba</i>	*	
sallow	<i>Salix caprea</i>	*	
crack willow	<i>Salix fragilis</i>	*	*
elder	<i>Sambucus nigra</i>	*	*
water figwort	<i>Scrophularia auriculata</i>		*
groundsel	<i>Senecio vulgaris</i>	*	
ragwort	<i>Senecio jacobaea</i>	*	*
red campion	<i>Silene dioica</i>	*	*
hedge mustard	<i>Sisymbrium officinale</i>	*	
bittersweet	<i>Solanum dulcamara</i>	*	*
branched bur-reed	<i>Sparganium erectum</i>	*	
hedge woundwort	<i>Stachys sylvatica</i>	*	
greater stitchwort	<i>Stellaria palustris</i>	*	*
dandelion	<i>Taraxacum officinale</i>	*	*
goatsbeard	<i>Tragopogon pratensis</i>	*	*
hop trefoil	<i>Trifolium campestre</i>	*	
coltsfoot	<i>Tussilago farfara</i>	*	
bulrush	<i>Typha latifolia</i>	*	
common nettle	<i>Urtica dioica</i>	*	*
brooklime	<i>Veronica beccabunga</i>	*	
germander speedwell	<i>Veronica chamaedrys</i>	*	
water speedwell	<i>Veronica anagallis-aquatica</i>	*	*
black poplar	<i>Populus nigra ssp.</i>	*	
not seen on visits			

Site name:

Site reference 3 – Bixley Heath

IBC ref:

W3

Site status:

Site of Special Scientific Interest (SSSI)
& Local Nature Reserve

Grid ref:

TM 19904 42968

Area:

5.10 hectares

Date:

22 May 2013 & 14 July 2013

Recorder:

M Wright

Weather conditions:

Warm with sunny periods, rain showers, windy

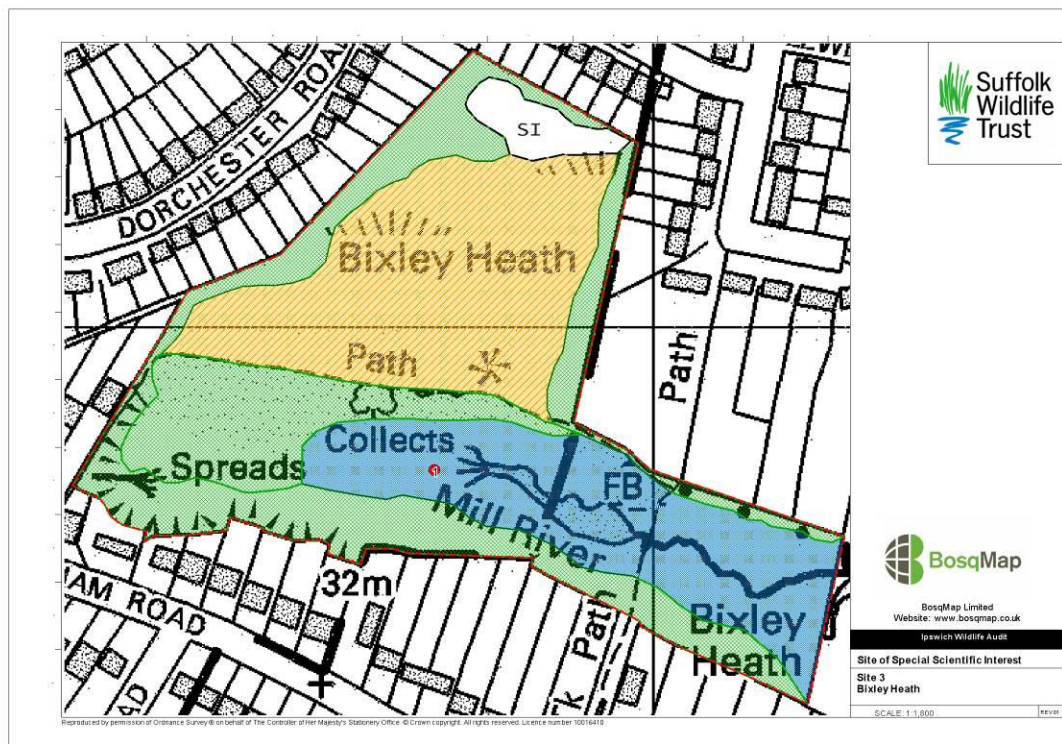
Ranking:

1

Biodiversity value:

High

Map:



Photos:



Fen, wet and dry woodland



Heathland



Gorse scrub on the perimeter of the heath



Reedbed and willow scrub

Habitat type(s):

Lowland heath, acid grassland, reed, fen, wet woodland, scrub and semi-natural woodland

Subsidiary habitats:

Deadwood and trees with holes and splits, bare ground and patchy open water

Site description:

This site is a good example of Suffolk Sandlings Lowland Heath comprising of a mosaic of mixed aged heather, acid grassland, bracken, scrub and woodland. The importance of the site is where the lowland heath grades naturally into the wet fen and sallow scrub, which supports a diverse plant community.

Protected species:

Reptiles (grass snake, common lizard and slow worm)

Protected species potential:

Adder

Bats

BAP habitats present:

Lowland heath (including acid grassland)

Lowland fen, Reedbed

Wet woodland

BAP species seen:

Duncock, song thrush

BAP species known:

Reptiles (grass snake, common lizard and slow worm), toad, house sparrow, starling and silver-studded blue and small heath butterflies

BAP species potential:

Bats, hedgehog, bullfinch, reed bunting, yellowhammer, grayling and wall butterflies

Connectivity:

The connectivity of the site is very good as it links to extensive and similar habitat types of Purdis Golf Course and Purdis farm heathland. The site is also close to Rushmere Heath, Warren Heath remnants and sites within the Ransomes Industrial Park.

Structural diversity:

The structural diversity is extremely good due to the mosaic of different habitat types and the varied vegetation found throughout the site.

Flora:

This site supports a rich and varied flora. Sheep's fescue, common bent and sheep's sorrel with stands of ling and bell heather and bracken dominate the acid grassland and heather area. The scrub areas consist mainly of gorse, bramble, birch and rowan.

The wetland area has encroaching sallow scrub, which supports a varied wetland flora including tussock sedge (Target Note) and a stand of reed.

The woodland fringe contains oak, sycamore, silver birch, hazel and rowan and honeysuckle is abundant throughout the site. Other woody species found during the site visit include ash, blackthorn, broom, cherry, dog rose, gorse, elder, holly, ivy, sallow, Scots pine, snowberry and yew. Grasses and herbs recorded in this area are as follows: annual meadow grass, barren brome, bell flower, birds-foot trefoil, bittersweet, bluebell, bracken, bristly oxtongue, broad-leaved dock, broad buckler fern, bracken, common cleavers, common nettle, cock's foot, common bent, common sorrel, clustered dock, common storks-bill, cow parsley, creeping buttercup, cuckoo flower, daffodil, dandelion, false oat-grass, garlic mustard, gipsywort, golden rod, great lettuce, great pond sedge, great willowherb, green alkanet, ground ivy, foxglove, harebell, hard rush, hemp agrimony, herb Robert, honesty, mallow, male fern, marsh marigold, marsh thistle, meadow buttercup, mugwort, pink campion, ragwort, ramsons, red currant, red dead nettle, reedmace, ribwort plantain, rosebay willowherb, slender thistle, smooth meadow grass, soft brome, soft rush, Spanish bluebell, spear thistle, southern marsh orchid, tansy, white dead nettle, woody nightshade, wood forget-me-not, yarrow, yellow archangel, yellow iris and Yorkshire fog.

Avifauna:

Only two BAP species were seen (dunnock and song thrush), although the site has the potential to support a number of other BAP species. Observations during the site visit included blackbird, blackcap, blue tit, carrion crow, chaffinch, chiffchaff, collared dove, great tit, goldfinch, magpie, reed warbler, robin, whitethroat, wood pigeon and wren.

More visits throughout the seasons will undoubtedly add many more species to this list. It is known that grey wagtails and water rail frequently use the site.

Invertebrates:

The rich variety of habitats, plant and shrub communities found at this site will be supporting a very rich and diverse invertebrate assemblage.

Observations of butterflies during the site visits included comma, Essex skipper, gate keeper, green-vein white, large skipper, large white, meadow brown, red admiral, small skipper, small tortoiseshell, small white and speckled wood.

The site is known for its silver-studded blue butterflies as well as purple and green hairstreak butterflies.

Observations of damselflies and dragonflies included brown hawk, blue-tailed damselfly, common blue damselfly and banded demoiselle.

Herpetofauna:

No species were seen during the site visit, however grass snake, lizard and slow worm and toad are known to occur. It is highly likely that frog also occurs.

Mammals:

The only species seen was grey squirrel; however, foxes are known to be present. The variety of habitats associated with the woodland and grassland are likely to support small mammals. A number of bat species may also use the site and the tree belt will provide excellent foraging habitat. Hedgehog is highly likely to be present.

Comments and recommendations:

The SSSI designation reflects the importance of Bixley Heath as a fragment of traditional Sandlings lowland heathland. It is of very high conservation value and retains considerable ecological interest.

Work is underway to manage the heathland area by removing invasive species and preventing the heathland from succeeding to scrub and woodland.

To the north of the site beyond the heather habitat there are two areas requiring restoration. The largest area is being managed to increase the heathland and acid grassland area. Cutting and removing the clippings should continue, however, due to substrate changes it may not revert to heathland, in that case the area should be allowed to scrub over with gorse and bramble and any other native plant or tree that is able to regenerate. The second open area is being colonized by garden escapes and these ought to be eradicated by allowing gorse scrub to outcompete them. Planting gorse and bramble would speed up succession.

Although water levels may fluctuate during the course of the year, the water level in the wetland area needs to be maintained. However, currently the dam is leaking substantially and water is being lost from the site. The dam and sluice points need urgent remedial work.

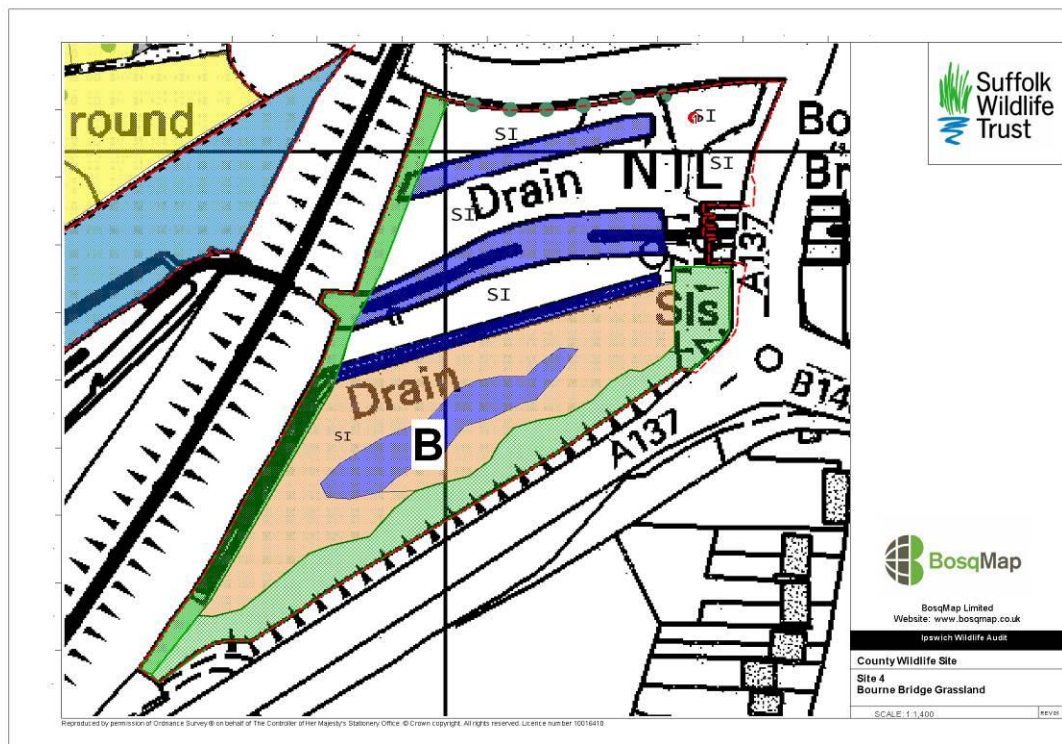
It is recommended, in the short term, to leave the reedbed uncut in order to improve its habitat qualities.

The fen and wet woodland are largely non-intervention and extremely rich wildlife areas. It is recommended that some sallow is removed from the centre of the fen whilst retaining some sallow on the margins.

Site name: **Site reference 4 – Bourne Bridge Grassland
(part outside IBC)**

IBC ref: W4
Site status: County Wildlife Site
Grid ref: TM 16015 41932
Area: 2.3 hectares
Date: 21 May 2013 and 15 July 2013
Recorder: M Wright
Weather conditions: Overcast, warm, light westerly wind
Ranking: 2
Biodiversity value: High

Map:



Photos:



Looking southwest from the sluice; excellent variety of habitats



Belstead Brook, looking southwest from the sluice



Looking northeast, saltmarsh and seasonal wet areas

Habitat type(s):

Tall rough grassland, scrub, reed fringed dykes, mature oaks, saltmarsh and seasonal brackish/freshwater lagoons

Subsidiary habitats:

Short ruderal and bare ground areas

Site description:

There is a range of habitats predominantly tall rough grassland and scrub with seasonal shallow brackish and freshwater areas. Belstead Brook runs through the site then via a concrete sluice before entering the Orwell estuary. On either side of the brook there are two reed-fringed brackish dykes. The western boundary is formed by the railway embankment, which is dominated by mature oaks and scrub. On the eastern boundary bordering the A137 there is an extensive area of scrub; adjacent to the road leading to Bourne Park, a fenced off area protects the corky-fruited water-dropwort.

Protected species:

Otter (2008)

Protected species potential:

Otter, bats, grass snake, slow worm, common lizard and toad,

BAP habitats present:

Reedbed
Saline lagoons

BAP species seen:

Dunnock

BAP species known:

Otter (2008)

BAP species potential:

Hedgehog, harvest mouse, bats, linnet, starling, reed bunting and yellowhammer

Connectivity:

This site is an integral part of the Belstead Brook chain of sites and links them to other corridors such the River Orwell SPA, Belstead Brook and the railway line.

Structural diversity:

The structural diversity of the site is very good due to the grassland types, scrub, trees, dykes and the brackish/freshwater lagoons.

Flora:

An important feature of the site is the line of mature oaks on the western boundary and the mixture of other trees and bushes, which include ash, blackthorn, bramble, dog rose, elder, gorse, hawthorn, hazel, honeysuckle, poplar sp., privet, snowberry, sweet chestnut, sycamore and yew.

The following plants were noted: angelica, annual meadow-grass, barren brome, beaked hawksbeard, bristly oxtongue, broad-leaved dock, bulbous buttercup, cuckoo flower, cock's foot, common bent, common cleavers, common figwort, common poppy, cow parsley, common saltmarsh grass, common vetch, corky-fruited dropwort (nationally scarce), creeping cinquefoil, creeping thistle, common storksbill, curled dock, daisy, dandelion, dittander (nationally scarce), false oat-grass, false fox-sedge, field bindweed, field forget-me-not, garlic mustard, germander speedwell, goat's beard, good King Henry, great willowherb, greater pond sedge, greater plantain, ground ivy, hairy brome, hemlock, horseradish, knotgrass, lesser burdock, mallow, meadow buttercup, meadow foxtail, nettle, perforate St. John's wort, pignut, ragwort, reed, red dead-nettle, ribwort plantain, rough chervil, saltmarsh rush, scentless mayweed, sea club-rush, sea couch, smooth sow-thistle, soft brome, soft rush, spear thistle, spotted medick, spring beauty, square-stemmed St. John's wort, tansy, teasel, wall barley, wavy bittercrest, white campion, white dead-nettle, wood forget-me-not, woody nightshade, yarrow and Yorkshire fog.

Also recorded on this site in the previous wildlife Audit 2000 is curved hard-grass (nationally scarce), but this was not found during this visit.

Avifauna:

Dunnock was the only BAP species seen. Other observations included blackbird, blackcap, blue tit, carrion crow, chaffinch, chiffchaff, collared dove, great tit, goldfinch, magpie, mallard, moorhen, reed warbler, robin, and wren. More visits over a twelve-month period would increase the number of bird species significantly.

The brackish lagoons are known to support greenshank, green sandpiper, common sandpiper and redshank, during winter and migration passage periods.

Invertebrates:

The rich variety of habitats, plant and shrub communities found at this site will be supporting a very rich and diverse invertebrate assemblage. Butterfly observations included comma, large white, meadow brown, small white, small tortoiseshell, Essex skipper and large skipper. Observations of dragonflies included common blue damselfly.

Herpetofauna:

No species were seen during the site visit, however grass snake, slowworm, lizard, toad and frog are all thought to occur.

Mammals:

The only species seen was rabbit; however, foxes are known to be present. The varieties of grassland habitat associated with the site are likely to support field vole and common shrew. A number of bat species may also use the site as the tree belt will provide excellent foraging habitat. Hedgehog is likely to be present. Otter is known to occur on Belstead Brook.

Comments and recommendations:

The wildlife associated with this small site is very good due to the variety of habitats, which have been allowed to evolve. In the short term very little management work is

required, the scrub belt is maturing well, however, in time this will need managing to prevent succession into woodland.

The main management objectives for this site are to maintain a mosaic of grassland swards, scrub, brackish lagoons and reed fringed dykes.

The population of corky-fruited dropwort is small compared with previous years. Apart from a few plants found outside of their main area, they still have not colonized elsewhere. Given the fragility of the present location for this species it may be prudent to establish the plant somewhere else on the site.

Site name:

Site reference 5 – Bourne Park Reedbed

IBC ref:

W5

Site status:

County Wildlife Site & Local Nature Reserve

Grid ref:

TM 15418 41761

Area:

7.50 hectares

Date:

15 July 2013

Recorder:

M Wright

Weather conditions:

Hot, sunny

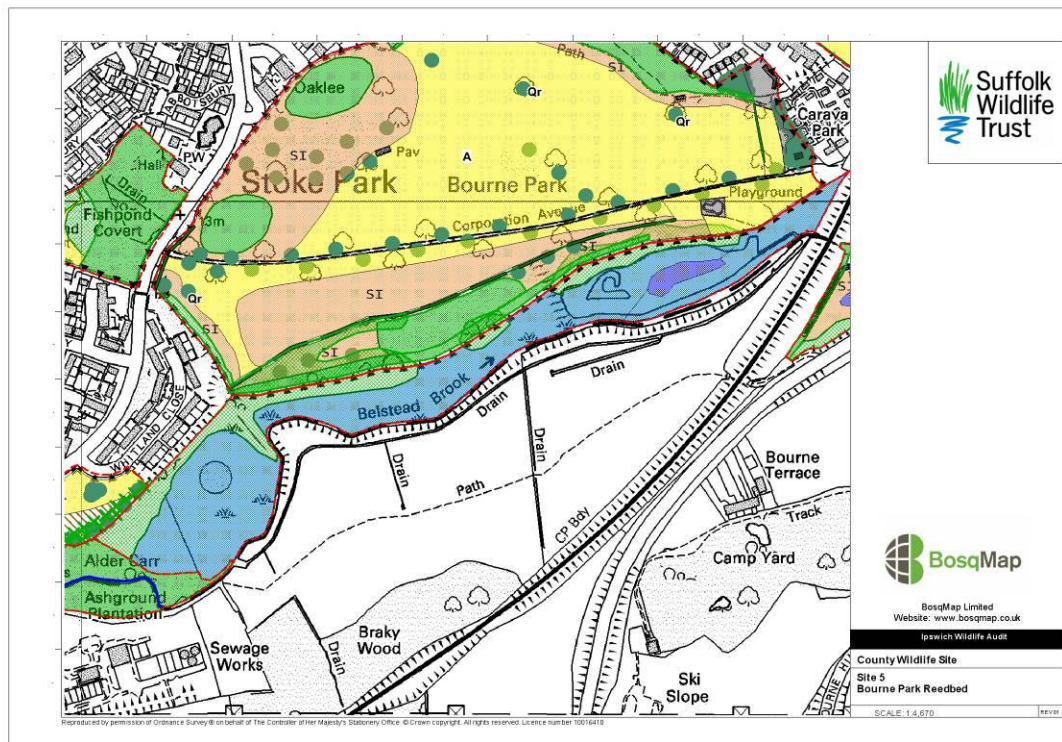
Ranking:

2

Biodiversity value:

High

Map:



Photos:



Silted boating lake, looking west



Extensive reedbed with Braky Wood and Ashground Plantation in the background



Extensive reedbed at the western end with Ashground Plantation on the boundary



Superb graded edge of the reedbed

Habitat type(s):

Reedbed with open areas of shallow water and seasonal mud, and tall rough grassland.

Subsidiary habitats

Subsidiary habitats include small areas of scrub and trees with some deadwood.

Site description:

Bourne Park Reed Bed is located on the southern fringe of Ipswich. The reedbed is flanked by Bourne Park to the north of the site and Belstead Brook and the flood plain reed swamp and meadows to the south.

The habitat is situated in the flood plain of Belstead Brook and consists predominantly of reed, which is growing in varying depths of water. At the eastern extremity of the reedbed the reed has colonised an abandoned boating lake (a relic of the 1920s) forming a combination of mud, water and reed interface providing further important habitat. Throughout the site there are higher dry areas, especially along the brook, where tall grasses and plants flourish and in addition there are areas of scrub, all of which create further good quality habitat.

Protected species:

Water vole (1996 & 2013) Otter (recorded on Belstead Brook)

Protected species potential:

Bats, grass snake, slow worm, common lizard and toad

BAP habitats present:

Reedbed

BAP species seen:

Reed bunting, water vole (feeding remains and droppings)

BAP species known:

Water vole (1996 & 2013) Otter (recorded on Belstead Brook)

BAP species potential:

Hedgehog, harvest mouse, water shrew, harvest mouse, bats, linnet, starling, grasshopper warbler, yellowhammer, grass snake, slow worm, lizard, cuckoo

Connectivity:

This site is an important part of the overall ecological network of the Belstead Brook corridor. The reed bed and associated habitats is of considerable conservation value in connecting the wildlife corridors of the River Orwell SPA and Belstead Brook.

Structural diversity:

The structural diversity is excellent; with dense, tall good quality reed with wet, dry and muddy conditions in combination with tall, rank grassland and other plant species. The whole site grades exceptionally well with soft edges to the Brook and Bourne Park.

Flora:

The site is dominated by reed and as a consequence the floristic value of the site is low. There are several areas of scrub and trees, which include ash, alder, blackthorn, bramble, dog rose, elm, hawthorn, ivy, lime, oak, willow and sycamore. Vascular plants observed were agrimony, angelica, black horehound, broad-leaved dock, bur-reed, cleavers, common orache, cock's foot, curled dock, dittander (nationally scarce), false oat-grass, field bindweed, great lettuce, great willowherb, ground ivy, false fox

sedge, hard rush, hedge bindweed, hemlock, knotgrass, mallow, meadow buttercup, mugwort, nettle, pink campion, pineapple weed, prickly sowthistle, ragwort, reed, reed mace, ribwort plantain, sea couch, smooth hawkweed, smooth sow-thistle, soft brome, soft rush, spear thistle, teasel, woody nightshade, yarrow, Yorkshire fog, water avens and white clover.

Avifauna:

Observations during the site visit included blackbird, blue tit, carrion crow, chaffinch, collared dove, goldfinch, magpie, mallard, moorhen, reed bunting, robin, swallow and wren; summer migrants breeding on site include reed and sedge warblers, whitethroat, blackcap and chiffchaff. More visits over a twelve-month period would increase the number of bird species significantly.

The site is known for its importance as a migration stopover for reed and sedge warblers as well as for roosting swallow and sand martins. Over the autumn, winter and spring periods the site is important for snipe, and jack snipe is recorded annually. Other wintering species include bearded tit, reed bunting, yellowhammer and several hundred pied wagtail may form a winter roost.

Invertebrates:

Observations of butterflies during the site visit included comma, large white, meadow brown, small white, green-veined white, small tortoiseshell, small skipper, Essex skipper and large skipper. Observations of dragonflies included common blue damselfly and banded demoiselle.

Herpetofauna:

No species were seen during the site visit, however grass snake, slowworm, lizard, toad and frog are all thought to occur.

Mammals:

The feeding remains and droppings of water vole and tracks of muntjac were noted. Foxes are known to occur and the variety of habitats associated with the reedbed and grassland are likely to support an abundance of small mammals including water shrew and harvest mouse. Otter is known to occur on Belstead Brook. A number of bat species may also use the site for foraging. Hedgehogs are likely to be present on the fringes.

Comments and recommendations:

Bourne Park reedbed is outstanding for its wildlife associated with a specialised habitat. It provides a safe, disturbance free area for a range of breeding birds that require a specific breeding habitat in addition to providing a secure roosting site for thousands of swallows and sand martins. The reedbed is habitat for a variety of other BAP species, with various warblers and small mammals likely to be present.

It is highly recommended that the seclusion of this reedbed habitat remains intact; not to do so will lead to a significant loss of biodiversity.

One of the outstanding features of this site is the soft edge between the reedbed and the park; such interfaces are so important for wildlife. A single autumn cut would

limit the growth of scrub and maintain the quality of the grassland and fen verge. Long-term, areas of scrub need to be coppiced to manage the quality of this habitat.

It also recommended that at some stage the boating lake is desilted to create a longer reed/water interface with shallow and deeper water. Other areas of the reedbed could be improved with the creation of small areas of open water especially where the reed interfaces with the higher grassy areas, thus not losing any reedbed area.

Site name: **Site reference: 6 - Braziers Wood, Meadow and Carr**

IBC ref: W6

Site status: County Wildlife Site (majority) plus undesignated land north of Pond Hall Carr

Grid ref: TM 18593 41244

Area: 29.98 hectares (CWS) 4.97 hectares (undesignated area)

Date: 17 October 2012

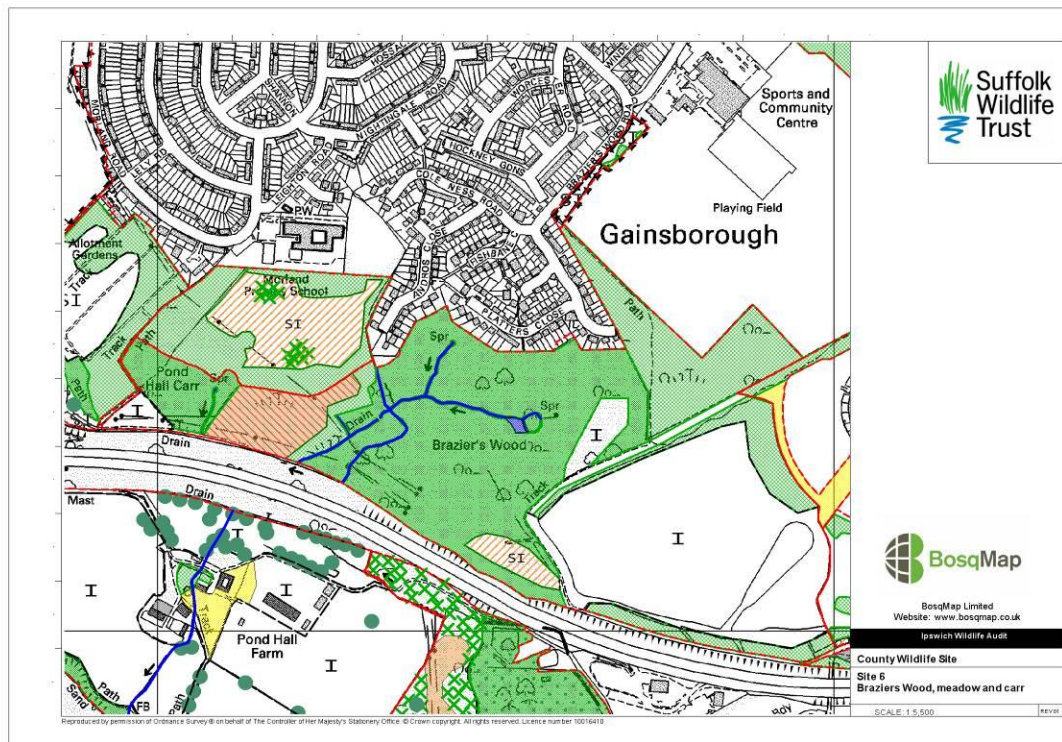
Recorder: M Wright

Weather conditions: Cloudy with sunny periods, strong southerly wind

Ranking: 2

Biodiversity value: High

Map:



Photos:



View looking west from the acid grassland meadow overlooking part of Braziers Wood



View looking west across the skylark meadow with Braziers Wood in the background



Stream running through Braziers Wood

Habitat type(s):

Dry deciduous woodland, alder carr, scrub, rank grass, streams, wet meadow and acid grassland

Subsidiary habitats:

Subsidiary habitats include a pond, standing deadwood, holes and splits in mature and veteran trees

Site description:

The site lies on the southeastern edge of Ipswich between two large housing estates, (Gainsborough and Ravenswood). The A14 trunk road represents the southern boundary. Braziers Wood, Pond Hall Carr, Braziers wet meadow and associated rough grassland and scrub associated with the former Ipswich airport along with Pipers Vale and Elm Hill to the west represent an excellent mosaic of habitats, rich in wildlife.

Braziers Wood is situated on either side of a stream at the base of a valley. The fringe of the wood is of oak and birch with bluebells. A number of streams issue from the valley sides and form boggy areas in the centre of the site, which remain wet throughout the year and there is also a pond. Alder is the dominant tree species in these areas, beneath which is a carpet of opposite-leaved golden saxifrage. Yellow flag and ferns are also abundant in the ground flora. Dead standing timber is frequent and provides suitable habitat for woodpeckers and invertebrates, which are dependent on dead wood.

Pond Hall Carr is also woodland, dominated by alder in the waterlogged areas. Birch, sycamore and oak are found in drier conditions on the higher ground and there is a dense understorey of elder, hawthorn, holly and bramble and a spring ground flora of bluebells.

An area of species-diverse grassland links Braziers Wood with Pond Hall Carr. This meadow supports a good range of plants, including marsh marigold and water mint in the wetter areas. At the top of the slope, the light soils are colonized by an acid grassland community, which is dominated by sheep's sorrel. The perimeter of this site is of scrub and a few ash and oak trees and there are some large areas of grassland succeeding to broom, oak and bramble scrub.

Adjacent to Ravenswood there is a large grassland area (former Ipswich Airfield) with a mixture of fine and coarse grasses with very good areas of scrub.

A Tree Preservation Order, dating from 1974, covers a large part of Braziers Wood.

Protected species:

Grass snake, slow worm, common lizard, great crested newt (2010) Cetti's Warbler (2013) (Schedule 1 bird) Further information available on request regarding other protected species.

Protected Species potential:

Bats

BAP habitats present:

Wet woodland, lowland mixed deciduous woodland, lowland fen and lowland dry acid grassland

BAP species seen:

Linnet, house sparrow, dunnock, skylark, bullfinch, starling, song thrush, grasshopper warbler (2013)

BAP species known:

Hedgehog, grass snake, slow worm, common lizard, bullfinch, turtle dove, great crested newt

BAP species potential:

Stag beetle, toad, bats

Connectivity:

The wildlife-rich areas of Braziers Wood, Pond Hall Carr and Meadows are an important part of the extensive wildlife corridor of the Orwell estuary and of southern Ipswich.

Structural diversity:

The structural diversity of all areas within this large complex of habitats was excellent, from the mosaics of good quality scrub, grassland and woodland, the interface between short and long grass to the ground flora and understorey of the woodlands.

Flora:

The timing of the site assessment was sub-optimal for producing a full species list. However, the varied and species rich flora of Braziers Wood, Pond Hall Carr and Meadows has been well documented.

The flora of the former Ipswich Airfield (Wright M. 2012) included: American willowherb, birdsfoot trefoil, black horehound, black medick, bristly oxtongue, broad-leaved dock, Canadian fleabane, cat's-ear, common centaury, common nettle, common poppy, common ragwort, common sorrel, common stork's-bill, common toadflax, common vetch, creeping thistle, curled dock, dandelion, dittander, field pansy, goat's beard, great lettuce, great mullein, great plantain, groundsel, field bindweed, hairy tare, hare's-foot clover, hedge bindweed, hedge mustard, hemlock, hogweed, hop trefoil, lady's bedstraw, lesser stitchwort, mallow, mugwort, oxeye daisy, perforate St.-John's-wort, red campion, red clover, ribwort plantain, rosebay, rough chervil, rough poppy, rough sow-thistle, scarlet pimpernel, scentless mayweed, self heal, sheep's sorrel, smooth hawkbeard, smooth sow-thistle, spear thistle, square-stemmed willowherb, weld, wild parsnip, wild radish, white campion, white clover and yarrow. Grasses include annual meadow grass, cocksfoot, common bent, creeping bent, false fox sedge, false oat-grass, red fescue, squirrel-tail fescue, Yorkshire fog. Scrub species associated with the meadow include broom, dog rose, buckthorn, hazel, hawthorn, bramble, silver birch and oak.

Avifauna:

The habitats of Braziers wood, meadow and carr are supporting a rich assemblage of birds throughout the year. The bird list that follows comprises records compiled in 2012 during the national nightingale, skylark surveys and the site visit for this report.

There were six BAP and Birds of Conservation Concern (BoCC) red listed species observed in 2012, which were skylark, 8 pairs (Wright M. 2012), linnet, song thrush, turtle dove, starling, house sparrow and dunnock.

Observations in 2012 include sparrowhawk, kestrel, jay, carrion crow, jackdaw, magpie, green woodpecker, great spotted woodpecker, meadow pipit, blackbird, mistle thrush, nightingale, blue tit, great tit, coal tit, long-tailed tit, robin, wren, willow warbler, chiffchaff, garden warbler, blackcap, whitethroat, lesser whitethroat, greenfinch, chaffinch, bullfinch and goldfinch. Birds feeding over the site were swallow, house martin and swift (Suffolk character species), all three species breed on nearby housing estates.

There were three nightingale territories in 2012, two in Braziers Wood and one in scrub behind Morland Road School.

A breeding bird survey of the Orwell Country Park for Ipswich Borough Council in 2009 found that there 28 breeding species, which included five BAP species and seven summer migrants (Wright M. 2009).

A bird survey of the Orwell Country Park in 2013 (SWT Trading Ltd) reported the following for Red and Amber list BoCC species: Braziers Meadow 6 species with a total of 27 territories, Braziers Wood 8 species with a total of 20 territories, Braziers Scrub 6 species with a total of 16 territories, Pond Hall Carr and Meadow 6 species with a total of 16 territories. Specific details of birds are provided in the report.

Invertebrates:

The timing of the site assessment was not favorable to record invertebrates. However, the diverse range of habitats associated with this site would support a rich assemblage of invertebrates. The drier areas of woodland are highly likely to support stag beetle larvae.

Herpetofauna:

No species were seen during the site visit but there are a number of areas within this large site where the habitat will support grass snake, slow worm and common lizard. All three species are recorded in the locality. Great crested newts have also been recorded at the site (2010 record). Reptiles were translocated in 2012 from the adjacent Ipswich Academy site to an area of the CWS owned by Suffolk County Council.

Mammals:

Rabbit and grey squirrel were the only species seen during the survey. However, it is highly likely that a number of small mammal species occur including a number of bat species. Larger species such as fox and muntjac will also be present. Other protected species have been recorded in Braziers Wood - reported by consultant ecologists TEP during their surveys for the Ipswich Academy development to the north (TEP, 2012).

Comments and recommendations:

To safeguard skylark breeding habitat on the former Ipswich Airfield grassland, initiatives regarding dog walking paths need to be implemented immediately. Almost all the dogs being walked are running free and this will inevitably have a detrimental effect on skylark breeding numbers and success.

It is recommended that the acid grassland area on high ground adjacent to Morland Road School be mown in the autumn with the clippings removed. This management work would maintain the acid grassland and prevent the area succeeding to broom, bramble and oak scrub. Consideration should be given to whether this area should also be included within the CWS.

The meadows adjacent to Pond Hall Carr would benefit if cattle grazing were reintroduced. A notable Suffolk plant recorded here is heath spotted orchid. Unfortunately, hawthorn and other scrub species have colonized the meadow to the detriment of the ground flora, but to the benefit of migrant birds.

Future management of the triangle of land owned by Suffolk County Council should take into consideration the population of translocated reptiles. Management should seek to secure this population into the long-term.

References

SWT Trading Ltd. (2013) Breeding bird survey of the Orwell Country Park.

Wright M. 2012. Skylark Survey at Ravenswood 2006, 2007, 2008, 2009, 2010, 2011 and 2012 Suffolk Wildlife Trust for Ipswich Borough Council

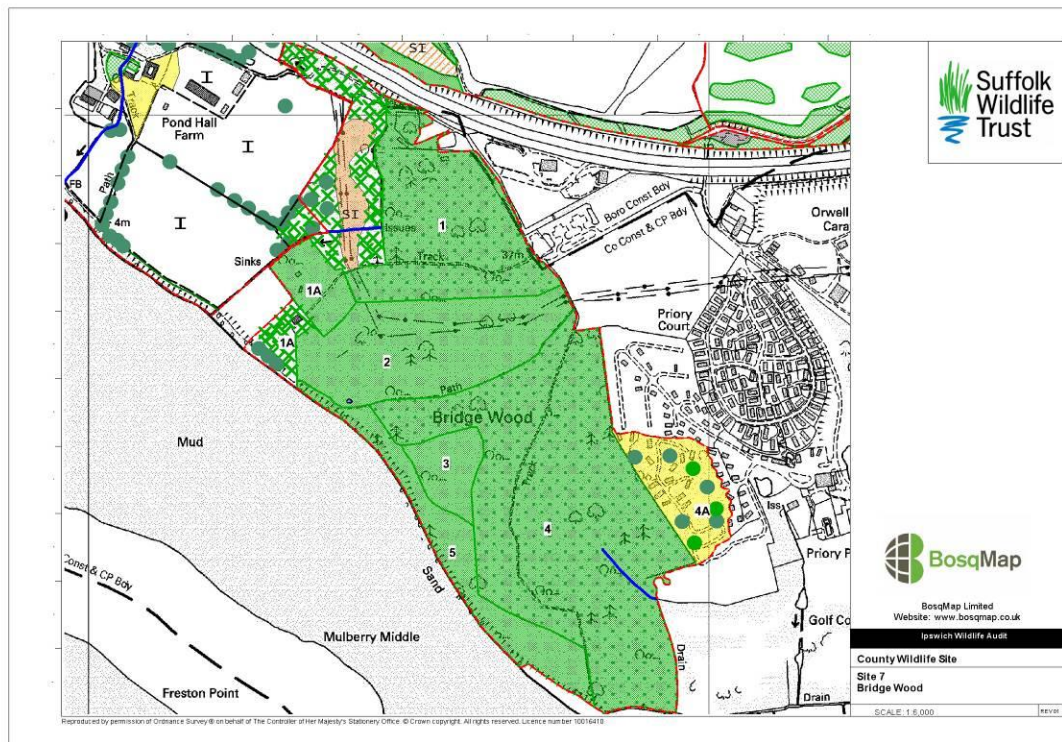
Wright M. 2009. Orwell Country Park Breeding Bird Survey 2009, Suffolk Wildlife Trust Report for Ipswich Borough Council

TEP. 2012. Updated Phase 1 Habitat Survey: Ipswich Academy. Version 2.

Site name: **Site reference 7 – Bridge Wood (part outside IBC)**

IBC ref: W7
Site status: County Wildlife Site & Local Nature Reserve
Grid ref: TM 18642 40534
Area: 38.07 hectares
Date: 1 April 2013, 5 April 2013, 16 May 2013, 10 June 2013
Recorder: M Wright
Weather conditions: The weather conditions ranged from overcast to bright, hot and sunny
Ranking: 2
Biodiversity value: High

Map:



Photos:



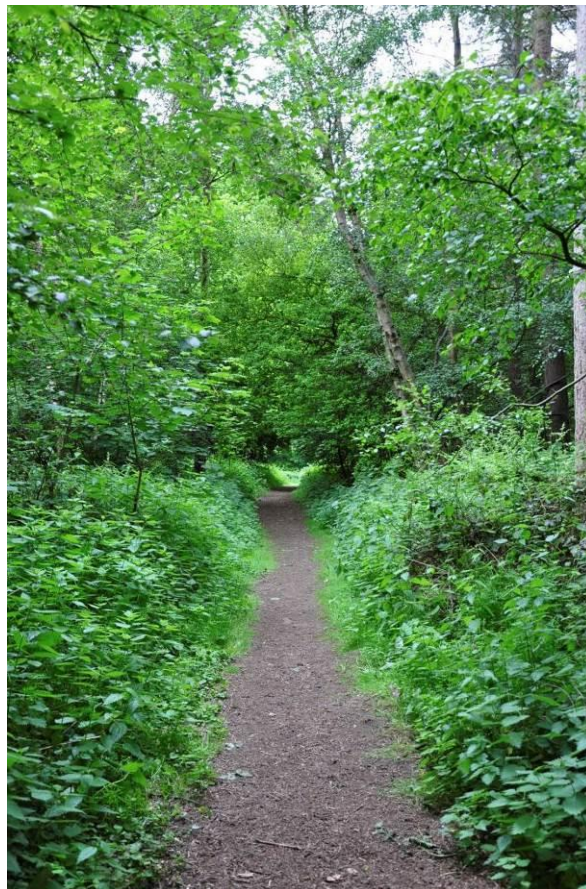
Ancient pollarded oak in compartment 4



Very old field maple in compartment 5



Saltings and scrub fringed woodland in compartment 4



Ride on the southern boundary of compartment 2



Glade in compartment 4

Habitat type(s):

Mixed broad-leaved woodland, wet woodland and plantations of sycamore, Corsican pine, Scot's pine and larch and localised areas of scrub

Subsidiary habitats

Standing deadwood and trees with holes and splits, a network of rides, paths and high sandy cliff faces, a small pond, shallow streams, boggy areas and saltmarsh

Site description:

Bridge Wood lies on the southern outskirts of Ipswich between the town's A14 southern bypass and the shoreline cliffs of the estuary. The wood fringes Pond Hall Farm in the west and Alnesbourne Priory in the east.

Bridge Wood is classified as ancient woodland (English Nature 1993). There are mature and relict pollarded oaks, some of which must be at least 400 years old, especially along the main rides, shoreline and at the woodlands boundary. The flora is more diverse in the woodland fringing the foreshore and in the gullies where springs and issues form boggy wet woodland. Following the clear felling in the 1950s, the wood was replanted with stands of Corsican Pine, Scots Pine, sycamore and larch. More recently areas of these plantations have been felled and replanted and regeneration by the understorey has created some good scrub habitat. Almost the entire western perimeter of the wood terminates along the Orwell's shoreline with a cliff edge. The wood has many wide rides, glades and footpaths.

For the purposes of this survey, the wood has been divided into five broad compartments and the corresponding numbers are shown on the map.

Compartment 1. The northern area of woodland comprises two main types, mixed deciduous woodland and an evergreen plantation. On the high free-draining soils the woodland is a mixture of sycamore, Scot's pine, Corsican pine, larch, silver birch, oak and the occasional sweet chestnut. There are a number of ancient oaks on the boundary. The scrub layer is poor with suckering sycamore and the occasional holly and elder, although there are some areas with mature hazel. The early ground flora is dominated by bluebells, but where the high ground slopes merge with the wet woodland, broad buckler fern becomes the dominant ground cover. There are also areas where the ground cover is of leaf and pine needle litter. Issues from the hillside form shallow streams and saturated boggy ground, which supports alder and a more varied ground flora, including bugle and opposite-leaved golden saxifrage. A Corsican and Scot's pine plantation dominates the hillside immediately south of the track to Downham Reach Cottage; the ground cover consists of bramble and decaying pine needles and cones. Under the power lines there is a mosaic of rabbit-grazed grassland, bramble and alder coppice.

Compartment 1a. This area of land is associated with Downham Reach Cottage. It is predominantly mature oak, sweet chestnut, sycamore and pine woodland with a sparse understorey apart from a dense stand of blackthorn. Daffodils, small balsam, dog's mercury and bracken dominate the ground flora.

Compartment 2. The sweet chestnut, sycamore and birch have been regularly coppiced or felled on the valley side and under the high tension power lines, with the ground cover dominated by bracken. In contrast, the adjoining woodland, for the most part has not been clear felled or replanted, resulting in one of the most diverse parts of Bridge Wood with scattered mature oak, ash, poplar and birch with dense and open scrub areas of hazel, elder and bramble. There is an interesting ground flora, which includes bluebell, yellow archangel, broad buckler fern and male fern. In the wetter areas, opposite-leaved golden saxifrage and on the dryer higher ground climbing corydalis is present. Where the valley rises again, a track has been cut into the hillside where there was once a meandering footpath to the shore. The track leads to a clearing for a dwelling that was curtailed soon after the foundations were built. In addition to the issues forming a shallow stream there is also a small pond. The pond adds diversity although the flora is currently being dominated by pennywort, it still supports populations of toad, frog, newt and the great diving beetle.

Compartment 3. This section of the wood comprises a stand of sycamores with all trees being clad with ivy. Unlike other areas of the wood, there are very few sycamore suckers, in fact, shrubs are virtually non-existent apart from the occasional elder, hawthorn and some regeneration by ash. The ground is covered throughout with ivy and bluebell with patches of nettle and dog's mercury.

Compartment 4. A large area of woodland comprising stands of Scot's and Corsican pine, sycamore and small areas of alder carr and elm. The occasional mature oak, holly and sweet chestnut can be found throughout. The ground flora varies from being poor, especially under the pine plantation, to bramble and bracken covered areas to an extensive ground cover of bluebells. Management of the wood has included felling areas along the main track and within the pine plantations to improve the main ride and to create open grassy glades. Large areas of pine and sycamore have been felled, especially on the slopes, and replanted with a variety of shrubs including hawthorn,

rose, hazel and ash. In these areas good quality regeneration has occurred by bramble, elder and birch, which has provided some additional structural diversity. However, some of these areas are in need of thinning, as regeneration is out-competing the planted trees and as a consequence are dying or dead. It is in these areas where nightingale and blackcap breed. In the south eastern portion of the wood there is an area of silver birch and a number of mature trees clad in ivy. The wood terminates at the shoreline with blackthorn and mature Corsican and Scot's pine.

Compartment 4a. This area lies adjacent to the woodland and is part of the Priory Park area. There are a number of log cabins, landscaped by rhododendrons and short mown lawns with mature oaks, sweet chestnut and Scot's pine.

Compartment 5

The high cliff-edge wooded shoreline fringe is dominated by mature oak with sycamore, Corsican pine, ash, field maple, broom, hazel and spindle. The flora found here is typical of ancient woodland with bluebell, dog's mercury, early-purple orchid and wood spurge. There is also a remnant area of saltmarsh.

Protected species:

Common lizard (2003). Further information about protected species available on request.

Protected species potential:

Bats, grass snake, slow worm,

BAP habitats present:

Lowland mixed deciduous woodland, wet woodland, saltmarsh and pond

BAP species seen:

Dunnock

BAP species known:

Common lizard (2003)

Spotted flycatcher (2000), willow tit (1995)

Moths: buff ermine (2011), small phoenix (1998), white ermine (Downham Reach Cottage) 1997

White letter hairstreak (2000) (and Downham Reach Cottage 2008), Grayling (1995)

Serrated tongue spider (1998),

BAP species potential:

Hedgehog, bullfinch, starling, house sparrow, song thrush, stag beetle (recorded in Priory Park to east)

Connectivity:

Bridge Wood links with the major wildlife areas of Braziers Wood Park, Pond Hall carr, and is an important part of the extensive wildlife corridor of the Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar site along with its hinterland.

Structural diversity:

The structural diversity of the whole site is extremely good due to the varied age class and the range of tree and shrub species found throughout the woodland. Additional areas of scrub, wet and fen areas improve the structural diversity still further.

Flora:

The diversity and mosaic of habitats provides a rich assemblage of plants, shrubs and trees. Over 160 species have been recorded from surveys over the years (see Appendix 1). The list was originally compiled in 2004 and has been updated since. Species lists have been given for each of the five compartments.

Trees and shrubs recorded during the site survey visits in 2013 are as follows: ash, alder, blackthorn, box, bramble, broom, Corsican pine, gorse, elder, elm, field maple, hawthorn, hazel, holly, larch, mountain ash, oak, Portugal laurel, sallow, silver birch, Scot's pine, spindle, sweet chestnut, sycamore, white poplar and yew.

Plants recorded during the survey visits in 2013 are as follows: annual meadow grass, black medick, bluebell, bristly oxtongue, broad-buckler fern, broad-leaved dock, bracken, bur chervil, bugle, catsear, chickweed, climbing corydalis, cock's foot, common bent, common figwort, common orache, common mouse-ear, common poppy, common sorrel, common storksbill, curled dock, cow parsley, dittander (nationally scarce), early purple orchid, enchanter's nightshade, false oat-grass, field bindweed, foxglove, garlic mustard, gipsywort, greater birds-foot trefoil, great horsetail, great willowherb, greater plantain, ground ivy, hairy bittercress, hard rush, hedge bindweed, hedge mustard, hemlock, Himalayan balsam, herb Robert, hogweed, lesser celandine, lords and ladies, male fern, marsh marigold, marsh thistle, meadowsweet, mugwort, opposite-leaved golden saxifrage, pink clover, ragged robin, ragwort, red campion, ribwort plantain, rough chervil, rough meadow grass, rosebay willowherb, saltmarsh grass, sea beat, sea couch, sea lavender, sea plantain, sheep's sorrel, small balsam, smooth hawkweed, smooth sow-thistle, spring beauty, soft brome, soft rush, spear thistle, sweet vernal grass, tufted vetch, water mint, wavy bittercress, white campion, white clover, wood millet, wood sage, wood spurge, white bryony, yarrow, yellow archangel, yellow iris, and Yorkshire fog.

Avifauna:

Observations during the site visits included blackbird, blackcap, blue tit, buzzard, carrion crow, chaffinch, chiffchaff, collared dove, dunnock, great tit, goldfinch, great-spotted woodpecker, jackdaw, long-tailed tit, magpie, nightingale, siskin (c100), redwing (c30), robin, sparrowhawk, tree creeper, wood pigeon and wren.

In 2012, there was a national Nightingale survey organized by the British Trust for Ornithology (BTO). There were six territories found (Wright M. 2012).

A breeding bird survey carried out in 2013 found in addition to the above: green woodpecker, mistle thrush, garden warbler, goldcrest, coal tit, jay and greenfinch.

Invertebrates:

The rich variety of habitats, plant and shrub communities found at this site support a very good invertebrate assemblage. Observations during the site visits included comma, common blue, gatekeeper, green-veined white, large white, meadow brown,

orange tip, peacock, purple hairstreak, small white, speckled wood. Other species of invertebrates seen include red-tailed bumblebee, five-spot burnet, silver-y moth and pond skater. Species that are known to occur include green hairstreak, small tortoiseshell and holly blue.

The Biological Records Centre holds a comprehensive list of invertebrates, which includes the serrated tongue spider *Centromerus serratus* in 1998 (UK BAP species).

Herpetofauna:

No species were seen during the site visit, however common lizard are known to occur. Grass snake and slow worm are likely to be present. Toad and frog also occur.

Mammals:

Evidence of species seen during the site visits were muntjac, mole and rabbit. Fox and fallow deer are seen on occasions. The variety of habitats associated with the woodland and grassland are likely to support voles, shrews and mice. A number of bat species may also use the site as the wood provides excellent foraging habitat. Hedgehog is also highly likely to be present.

Comments and recommendations:

Bridge Wood is included with other adjacent wildlife areas and open spaces to form the Orwell Country Park. The Park is now a very popular destination for local people as well as for those from much further afield. As a result of visitor pressure there are associated impacts upon the ancient woodland ground flora, particularly on bluebells. A network of meandering footpaths, rides and glades has been largely successful in guiding and managing people through the woodland areas, but there are still indications of new paths becoming established through sensitive areas. Future development at Ravenswood is likely to further increase the recreational pressure within the wood.

It is recommended that measures are taken to encourage use of the existing rides and deterring visitors from straying from the paths. Unofficial paths should be blocked off using natural materials. The main rides could be enhanced by creating graduated ride edges and the growth of bramble and scrub should be encouraged on the ride edges and in unshaded areas.

It is unclear why the CWS boundary includes an area within Priory Park, although this may have arisen as a result of previous planning applications. Consideration should now be given to asking the CWS Panel to review the boundary of the CWS regarding this small area with the log cabins (4a).

References

SWT Trading Ltd. (2013) Breeding bird survey of the Orwell Country Park.

Wright M. (2012) Results of a national Nightingale survey for the British Trust for Ornithology

Wright M. Birds of Bridge Wood <1975 – 2013 unpublished data

Appendix 1. Botanical list for Bridge Wood (Excluding car park & Priory Park)

<u>BRIDGE WOOD</u>						
		1	2	3	4	5
Grasses						
Hairy Brome	<i>Bromus ramosus</i>	*		*		*
False Wood brome	<i>Brachypodium sylvaticum</i>		*	*	*	*
False Oat Grass	<i>Arrhenatherum elatius</i>	*				
Sea Couch	<i>Elymus pycnanthus</i>					*
Wood Millet	<i>Milium effusum</i>	*				
Perennial Ryegrass	<i>Lolium perenne</i>			*	*	
Annual Meadow Grass	<i>Poa annua</i>	*			*	*
Rough Meadow Grass	<i>Poa trivialis</i>	*	*		*	*
Smooth Meadow Grass	<i>Poa pratensis</i>					*
Yorkshire Fog	<i>Holcus lanatus</i>				*	
Creeping Bent	<i>Agrostis stolonifera</i>		*		*	
Cord-grass	<i>Spartina anglica</i>					*
Common Saltmarsh G	<i>Puccinellia maritima</i>					*
Common Bent	<i>Agrostis capillaris</i>		*			
Squirrel-tailed Fescue	<i>Vulpia bromoides</i>		•			
Sweet Vernal Grass	<i>Anrthoxanthum odoratum</i>				*	
Common Reed	<i>Phragmites australis</i>					*
Hard Rush	<i>Juncus inflexus</i>	*	*			
Soft Rush	<i>Juncus effusus</i>	*	*		*	*
Sedges						
Hairy Sedge	<i>Carex hirta</i>					*
Horsetail Family	<i>Equisetaceae</i>					
Great Horsetail	<i>Equisetum telmateia</i>	*				*
Fern Family	<i>Filicopsida</i>					
Male Fern	<i>Dryopteris filix-mas</i>	*	*		*	*
Broad Buckler Fern	<i>Dryopteris dilatata</i>	*	*		*	*
Pine Family	<i>Pinaceae</i>					
European Larch	<i>Larix decidua</i>	*	*		*	*
Scots Pine	<i>Pinus sylvestris</i>	*	*		*	*
Corsican Pine	<i>Pinus larico</i>	*	*		*	*
Yew Family	<i>Taxaceae</i>					
Yew	<i>Taxus baccata</i>				*	
Willow family	<i>Salicaceae</i>					
Goat Willow	<i>Salix caprea</i>		*		*	

Birch Family	<i>Betulaceae</i>					
Silver Birch	<i>Betula pendula</i>	*	*		*	*
Alder	<i>Alnus glutinosa</i>	*	*		*	
Hazel Family	<i>Corylaceae</i>					
Hazel	<i>Corylus avellana</i>	*	*		*	*
Beech Family	<i>Fagaceae</i>					
Sweet Chestnut	<i>Castanea sativa</i>	*	*		*	*
Pedunculate Oak	<i>Quercus robur</i>	*	*		*	*
English Elm	<i>Ulmus procera</i>	*			*	*
Maple Family	<i>Aceraceae</i>					
Sycamore	<i>Acer pseudoplatanus</i>	*	*	*	*	*
Field Maple	<i>Acer campestre</i>				*	*
Holly Family	<i>Aquifoliaceae</i>					
Holly	<i>Ilex aquifolium</i>	*	*		*	*
Olive Family	<i>Oleaceae</i>					
Ash	<i>Fraxinus excelsior</i>	*	*	*	*	*
Mountain Ash	<i>Sorbus aucuparia</i>				*	
Nettle Family	<i>Urticaceae</i>					
Nettle	<i>Urtica dioica</i>	*	*	*	*	*
Thrift Family	<i>Plumbaginaceae</i>					
Thrift	<i>Armeria maritima</i>					*
Sea Lavender	<i>Limonium vulgare</i>					*
Dock Family	<i>Polygonaceae</i>					
Spring Beauty	<i>Montia perfoliata</i>					*
Common Sorrel	<i>Rumex acetosa</i>				*	
Sheeps Sorrel	<i>Rumex acetosella</i>	*			*	*
Broad-leaved Dock	<i>Rumex obtusifolius</i>	*			*	*
Curled Dock	<i>Rumex crispus</i>				*	
Goosefoot Family	<i>Chenopodium</i>					
Good King Henry	<i>Chenopodium b-henricus</i>	*				
Fat Hen	<i>Chenopodium album</i>	*				
Common Orache	<i>Atriplex patula</i>					*
Sea Beet	<i>Beta vulgaris</i>					*
Sea Purslane	<i>Halimione portulacoides</i>					*
Glasswort	<i>Salicornia europaea</i>					*
Annual Seablite	<i>Suaeda maritima</i>					*

Pink Family	<i>Caryophyllaceae</i>				
Three-veined Sandwort	<i>Moehringia trinervia</i>	*	*		*
Greater Stitchwort	<i>Stellaria holostea</i>		*		*
Lesser Stitchwort	<i>Stellaria graminea</i>	*			*
Marsh Stitchwort	<i>Stellaria palustris</i>				*
Common Chickweed	<i>Stellaria media</i>	*	*		*
Common Mouse-ear	<i>Cerastium fontanum</i>	*	*		*
Red Campion	<i>Silene dioica</i>	*	*		*
White Campion	<i>Silene alba</i>				*
Ragged Robin	<i>Lychnis flos-cuculi</i>				*
Buttercup Family	<i>Ranunculaceae</i>				
Marsh Marigold	<i>Caltha palustris</i>	*			*
Meadow Buttercup	<i>Ranunculus acris</i>				*
Creeping Buttercup	<i>Ranunculus repens</i>	*			*
Lesser Celendine	<i>Ranunculus ficaria</i>	*			*
Fumitory Family	<i>Fumariaceae</i>				
Climbing Corydalis	<i>Corydalis claviculata</i>	*	*		*
Poppy Family	<i>Papaveraceae</i>				
Common Poppy	<i>Papaver rhoeas</i>				*
Cabbage Family	<i>Cruciferea</i>				
Hedge Mustard	<i>Cheiranthus cheiri</i>				*
Garlic Mustard	<i>Alliaria petiolata</i>				*
Dittander	<i>Lepidium latifolium</i>				*
Hairy Bittercress	<i>Cardamine hirsuta</i>				*
Wavy Bittercress	<i>Cardamine flexuosa</i>	*	*		*
Saxifrage Family	<i>Saxifragaceae</i>				
Opposite-leaved Golden Saxifrage	<i>Chrysosplenium opposifolium</i>	*	*		*
Pepperworts	<i>Lepidiuym</i>				
Dittander (Nationally Scarce)	<i>Lepidium latifolium</i>				*
Rose Family	<i>Rosaceae</i>				
Meadowsweet	<i>Filipendula ulmaria</i>				*
Dog Rose	<i>Rosa canina</i>	*			*
Bramble	<i>Rubus fruticosus agg.</i>	*	*		*
Barren Strawberry	<i>Potentilla sterilis</i>		*		
Herb Bennet	<i>Geum urbanum</i>				*

Hawthorn	<i>Crataegus monogyna</i>	*	*	*	*	*
Blackthorn	<i>Prunus spinosa</i>	*			*	*
Portugal Laurel	<i>Prunus lusitanica</i>		*			
Wild cherry	<i>Prunus avium</i>				*	
Cherry sp	<i>Prunus sp.</i>				*	
Pea Family	<i>Leguminosae</i>					
Gorse	<i>Ulex europaeus</i>		*			
Broom	<i>Cytisus scoparius</i>		*		*	*
Tufted Vetch	<i>Vicia cracca</i>				*	
Common Vetch	<i>Vicia sativa</i>	*	*			
Hairy Tare	<i>Vicia hirsuta</i>		*		*	
Greater Birdsfoot Trefoil	<i>Lotus uliginosus</i>	*				*
Black Medic	<i>Medicago lupulina</i>				*	
White Clover	<i>Trifolium repens</i>				*	
Lesser Trefoil	<i>Trifolium dubium</i>				*	
Geranium Family	<i>Geraniaceae</i>					
Common Storksbill	<i>Erodium cicutarium</i>	*				*
Spurge Family	<i>Euphorbiaceae</i>					
Wood Spurge	<i>Euphorbia amygdaloides</i>					*
Dog's Mercury	<i>Mercurialis perennis</i>	*	*	*	*	*
Spindle-Tree Family	<i>Celastraceae</i>					
Spindle	<i>Euonymus europaeus</i>	*	*		*	*
Box Family	<i>Buxaceae</i>					
Box	<i>Buxus sempervirens</i>				*	
Violet Family	<i>Violaceae</i>					
Common Dog Violet	<i>Viola riviniana</i>					*
Gourd Family	<i>Cucurbitaceae</i>					
White Bryony	<i>Bryonia dioica</i>	*			*	*
Willowherb Family	<i>Onagraceae</i>					
Enchanter's Nightshade	<i>Circaea lutetiana</i>	*	*			
Black Nightshade	<i>Solanum nigrum</i>		*			
Rosebay Willowherb	<i>Epilobium angustifolium</i>	*	*			*
Ivy Family	<i>Araliaceae</i>					
Ivy	<i>Hedera helix</i>	*	*	*	*	*

Balsam Family	<i>Balsaminaceae</i>					
Small Balsam	<i>Impatiens parviflora</i>	*	*			
Himalayan Balsam	<i>Impatiens glandulifera</i>	*	*			
Carrot Family	<i>Umbeliferae</i>					
Floating Pennywort	<i>Hydrocotyle ranunculoides</i>		*			
Cow Parsley	<i>Anthriscus sylvestris</i>	*			*	
Rough Chervil	<i>Chaerophyllum temulentum</i>				*	
Bur Chervil	<i>Anthriscus caucalis</i>				*	
Hogweed	<i>Heracleum sphondylium</i>	*			*	
Hemlock	<i>Conium maculatum</i>	*			*	
Lesser Water Parsnip	<i>Berula erecta</i>	*			*	
Primrose Family	<i>Primulaceae</i>					
Primrose	<i>Primula vulgaris</i>					*
Yellow Pimpernel	<i>Lysimachia nemorum</i>					*
Scarlet Pimpernel	<i>Anagallis arvensis</i>				*	
Bindweed Family	<i>Convolvulaceae</i>					
Hedge Bindweed	<i>Calystegia sepium</i>	*			*	
Great Bindweed	<i>Calystegia sylvatica</i>	*			*	*
Field Bindweed	<i>Convolvulus arvensis</i>	*				
Bedstraw Family	<i>Rubiaceae</i>					
Cleavers	<i>Galium aparine</i>	*	*	*	*	*
Borage Family	<i>Boraginaceae</i>					
Common Comfrey	<i>Symphytum officinale</i>				*	
Wood Forget-me-not	<i>Myosotis sylvatica</i>	*	*		*	*
Green Alkanet	<i>Pentaglottis sempervirens</i>	*				
Labiata Family	<i>Labiatae</i>					
Bugle	<i>Ajuga reptans</i>	*	*			*
Wood Sage	<i>Teucrium scorodonia</i>		*		*	*
Ground Ivy	<i>Glechoma hederacea</i>	*	*	*	*	*
Red Dead-nettle	<i>Lamium purpureum</i>	*				
Yellow Archangel	<i>Lamiastrum galeobdolon</i>	*	*			*
Water Mint	<i>Mentha aquatica</i>	*				*
Gipsywort	<i>Lycopus europaeus</i>	*	*			
Figwort Family	<i>Scrophulariaceae</i>					
Common Figwort	<i>Scrophularia nodosa</i>	*				*
Water Figwort	<i>Scrophularia auriculata</i>	*				*
Foxglove	<i>Digitalis purpurea</i>				*	*
Germander Speedwell	<i>Veronica chamaedrys</i>					*

Common Field Speedwell	<i>Veronica persica</i>				*	
Plantain Family	<i>Plantaginaceae</i>					
Greater Plantain	<i>Plantago major</i>				*	
Ribwort Plantain	<i>Plantago lanceolata</i>				*	
Sea Plantain	<i>Plantago maritima</i>					*
Moschatel Family	<i>Adoxaceae</i>					
Moschatel	<i>Adoxa moschatellina</i>	*	*		*	*
Honeysuckle Family	<i>Caprifoliaceae</i>					
Elder	<i>Sambucus nigra</i>	*	*	*	*	*
Honeysuckle	<i>Lonicera periclymenum</i>	*	*		*	*
Daisy Family	<i>Compositae</i>					
Sea Aster	<i>Aster tripolium</i>					*
Daisy	<i>Bellis perennis</i>		*		*	
Yarrow	<i>Achillea millefolium</i>				*	
Ragwort	<i>Senecio jacobaea</i>				*	
Groudsel	<i>Senecio vulgaris</i>				*	
Lesser Burdock	<i>Arctium minus</i> agg.					*
Creeping Thistle	<i>Cirsium arvense</i>	*	*		*	
Spear Thistle	<i>Cirsium vulgare</i>				*	*
Marsh Thistle	<i>Cirsium palustre</i>	*				*
Smooth Sow-thistle	<i>Sonchus oleraceus</i>				*	
Prickly Sow-thistle	<i>Sonchus asper</i>				*	
Smooth Hawksbeard	<i>Crepis capillaris</i>		*		*	
Dandelion	<i>Taraxacum</i> sect. <i>vulgaria</i>	*				*
Catsear	<i>Hypochaeris radicata</i>				*	
Lily Family	<i>Liliaceae</i>					
Bluebell	<i>Endymion non-scriptus</i>	*	*	*	*	*
Arum Family	<i>Araceae</i>					
Lords and Ladies	<i>Arum maculatum</i>	*	*		*	*
Iris Family	<i>Iridaceae</i>					
Yellow Iris	<i>Iris pseudacorus</i>	*	*			
Orchid Family	<i>Orchidaceae</i>					
Early Purple Orchid	<i>Orchis mascula</i>					*
Waterweeds						
Common Duckweed	<i>Lemna minor</i>		*			

		1	2	3	4	5
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Appendix 2. Bird List for Bridge Wood

BRIDGE WOOD

Key:- vv = winter visitor W = winter S = summer SV = summer visitor B = breeding (O) = seen over site C = casual observation		All records by Mick Wright				
		BAP = Biodiversity Action Plan Species BoCC = Birds of Conservation Concern				
		Red = High Amber = Medium				
		Status <1975/1985	Status 2001	2013	BAP BoCC	Notes
Grey Heron	<i>Ardea cinerea</i>	(O)	(O)	(O)		Has bred
Common Shelduck	<i>Tadorna tadorna</i>	S - B	S - B		Amber	
Mallard	<i>Anas platyrhynchos</i>	W - S - B	W - S		Amber	
Eurasian Sparrowhawk	<i>Accipiter nisus</i>	W - S	W - S			
Common Kestrel	<i>Falco tinnunculus</i>	W - S - B	W - S		Amber	
Common Buzzard	<i>Buteo buteo</i>		C	S - C		
Red-legged Partridge	<i>Alectoris rufa</i>	W - S - B	W - S			
Common Pheasant	<i>Phasianus colchicus</i>	W - S - B	W - S			
Common Moorhen	<i>Gallinula chloropus</i>	W - S - B	W - S			
Stock Dove	<i>Columba oenas</i>	W - S - B			Amber	
Common Wood Pigeon	<i>Columba palumbus</i>	W - S - B	W-S-B	W - S - B		
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	W - S	W - S			
European Turtle Dove	<i>Streptopelia turtur</i>	S - B			BAP-Red	
Common Cuckoo	<i>Cuculus canorus</i>	S - B				
Tawny Owl	<i>Strix aluco</i>	W - S - B				
Common Swift	<i>Apus apus</i>	SV (O)	SV (O)	SV (O)		
Common Kingfisher	<i>Alcedo atthis</i>	S			Amber	
Green Woodpecker	<i>Picus viridis</i>	W - S - B	W - S - B	W - S - B?	Amber	
Great Spotted Woodpecker	<i>Dendrocopos major</i>	W - S - B	W - S	W - S - B?		
Lesser Spotted Woodpecker	<i>Dendrocopos minor</i>	W - S - B				
Sand Martin	<i>Riparia riparia</i>	SV - B	SV - (O)	SV - (O)	Amber	Has bred in pit and shoreline cliffs
Barn Swallow	<i>Hirundo rustica</i>	SV - (O)	SV - (O)	SV - (O)	Amber	
House Martin	<i>Delichon urbica</i>	SV - (O)	SV - (O)	SV - (O)	Amber	
Pied Wagtail	<i>Motacilla alba</i>	W - S				
Winter Wren	<i>Troglodytes troglodytes</i>	W - S - B	W - S - B	W - S - B		
Hedge Accentor	<i>Prunella modularis</i>	W - S - B	W - S - B	W - S - B	BAP- Amber	
European Robin	<i>Erithacus rubecula</i>	W - S - B	W - S - B	W - S - B		
Common Nightingale	<i>Luscinia megarhynchos</i>	SV - B	SV - B	SV - B	Amber	
Common Redstart	<i>Phoenicurus phoenicurus</i>	SV - B			Amber	Last known breeding 1958
Common Blackbird	<i>Turdus merula</i>	W - S - B	W - S - B	W - S - B	Amber	
Redwing		WV	WV	WV		
Fieldfare	<i>Turdus pilaris</i>	WV	WV	WV		
Song Thrush	<i>Turdus philomelos</i>	W - S - B	W - S	W	BAP-Red	
Mistle Thrush	<i>turdus viscivorus</i>	W - S - B		C	Amber	

Sedge Warbler	<i>Acrocephalus schoenobaenus</i>	SV - B				
Lesser Whitethroat	<i>Sylvia curruca</i>	SV - B				
Common Whitethroat	<i>Sylvia communis</i>	SV - B	SV - B	SV - B	Amber	
Garden Warbler	<i>Sylvia borin</i>	SV - B		SV - B		
Blackcap	<i>Sylvia atricapilla</i>	SV - B	SV-B	SV - B		
Common Chiffchaff	<i>Phylloscopus collybita</i>	SV - B	SV-B	SV - B		
Willow Warbler	<i>Phylloscopus trochilus</i>	SV - B			Amber	
Goldcrest	<i>Regulus regulus</i>	WV - S - B	WV - S	W - S		
Spotted Flycatcher	<i>Muscicapa striata</i>	SV - B			BAP-Red	
Long-tailed Tit	<i>Aegithalos caudatus</i>	W - S - B	W - S - B	W - S - B		
Marsh Tit	<i>Parus palustris</i>	W - S - B	W		Red	
Coal Tit	<i>Parus cristatus</i>	W - S - B	W - S - B	W - S - B		
Blue Tit	<i>Parus caeruleus</i>	W - S - B	W - S - B	W - S - B		
Great Tit	<i>Parus major</i>	W - S - B	W - S - B	W - S - B		
Wood Nuthatch	<i>Sitta europaea</i>	W - S - B				
Eurasian Treecreeper	<i>Certhia familiaris</i>	W - S - B	W-S	W - S - B		
Eurasian Jay	<i>Garrulus glandarius</i>	W - S - B	W - S	W - S - ?		
Black-billed Magpie	<i>Pica pica</i>	W - S - B	W - S - B	W - S - B		
Eurasian Jackdaw	<i>Corvus monedula</i>	W - S - B	S - B	W - S - B		
Carrion Crow	<i>Corvus corone</i>	W - S - B	W - S - B	W - S - B		
Common Starling	<i>Sterna vulgaris</i>	W - S - B	W	W	BAP-Red	
House Sparrow	<i>Passa domesticus</i>	W - S - B			BAP-Red	
Eurasian Tree Sparrow	<i>Passa montanus</i>	W			BAP-Red	
Chaffinch	<i>Fringilla coelebs</i>	W - S - B	W - S - B	W - S - B		
Brambling	<i>Fringilla montifringilla</i>	WV	WV			
European Greenfinch	<i>Carduelis chloris</i>	W - S - B	W - S - B	W - S - B?		
European Goldfinch	<i>Carduelis carduelis</i>	W - S - B	W - S - B	W - S - B	Amber	
Eurasian Siskin	<i>Carduelis spinis</i>	WV	WV	WV		
Common Linnet	<i>Carduelis cannabina</i>	W - S - B			BAP-Red	
Lesser Redpoll	<i>Carduelis flammea</i>	WV - S - B	WV	WV	Red	
Common Bullfinch	<i>Pyrrhula pyrrhula</i>	W - S - B	W - S	W	BAP- Amber	
Yellow Hammer	<i>Emberiza citrinella</i>	W - S - B			Red	

Site name Site reference 10 – Holywells Park

IBC Ref: W11
Site status: County Wildlife Site
Grid ref: TM 13912 44048
Area: 21.10 Hectares
Date: 11 July 2013
Recorder: S Bullion
Weather conditions: Hot and sunny 26 °C
Ranking: 2
Biodiversity value: High

Map:



Photos:



View southwards across park



Kissing Gate Meadow with log pile in grass on left hand side of photo



View across 'Big Pond'



Natural spring in east of park

Habitat type(s):

Mixed woodland, scrub, rough grassland, short mown grassland, streams, ponds and marsh, tall ruderals

Subsidiary habitats:

Mature specimen trees, fallen and standing deadwood

Site description:

There is an excellent habitat mosaic within this historic park. Natural springs rise in the east of the park, which are then channelled through a series of centrally-located ponds into a watercourse running along the western boundary known as 'The Canal'. These waterbodies are varied, depending on size, water depth, the level of shading and degree of colonisation by emergent vegetation. There is also a separate pond within the woodland known as 'Dell Pond' which is heavily shaded with no emergent vegetation and several items of domestic rubbish. There is a stream within the Orchard which runs towards The Canal.

Mixed coniferous and deciduous woodland is a major feature of the park, with large amounts on the eastern side as well as the western and northern boundaries of the park and the south-western corner. There is also a good mix of rough grass areas interspersed with areas of short-mown amenity grassland. In the south-west corner is an area known as Kissing Gate Meadow, which is believed to have been sown with a wildflower mix sometime in the past, but which is becoming overgrown with more ruderal species. Common lizards and slow worms were released here in 2011. There is also a recently created orchard with planted trees and shrubs north of the meadow. This is a very well-recorded site and there are good desktop records for many groups.

Protected species:

Common pipistrelle (2004)

Grass snake (2011), slow worm and common lizard (released into Kissing Gate Meadow 2011)

Protected species potential:

Various bat species

BAP habitats present:

Eutrophic standing water

BAP species seen:

-

BAP species known:

Mammals: Noctule bat (1985), hedgehog (1990)

Reptiles and amphibians: Grass snake (2011) slow worm and common lizard (2011), toad (2011)

Birds: bullfinch (2011), spotted flycatcher (2011), wood warbler (2010), song thrush (2011), lesser spotted woodpecker (1995), starling (2011), turtle dove (2011), common cuckoo (2011)

Butterflies: silver studded blue (2009), white letter hairstreak (2006) wall (2009),

Moths: white ermine (1995), buff ermine (2011), oak hook-tip (1996), small phoenix (1975), September thorn (1975), small emerald (1994), dark barred twin-spot carpet (1975), ghost moth (1996), lackey (1995), grey dagger (2003), garden dart (1996), white-line dart (1975), rustic (1994), dot moth (1996), rosy minor (1975)

Other invertebrates: Five banded weevil-wasp (2008), bee wolf (2010) golden hoverfly (2005), stag beetle (1996)

BAP species potential:

-

Connectivity:

The park is surrounded by employment land, housing and roads, so it is not connected to any wildlife corridors. However, immediately to the south of Cliff Lane lies the linear north-western extension of Landseer Park, so there are large tracts of other semi-natural habitat in the immediate vicinity. The combined areas of the two parks amount to over 38 hectares, so this represents a large tract of valuable wildlife habitat within this part of Ipswich.

Structural diversity:

Structural diversity is excellent with a mixture of short and rough grassland with specimen trees, woodland, scrub, springs and a variety of water bodies. Standing and fallen deadwood provide valuable microhabitats for invertebrates.

Flora:

In the rough, un-mown areas of grassland a reasonable range of grasses are present: Yorkshire fog, false oat, cock's foot, sweet vernal grass, meadow foxtail and common bent. Herbs include ribwort plantain, common sorrel, yarrow, black knapweed, lesser stitchwort, ragwort, common cat's ear. Pignut is also present in rough grassland near the centre of the park.

Kissing Gate meadow was dominated by very tall grasses such as cock's foot and false oat grass, but also common bent, Yorkshire fog and sweet vernal grass. Rough stalked meadow grass was present in more shaded areas. There was a good mix of herbaceous species, as would be expected in a sown meadow, including red clover, meadow crane's bill, red campion, black knapweed, greater knapweed, tufted vetch, tansy, ox-eye daisy, greater bird's foot trefoil and also dropwort (a species normally associated with chalky grassland but it can also be a garden escape). At the eastern end of the meadow the sward is very rank and colonised by a dense stand of creeping thistle.

Areas of short-mown amenity grassland typically included both greater and ribwort plantains, daisy, common mouse-ear, yarrow and white clover.

The Canal was lined by mature alder and willows, but further east the woodland was more diverse with ash, poplar, beech, goat willow, sweet chestnut, dogwood and hazel. The ground flora was quite diverse with hedge woundwort, wood avens, square-stalked St John's wort, red campion, hedge bindweed, male fern. North of the Big Pond, the woodland was more mixed, with Scot's pine, yew, ash, horse chestnut and suckering elm. The mature woodland north of the car park on Cliff Lane again included some large trees, with Scot's pine, oak, ash, horse chestnut with holly and elder. Bramble provides valuable habitat along the woodland edges. The Orchard contains an excellent mix of woody species with many of the above listed as well as wayfaring tree, rowan and hornbeam. There are some superb specimen trees with a central avenue of limes and some very large beech trees.

Wetland species associated with the water bodies included brooklime near Big Pond, common reed, reed mace, hairy willowherb, pendulous sedge and horsetails, which are particularly abundant in damp or inundated areas.. Fool's water cress grows in some of the springs on the eastern side. Hemlock water dropwort is associated with Paddling Pool pond, but this was not observed during the site visit.

There are good fungal records for this site.

Avifauna:

The birds are very well recorded by local experts. There is likely to be a good range locally common

garden bird species breeding in good numbers in the park. The larger ponds are good for various wildfowl, with mallard, gadwall, tufted duck, shelduck, teal and wood duck amongst some of the records. Kingfisher has been regularly recorded and water rail is another interesting record. The park will provide excellent habitat for over-wintering birds and there are good records of brambling, siskin, redpoll, redwing, fieldfare and brambling. Summer migrant warblers are also well recorded, with wood warbler and yellow-browed warbler being unusual records. SBRC records indicate one nightingale was recorded in 1993 and it would be useful to know if there are more recent records. The Turtle dove record in 2011 is notable as this is a severely declining species. Lesser spotted woodpecker has not been recorded since 1995 and is likely to be extinct.

Invertebrates:

The woodland/grassland mosaic will be important for a wide range of invertebrates. There is fallen and standing deadwood within the park providing excellent opportunities for saprophytic invertebrates, including stag beetle.

Few butterflies were recorded but it started as a poor year for this group. Dragonflies and damselflies were flying over the 'Big Pond' including southern hawker and common blue damselfly. This large pond was dipped and was found to be reasonably rich in invertebrates, including flatworms, pond snail, great water boatman, hoglouse and a large leech (Order Rhynchobdellae, family Glossiphoniidae).

There are excellent hymenoptera, butterfly, moth, dragonfly and damselfly records for the site, as provided by SBRC.

The five-banded weevil-wasp was recorded in Kissing Gate Meadow in 2009. This species like bare ground exposures in which to excavate a tunnel.

Herpetofauna:

Although there are only anecdotal records for grass snake, the habitat mosaic with numerous ponds provides good habitat for this species. However a recent amphibian survey of the ponds revealed the presence of fish (stickleback and pike, with rudd also in the big pond) with only few smooth newt and frogs, which are the principal prey species for the grass snake (Sudbury Ecological Field Services 2011). Two grass snakes (an adult and an immature were recorded during a reptile survey (Sudbury Ecological Field Services 2011) and the population was described as low. Toad was also recorded during this survey although there is a Registered Toad Crossing on Cliff Lane. As a result of a development project close to Ipswich (thought to be in Rushmere), Kissing Gate Meadow was selected as a receptor site and 175 common lizards were released here 2011, along with 22 slow worms, 26 common toad and 27 common frogs.

Mammals:

The site will support common mammals such as muntjac deer, grey squirrel, rabbit, mole, fox and various small mammals and wood mouse, bank vole and common shrew have been recorded on several occasions. A stoat record in 2003 is unusual. The habitat is suitable for hedgehog and may be an important site for this declining mammal, although there are no recent records. Common pipistrelle was recorded using a bat detector in 2004. The very large, mature trees within the park offer superb roosting opportunities for bats and there are several known roosts. There is a coypu record for 1983 which is notable as this species is now extinct in Britain following an eradication process (last Suffolk record 1989).

Comments and recommendations:

Kissing gate Meadow is becoming very overgrown with a dominance of thistles at the eastern end. It is recommended that a third of the meadow should be cut on rotation and the cuttings removed. If this cut took place at the end of October/early November, this would limit impacts upon reptiles, which have been released here. By cutting only a section of the meadow each year, this will ensure that there is always tall habitat to provide shelter for overwintering invertebrates. If a path is close mown each year, this will ensure there is a very close sward and potentially bare ground areas which are required by the five-banded weevil wasp.

It is recommended that a follow-up reptile survey should be undertaken to assess the success of the translocation.

There is a proposal to restore the pond network within the park as part of a Heritage Lottery Grant. The work should seek to maximize the habitat mosaic and if fish were removed from the upper parts of the chain of ponds, this could benefit amphibians.

The non-native invasive species, Himalayan Balsam, which is quick to colonise and dominate bankside vegetation due to its explosive seed pods, was noted by The Canal.

References

Holywells Park Pond Report (2011) Sudbury Ecological Field Services
Holywells Park Reptile Survey (2011) Sudbury Ecological Field Services

Site name

Site reference 9 – Christchurch Park (CWS)

IBC Ref: W9
Site status: County Wildlife Site
Grid ref: TM 16441 45300
Area: 33.06 Hectares
Date: 29 June 2013
Recorder: S Bullion
Weather conditions: Hot and sunny 25°C
Ranking: 2
Biodiversity value: High

Map:



Photos:



Acid grassland in north-west of park



Mature oak within parkland



Pond on southern edge of central woodland



Large spring-fed lake in south-west of park

Habitat type(s):

Mixed broadleaf and conifer woodland, scrub, acid grassland, wet neutral grassland, rough semi-improved grassland, amenity grassland, lake, ponds

Subsidiary habitats:

Veteran trees, spring-fed areas

Site description:

This historic park is situated in the centre of Ipswich, north of the Christchurch Mansion. There is a good habitat mosaic with areas of rough, acid grassland in the northern two thirds of the site within a parkland setting. There is a central block of mixed mature woodland, with a recently planted orchard on its north-eastern edge. Springs arise within the park giving rise to neutral grassland and further south there is a large ornamental lake. A circular lake behind the mansion is the next largest water body, but there are also three other smaller ponds which are surrounded by semi-natural habitat. The veteran and super-veteran trees are one of the outstanding features of this park.

Protected species:

Common and soprano pipistrelle bat (2013)
Nathusius' Pipistrelle (2013)
Brown long-eared bat (1993)
Noctule bat (2003)

Protected species potential:

-

BAP habitats present:

Lowland Acid grassland
Woodpasture and parkland
Eutrophic standing water

BAP species seen:

-

BAP species known:

Soprano pipistrelle (2013), Noctule bat (2003), Brown long-eared bat (1993)
Stag beetle (1998), Bee wolf 2003
Lesser spotted woodpecker (1995), Spotted flycatcher (2010), starling (2011), song thrush (1995)

BAP species potential:

Hedgehog

Connectivity:

The site is relatively isolated, although the large area of the Cemetery is less than 400m to the east

Structural diversity:

Structural diversity is excellent with a mixture of rough grassland with scattered parkland trees, woodland, scrub and a large, ornamental lake and a smaller, semi-natural pond.

Flora:

The steep banks in the centre of the site are notable for their distinctive acid grassland community: sheep's sorrel, red fescue, common cats-ear, common bent being the dominant species. Other parts of the park, particularly the northern section, also have these indicator species but it is less distinctive or harder to interpret due to the mowing regime.

An area towards the west of the main park, at the bottom of the slopes, is dominated by Yorkshire fog and indicates an area of seepage. Creeping buttercup and creeping thistle are also present. Further south the grassland becomes less acidic in character with plantain species becoming more prolific. In the far south around the Mansion the grasslands are species poor and typical of amenity grassland. East of the woodland the un-mown areas include a good range of grass species, with Yorkshire Fog, rye grass, common bent, smaller cat's tail, cock's foot to name a few. A thick band of bramble is present on the eastern side of the woodland.

The woodland (known as the bird reserve) is varied, with mature Scot's pine of at least 100 year old, along with oak, sweet chestnut, yew, hazel, elder and rowan. Wetter areas along the western edge of the woodland are marked by the presence of alder.

The parkland trees are superb, with veteran sweet chestnut and oak being most notable.

Avifauna:

No formal bird survey has been included as part of this assessment but the site will support a varied mix of common and less common species, as indicated by a desktop search. Several BAP species have been recorded in the past and whilst lesser spotted woodpecker (1995) and linnet (1997) are unlikely to be still present, song thrush (2001) and spotted flycatcher (2010) may still be present. A record of Cetti's warbler in 2011 is notable. Birds recorded within the woodland area include common garden species as well as migrant warblers (chiffchaff and blackcap). In addition, other more unusual species include mistle thrush, redwing and tawny owl recorded by the Friends of Christchurch Park. Bird walks are led by the Friends and further details are given on their website (see References).

Invertebrates:

A particularly interesting record is that of bee wolf in 2003, west of the arboretum. There is another record dating from 1996 associated with a bank on the south-eastern side of the park.

The juxtaposition of the woodland/grassland habitats is very important for a wide range of invertebrates, as well as the presence of various water bodies. In addition, there is plentiful fallen deadwood in the woodland which is highly suitable for stag beetle. A range of common butterflies have been recorded over the years. There are several dragonfly species recorded, including ruddy darter, common darter, black-tailed skimmer, emperor dragonfly, brown, migrant and southern hawkers. Azure, common and emerald damselflies have also been recorded. Moths have also been recorded at this site.

Herpetofauna:

There appear to be no records of reptiles or amphibians for this park. Although the habitat is suitable for reptiles, they are isolated from other populations, so grass snake is the only likely species present as it is farther ranging than other species. Common amphibians such as smooth newt and frog are likely to be present within some of the small ponds and their presence will also relate to whether grass snake can exist within this site.

Red-eared terrapin has been recorded in the Wilderness Pond in 2003.

Mammals:

The site will support common mammals such as muntjac deer, grey squirrel, rabbit, mole, fox and various small mammals (there is a bank vole record for 2012). The habitat is suitable for hedgehog and may be an important site for this declining mammal. During a visit on 1st October 2013, a weasel was seen in the woodland nature reserve.

A Suffolk Bat Group evening walk for the Friends of Christchurch Park on 6th September 2013 not only recorded common and soprano pipistrelles but also the much rarer Nathusius' pipistrelle over the large duck pond near the mansion (Sue Hooton pers. Comm.). Historical bat records include brown long eared bat (most recent 2000) and noctule bat (2003). The mature and veteran trees are likely to provide roosting opportunities for a variety of bat species, whilst the park itself will provide excellent foraging habitat.

Comments and recommendations:

This is a site of high ecological value within the centre of the Town, with a high public use all year round. Management should focus on maintaining the habitat mosaic and parkland setting. There is a good abundance of rough grass habitat in the northern, acidic part of the park and consideration should be given to managing this on rotation. Leaving some rough grassland areas for several years is highly beneficial to overwintering invertebrates and a tussocky sward will also provide habitat for other species. However, any future management of long grass areas should ensure that the cuttings are removed immediately afterwards. This will stop the cuttings smothering the low growing plants and avoid the build up of nutrients in what is currently a free-draining and nutrient-poor sward.

The central woodland should also be allowed to develop a 'wild' appearance, with a focus on developing more of a shrubby understorey to encourage bird nesting. The bramble patches adjoining the woodland are of high ecological value and should be retained as much as possible. Any cutting back of bramble should be outside of the bird nesting season and should be on rotation to ensure there is always a bramble resource.

A breeding bird survey could be useful to obtain an up-to-date picture of this group and birds are recorded by the Friends of Christchurch Park.

References

Friends of Christchurch Park website <http://www.focp.org.uk/> accessed on 11 March 2014.