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# COLCHESTER BOROUGH LOCAL WILDLIFE SITE REVIEW 2015

**Final Report** 

November 2017

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# ESSEX ECOLOGY SERVICES Ltd. EECOS

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The information, data, advice and opinions which have been prepared and provided are true, and have been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional *bona fide* opinions.

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# <u>COLCHESTER BOROUGH</u> <u>LOCAL WILDLIFE SITE REVIEW 2015, FINAL REPORT</u>

# 1. INTRODUCTION

# 1.1 General Introduction

This report has been prepared by Essex Ecology Services Ltd. (EECOS), the ecological consultancy of the Essex Wildlife Trust, for Colchester Borough Council. It comprises the results of a partial review of the Local Wildlife Site network in Colchester Borough, to inform future planning policy.

# 1.2 Background

The first non-statutory conservation sites in Colchester Borough were identified in 1991 by Essex Wildlife Trust, following a county-wide Phase 1 habitat survey. At the time they were known as Sites of Importance for Nature Conservation (SINC) and they were selected on the basis of being the most important wildlife habitats in the Borough, with the already nationally designated and legally protected Sites of Special Scientific Interest (SSSI) included within the network.

EECOS was commissioned to review the network in 2008, by which time the sites were known as Local Wildlife Sites (LoWS), in line with national government guidance. The review looked at all of the original sites and judged their validity against an emerging set of selection criteria, which were based on the UK Biodiversity Action Plan (BAP). SSSI were now excluded from the network, on the basis that they already had stronger legal protection, but non-SSSI intertidal habitats were now eligible for selection. A widespread consultation exercise with local natural history societies and other interested parties generated an additional group of potential sites to be considered for selection.

During the 2008 review, 14 sites were deleted because they no longer satisfied selection criteria and eight SSSI were also removed. However, 48 new sites were added because of the broadening of the scope of the selection criteria. The original sites were almost exclusively selected because of their plant communities, whereas the emerging criteria covered all plant and animal species groups. In Colchester Borough, a significant proportion of the new sites were identified because of their invertebrate interest, reflecting the increased recognition of the value of post-industrial "brownfield" sites for invertebrate conservation.

After the 2008 review, there were 168 LoWS identified within Colchester Borough covering an area of nearly 2000 hectares. A further 13 sites were identified as Potential LoWS (PLoWS), where they were considered likely to provide good conservation value, but where there was insufficient available data to be able to attribute a selection criterion.

After 2008, the emerging LoWS selection criteria were modified, through use and to reflect policy changes, and in 2010 they were published in a final version.

# 1.3 <u>Review Areas</u>

This review does not cover the whole of Colchester Borough, instead focussing on areas that are likely to come under pressure for development in the near future. Map 1 illustrates the areas selected. In addition to the LoWS within these areas, LoWS within a one kilometre buffer drawn around each were also included in the list of sites to be reviewed. This approach has meant that the review also included 11 existing LoWS in Tendring District and one in Braintree District.

Hereafter, the potential development areas and their buffers are collectively referred to as the 'survey area'.

## 1.4 **Objectives of Survey**

The objectives of the survey were as follows:

- to visit existing LoWS within the survey area and record their condition;
- to assess existing LoWS in the survey area against the current, published LoWS selection criteria to determine whether or not they should remain as LoWS;
- to revisit and review existing PLoWS within the survey area to determine whether any selection criteria can now be applied;
- to identify new candidate sites within the survey area and assess them against the LoWS selection criteria.

### 1.5 <u>Survey Methodology</u>

### 1.5.1 Desk study

Data concerning existing or potential LoWS were collated from a number of sources. Parish Councils were asked to submit details of any sites that they thought should be considered as new sites, with their reasons for considering them to be suitable. In addition, aerial photographs available on the internet were used to identify sites within the survey area that appeared to support semi-natural habitats that could satisfy selection criteria. Existing records held by the Essex Wildlife Trust and the individual knowledge of the surveyors and colleagues were also used to influence the sites that were assessed during site visits.

### 1.5.2 Site visits

All of the existing LoWS within the survey area, together with those sites identified as Potential LoWS during previous reviews and any new sites highlighted by the desk study, were visited during the late summer and autumn of 2015. Where possible, public rights of way were used to access the sites or landowners were contacted for permission, if their details were known. Where neither of these routes was possible within the timescale of the study, surveyors were provided with delegated rights of access under powers granted to the Council through the Town and County Planning Act 1990.

With reference to the existing site descriptions, notes were made about the characteristic plant and animal species and communities present and about any apparent changes since the last review in 2008. The condition of the sites was also recorded and notes made about any management issues that, from a nature conservation perspective, were evident.

With all available data in mind, the status of each surveyed site was reviewed in line with the current LoWS Selection Criteria (see Appendix 1) in order to assess whether or not it should remain within the LoWS network.

## 1.6 <u>Competence</u>

Neil Harvey has been a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) since 2004 and has been involved in ecological consultancy since 1994. Neil is a fully competent field botanist with considerable experience of NVC surveys, habitat assessment (including Phase 1 surveying) and management planning. He is a proficient ornithologist with experience of many standard survey methodologies and a particular

specialism in the birds of Essex. He has a good all-round knowledge of the invertebrate fauna of the UK, with specialist knowledge of Diptera (particularly hoverflies, soldierflies and allies, Conopidae), molluscs, Orthoptera, Odonata, butterflies, moths and various other lesser orders. During his time with EECOS he gained considerable experience in the identification of LoWS, discussing their conservation requirements and dealing with threats to sites through the planning process.

Martin Pugh has been an ecologist with EECOS since 2005 and has experience in a range of ecological survey work. He has over eight years' experience in surveying for legally protected species and carrying out Preliminary Ecological Appraisal surveys, and has been involved in several previous Local Wildlife Sites reviews, including of Colchester Borough in 2008. In addition, he has written management strategies and habitat management plans for several sites, including Essex Wildlife Trust reserves. He has been a full member of CIEEM since 2009.

# 1.7 <u>Constraints of Methodology</u>

The timing of the survey was not ideal for the recording of plant species and vegetation communities in all habitat types. A start date in early July meant that many spring flowering species in woodlands and annuals in open mosaic habitats were no longer easily visible and some grassland sites had already been cut for hay crops. This was exacerbated in 2015 by a very dry late spring and early summer that had resulted in many grassland plants completing their reproduction by the end of June and then dying off.

The intensity of the survey period also meant that only limited time was available to spend on each site, rather than a careful study of species diversity being possible. With experience, rapid assessment of habitat types, recording of key species and condition monitoring are all possible under these conditions.

# 2. <u>RESULTS</u>

# 2.1 <u>Summary of Results</u>

In Colchester Borough, as a result of this review, six sites totalling 41 hectares have been added, two sites totalling 1.5 hectares has been deleted, 19 sites have been extended by a total of 151.3 hectares and 19 sites have been reduced by a total of 55.5 hectares, leaving 127 sites unchanged. The end result is that there are now 170 LoWS in Colchester Borough totalling 2049.6 hectares.

Most of the additions have come from secondary habitats establishing or improving to a point whereby their conservation value is sufficiently substantive for them to be selected, typically in association with existing LoWS or other already designated habitats.

Losses of LoWS habitat have generally been minor, the average loss of just under three hectares per site being made up of a few larger losses and a higher number of very small ones. Losses resulted from:

- residential and other development;
- the changing management of an active aggregates site;
- expansion of gardens;
- lack of appropriate management.

In addition, the stricter application of updated LoWS selection criteria and more accurate mapping also resulted in minor reductions.

One of the Sites in the new register is currently being developed and others may have extant planning consents. These Sites are fully included in the network and Site descriptions, as until development actually takes place they still satisfy the selection criteria. A situation could be envisaged where construction does not take place under the existing consent, either through an application to modify it, or through its expiry, and so it is necessary, and appropriate, to retain the Sites to properly inform any future planning situation.

# 2.2 <u>Citations and Site Numbering</u>

In order to maintain continuity and avoid confusion when considering old LoWS information, the numbering of LoWS has been preserved from the 2008 registers. As a result, the numbers of the current LoWS are not entirely sequential, those numbers where the LoWS has been

deleted being retired from use rather than re-applied to newly identified Sites. Appendix 2 contains the revised descriptions of the sites assessed during this survey, but not those Colchester LoWS that lie outside of the survey area. One slight modification has been made to the names of existing LoWS that remain as such following this present review. Unless otherwise obvious, the name of the nearest settlement is added to the name so that, for example, 'Co59 Tye Grove' becomes 'Co59 Tye Grove, Stanway'.

The citations in Appendix 2 are in a format that has been agreed by the Essex Local Sites Partnership. They are headed with the Site number and name, a broad location, an approximate area in hectares and an Ordnance Survey grid reference that identifies the notional central point of the Site. They include a map to illustrate the approximate boundaries of the Site, although these should be subject to interpretation on the ground by a suitably qualified ecologist rather than being treated as set in stone. On the maps, nearby LoWS are also shown in order to give some idea of the Site's context.

The Site's habitats are then described with reference to the plant species that characterise the communities present as well as those of above average conservation significance. Noteworthy animal species are also mentioned, although in the case of Sites where good invertebrate survey data is available, this is restricted to a representative selection of the more nationally significant species.

Below the Site description is information about the site's ownership, where it is known, and about means of public access, if there are any. Below this are lists of the Habitats of Principal Importance in England that are present and of the selection criteria that have justified the Site's inclusion in the LoWS register, with an explanation of the rationale behind the use of those criteria. A brief statement of the ecological condition of the Site at the time of the survey visit is included together with a consideration of the issues relating to the Site's management, from an ecological perspective.

At the end of the citation is a record of the date when the Site was first identified as a LoWS together with the dates when it has subsequently been reviewed.

# 2.3 Changes to LoWS Network

Below is a summary list of the changes made to existing LoWS as a result of this review. In many cases boundaries have been remapped to fit with the up to date Ordnance Survey base maps used during this review. These changes have not been noted in this section, as they are not material to the decisions made.

Co10 Inworth Grange Pits, Tiptree – a significant extension of grassland habitat with habitat quality demonstrated by recent species records. Areas of post-industrial land also added following the completion of extraction work.

Co32 Cadgers Complex, Tiptree - new area of public open space added, extending existing habitat.

Co45 Fordham Bridge Meadow, Fordham – reverted arable land removed, as its plant community is not of conservation significance; marsh habitats retained.

Co59 Tye Grove, Stanway – the eastern boundary has changed to reflect current extent of woodland habitat resulting in a small loss, but the same area is added to Co62.

Co60 Fordham Heath – minor loss through re-mapping the sports pitch boundaries.

Co62 Stanway Pits – significant loss of former gravel pit area to new housing and infrastructure.

Co63 Hillhouse Wood, West Bergholt – block of secondary woodland added in support of ancient woodland area.

Co67 Warren Lane Pit, Stanway - large changes in active quarrying area and additional secondary woodland area added.

Co68 Iron Latch Woods and Meadow, Eight Ash Green - loss of section to the south of the railway line to housing development.

Co69 Spring Wood, West Bergholt – the developed area of private camp is removed, but contiguous secondary woodland and meadow outside of the camp is added, with a net increase.

Co71 Grove Wood, West Bergholt – a non-ancient section is removed as it now forms part of a garden.

Co72 West Bergholt Hall Churchyard – the church itself is removed.

Co76 Olivers Thicks / Butchers Wood, Stanway – the central part of Butchers Wood is included within the LoWS again, as it recovers from past clearance.

Co77 West Bergholt Heath – a section of the heath overgrown with scrub and trees is removed.

Co79 West Bergholt Churchyard – the church itself is removed, with a car park and an area of amenity managed grassland.

Co85 Chest Wood and Roman River Complex, Layer de la Haye – a private house and garden are removed, but additional secondary woodland habitat is added, with a net increase.

Co94 Lexden Dyke, Colchester – a small unimproved meadow adjacent to the dyke is added.

Co97 Irvine Road Orchard, Colchester - re-mapped to remove a track.

Co102 Bounsted Bridge – site deleted due to intensive horse-grazing.

Co103 Bounsted Strip – a line of oak trees that is deleted as no selection criterion is satisfied.

Co108 Layer Brook Pasture, Abberton – two groups of planted pines are removed from this grassland site.

Co110 Berechurch Grassland, Colchester – areas of planted pines are removed from this grassland site.

Co113 Colchester Cemetery – The Anglican Chapel is included within the site, as it supports roosting Long-eared Bats.

Co116 High Woods, Colchester - Squirrel Field and an additional area of secondary woodland off Brinkley Grove Road are added and the enlarged car park is re-mapped, overall giving a large net increase.

Co117 Manwood Chase, Abberton – secondary woodland at Oxley Grove and unimproved meadows north of Ball Lane are added.

Co118 Cowdray Marsh, Colchester - remapped following adjacent residential development and creation of a new footpath.

Co122 Middlewick Ranges, Colchester – adjacent acid grassland is added and the boundary with Co128 is re-mapped to reflect differences in dominant habitats.

Co127 Donyland Woods West, East Donyland - additional secondary woodland blocks are added.

Co128 Birch Brook, Colchester - boundary with Co122 re-mapped to reflect differences in dominant habitats; minor boundary adjustments elsewhere.

Co133 Kiln Wood, Langham – a surfaced track through the wood is removed.

Co135 Donyland Wetlands, Colchester - name changed (from Donyland Pits) to reflect site history; old lane to the west is added with post-industrial habitat that was identified as a Potential LoWS at last review.

Co137 Hythe Brownfield, Colchester – boundary with Co142 re-mapped to reflect habitat origins, resulting in a loss of area.

Co140 University Marshes, Colchester – grazing marsh habitat lost to university accommodation development.

Co142 Hythe Lagoons, Colchester – boundary with Co137 re-mapped to reflect habitat origins, resulting in an increase.

Co144 Rowhedge Pits, East Donyland – boundaries re-mapped to remove surfaced road.

Co148 Wivenhoe Park, Colchester - loss of area to university development and infrastructure and addition of belts of parkland trees resulting in a small net increase.

Co161 Wivenhoe Cross Pit - major extension to include meadow, woodland corridor and secondary woodland, supported by recent plant records.

# 2.4 <u>New LoWS</u>

Below are listed the sites that have been identified as LoWS for the first time. These include previous PLoWS, sites identified as candidates from the desk search and a site proposed by a consultee.

Co169 Warrior's Rest, Tiptree – a large mosaic of acid grassland, scrub and woodland on former arable land.

Co170 Cowdray Brownfield, Colchester – previously PCLoWS7, a small area of brownfield land matching the Open Mosaic Habitat on Previously Developed Land HPIE description.

Co171 Manwood Road Verge, Colchester – roadside verge supporting a strong population of the nationally Scarce Lesser Calamint and Glow Worms.

Co172 Ferry Marsh, Wivenhoe – a small area of coastal grassland adjacent to the Upper Colne Marshes SSSI.

Co173 Aldercar Wood, Great Horkesley – a small area matching the Wet Woodland HPIE description.

Co174 Gosbeck's Park, Colchester – previously PCLoWS5; a large area of seeded grassland that has gained conservation significance, selected because of its public accessibility.

# 2.5 <u>Potential LoWS</u>

Below are listed all of the Potential LoWS in the survey area that were identified during the 2008 LoWS Review, with a summary of the result of their reassessment. Some of these Sites have been upgraded into LoWS, in which case they are included in section 2.4.

PCLoWS1 Messing Park – specialist survey work needed; retain as PLoWS.

PCLoWS4 Lexden Triple Dyke – insufficient habitat to satisfy selection criteria; remove from PLoWS list.

PCLoWS5 Gosbeck's Park - selected as Co174.

PCLoWS6 Spring Lane Park - management has not changed; retain as PLoWS.

PCLoWS7 Former Ozalid Works - selected as Co170.

PCLoWS8 Black Heath – removal of planted conifers still required; retain as PLoWS.

PCLoWS9 St Botolph's Sidings – specialist survey work needed; retain as PLoWS.

PCLoWS10 Grant's Meadow Allotments - now fully utilised; remove from PLoWS list.

PCLoWS11 Donyland Waste - incorporated into Co135.

The updated descriptions of these PLoWS are included at the end of Appendix 2.

## 2.6 Tendring LoWS

Eleven LoWS within Tendring District that fell within the survey's buffer area were also surveyed according to the same methodology. Changes to these sites are summarised below with revised descriptions in Appendix 3.

Te1 Ardleigh Reservoir Wood – no change.

Te2 Birch Wood – removed from LoWS list as incorporated into a garden.

Te3 Ardleigh Reservoir Grassland – no change.

Te4 Churn Wood Meadow – no change.

Te5 Churn Wood – no change.

Te6 Wall's Wood – additional secondary woodland blocks and old streamside woodland added.

Te7 Chapel Lane Verge – no change.

Te8 Pyecats Corner Verges – additional verge sections added.

Te12 Villa Farm – no change.

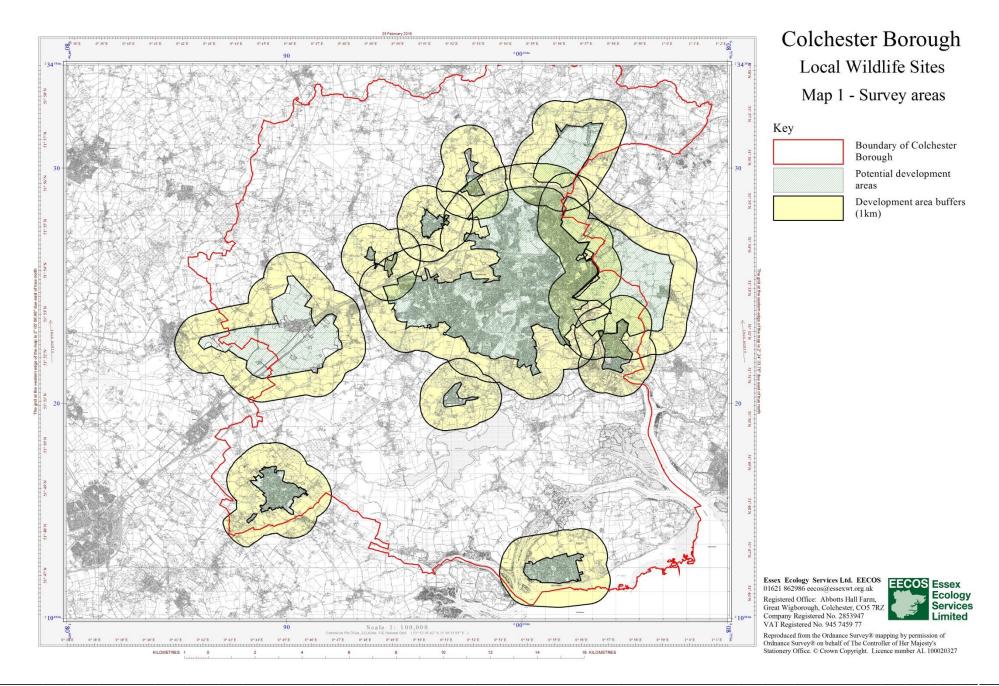
Te15 Palegate Wood – no change.

Te17 Park Wood – no change

Te20 Money Wood – no change.

# 2.7 Braintree LoWS

Within Braintree District, Bra225 Coggeshall Hall Farm fell within the buffer area and was surveyed, but there was no change in its status. A revised description is included in Appendix 4.



# **APPENDIX 1 - LIST OF SELECTION CRITERIA**

The following list is taken from "Local Wildlife Site Selection Criteria", produced by the Essex Local Wildlife Sites Partnership and published by Essex Wildlife Trust, third edition, January 2016 (draft), amended to reflect the changes in terminology associated with Habitats and Species of Principal Importance.

## Habitat Criteria

HC1 Ancient Woodland Sites – by inclusion in the Ancient Woodland Inventory, or as indicated by documentary evidence or the presence of indicator species.

HC2 Lowland Mixed Deciduous Woodland on Non-ancient Sites – HPIE woodland habitat, which in Essex means Oak-Ash-Maple or Oak-Bracken-Bramble woods.

HC3 Other Priority Habitat Woodland Types on Non-ancient Sites – in Essex this is restricted to the Wet Woodland HPIE.

HC4 Wood-pasture and parkland

HC5 Woody Scrub – stands supporting exceptional diversity, unusual communities or where the scrub is integral to another aspect of the site's ecology.

HC6 Veteran Trees – where there is specific associated ecological interest (*e.g.* epiphytes or invertebrates).

HC7 Old Orchards

HC8 Hedgerows and Green Lanes – if connecting other significant wildlife habitats, forming an extensive network of valuable hedges or if demonstrating ancient woodland flora.

HC9 Lowland Meadows – grassland conforming to the National Vegetation Classification MG5 hay meadow community.

HC10 River Floodplain

HC11 Other Neutral Grasslands – old grasslands that do not clearly match HC9.

HC12 Lowland Calcareous Grassland

HC13 Heathland and Acid grassland – including sites with potential for restoration.

HC14 Lowland Fen Vegetation

HC15 Reedbeds

HC16 Lakes and Reservoirs – a means of designating a whole water body where species selection criteria are applied.

HC17 Ponds – a means of designating a habitat where species criteria apply, in accordance with the Ponds HPIE.

HC18 Rivers

HC19 Extended Riverine Habitat

HC20 Complex Riverine Habitats

HC21 Coastal Grazing Marsh – naturalness of the land form is of primary importance, to be supported by the presence of notable plant or animal species.

HC22 Tidal Transition Zones – where there is no intervening coastal defence between intertidal and terrestrial habitats.

HC23 Saltmarsh and Mudflats

HC24 Saline Lagoons and Borrow Dyke Habitats – as indicated by characteristic plant and animals species.

HC25 Sand Dune and Shingle Beach Vegetation

HC26 Maritime Cliffs and Slopes

HC27 Post Industrial Sites – where there is evidence of the presence of notable species or where habitat features likely to support such species are present.

HC28 Small-component Mosaics – sites with two or more habitats that are close to satisfying other criteria.

HC29 Habitat Extension Mosaics – sites with habitat that supports a species for which an adjacent area has been selected.

HC30 Wildlife Corridors – habitat with a connectivity function, but that does not meet another criterion.

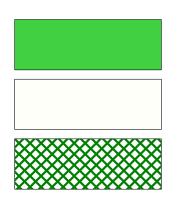
HC31 Urban Sites – sites that would not otherwise qualify, but that have value for amenity, cultural or educational purposes in relation to the local community.

### Species Criteria

SC1 Vascular Plants SC2 Bryophytes SC3 Lichens SC4 Fungi SC5 Notable Bird Species SC6 Exceptional Populations of Common Bird Species SC7 Dormouse SC8 Barbastelle (and other Annex II) bats SC9 Other Bat Breeding Colonies SC10 Bat Hibernation Sites SC11 Protection of Otter Holts
SC12 Breeding Water Vole Colonies
SC13 Hotspots for Amphibian Diversity
SC14 Palmate Newts
SC15 Great Crested Newts
SC16 Hotspots for Reptile Diversity
SC17 White-clawed Crayfish
SC18 Invertebrate SPIE
SC19 Important Invertebrate Assemblages
SC20 Notable 'Flagship' Macro-invertebrates

# APPENDIX 2 – REGISTER OF COLCHESTER LOCAL WILDLIFE SITES ASSESSED DURING 2015 SURVEY

# KEY TO MAPS



Highlighted LoWS

Adjacent LoWS

Potential LoWS



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Hill Wood is dominated by Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*) coppice with occasional Field Maple (*Acer campestre*), Aspen (*Populus tremula*) and Hazel (*Corylus avellana*). There are Pedunculate Oak (*Quercus robur*) standards, but mostly around the edges of the wood and few of them are of any significant age.

The generally sparse ground flora, typical of many Hornbeam woods, is dominated by Bramble (*Rubus fruticosus*) with patches of Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*) and Gooseberry (*Ribes uva-crispa*). Butcher's Broom (*Ruscus aculeatus*) and Spurge-laurel (*Daphne laureola*) are present in small quantities.

### **Ownership and Access**

The wood is in private ownership and there is no public access.

### Habitats of Principal Importance in England

Lowland Mixed Deciduous woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

The majority of the site is illustrated as woodland on old maps and its composition and ground flora suggest ancient origin, but it is not shown in the Ancient Woodland Inventory due to its size. Strips along the southeast and southwest edges, containing the young oaks, are more recent.

### **Condition Statement**

Favourable

#### **Management Issues**

The re-establishment of an appropriate coppice cycle will be needed to maintain the condition of the wood in the longer-term.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (re-mapped)

The canopy of this wood is composed of Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*) with an understorey of Hornbeam (*Carpinus betulus*) coppice, Hawthorn (*Crataegus monogyna*), Midland Hawthorn (*Crataegus laevigata*), Crab apple (*Malus sylvestris*), elm (*Ulmus sp.*), Field Maple (*Acer campestre*), Aspen (*Populus tremula*) and Hazel (*Corylus avellana*).

The ground flora is generally sparse but includes Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*), Wood Forget-me-not, Enchanter's Nightshade (*Circaea lutetiana*), Wood Speedwell (*Veronica montana*), Primrose (*Primula vulgaris*), Remote Sedge (*Carex remota*) and Bugle (*Ajuga reptans*) with Common Marsh-bedstraw (*Galium palustre*) in damper areas. There are two shaded ponds in the western corner, which support Pendulous Sedge (*Carex pendula*).

#### **Ownership and Access**

The site is under private ownership and there is no public access, but it can be viewed from a public footpath that runs along its western edge.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

The site is shown in its entirety in the Ancient Woodland Inventory.

# **Condition Statement**

Favourable

#### **Management Issues**

There is currently no evidence of active management, but the wood appears to be used by its owners for recreational purposes.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This site consists of a block of ancient woodland with 20<sup>th</sup> Century additions to the northeast, southeast and along the southern edge.

The older woodland consists of Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*) coppice with Pedunculate Oak (*Quercus robur*) standards, primarily around its edges, and occasional Wild Cherry (*Prunus avium*). The understorey includes Field Maple (*Acer campestre*), Crab Apple (*Malus sylvestris*) and Midland Hawthorn (*Crataegus laevigata*) with elm invading along the southern edge. Bramble (*Rubus fruticosus* agg.) is dominant in places, where there has been recent coppicing.

The ground flora includes frequent Bluebell (*Hyacinthoides non-scripta*) and Dog's Mercury (*Mercurialis perennis*) as well as Primrose (*Primula vulgaris*), Red Currant (*Ribes rubra*), Three-nerved Sandwort (*Moehringia trinervia*), Wood Speedwell (*Veronica montana*), Wood Sedge (*Carex sylvatica*) and Goldilocks Buttercup (*Ranunculus auricomus*).

The more recent blocks of woodland are made up of Pedunculate Oak and Ash, with occasional Hornbeam in the southeast.

#### **Ownership and Access**

The wood is under private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

#### Rationale

The majority of the woodland is shown on the Ancient Woodland Inventory, including the northeast block, which map evidence shows was not woodland in the late 19<sup>th</sup> and early 20<sup>th</sup> Centuries. The non-ancient parts meet the Lowland Mixed Deciduous Woodland HPIE description.

#### **Condition Statement**

Mostly favourable.

#### **Management Issues**

The wood is being actively managed by coppicing, but t a large Pheasant pen in the southeast corner is having a negative impact on the secondary woodland habitat there.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

Short, closely mown grassland on the slopes of the water treatment works supports a range of herbs and fine grasses that are typical of dry acid grassland conditions, with Fairy Flax (*Linum catharticum*), an Essex Red Data List (ERDL) species, being of particular note. The sward comprises Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Bird's-foot-trefoil (*Lotus corniculatus*), various small clovers (*Trifolium spp.*) and some Perennial Ryegrass (*Lolium perenne*).

The western section is damper in places and has a more species-rich sward, made up of Yorkshire-fog, Creeping Bent (*Agrostis stolonifera*), Meadow Barley (*Hordeum secalinum*) and Crested Dog's-tail (*Cynosurus cristatus*) with Agrimony (*Agrimonia eupatoria*), Selfheal (*Prunella vulgaris*), Meadow Buttercup (*Ranunculus acris*), Oxeye Daisy (*Leucanthemum vulgare*) Common Knapweed (*Centaurea nigra*), Marsh Thistle (*Cirsium palustre*) and the ERDL Common Sedge (*Carex nigra*. Drier areas to the south support Red Fescue (*Festuca rubra*), Bird's-foot-trefoil, Creeping Cinquefoil (*Potentilla reptans*), Lady's Bedstraw (*Galium verum*), Lesser Hawkbit (*Leontodon saxatile*) and Common Centaury (*Centaurium erythraea*).

#### **Ownership and Access**

The site is under the ownership of Essex & Suffolk Water. The western half is accessible to local residents

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland Lowland Meadows

### **Selection Criteria**

HC11 – Other Neutral Grasslands HC13 – Heathland and Acid Grassland

### Rationale

Artificial conditions around the reservoir mimic the environment required to favour the development of acid grassland communities, but the result is habitat that meets the Lowland Dry Acid Grassland HPIE description. The western field, although acidic to some degree, does not support a range of species that would enable it to be placed in an acid grassland category. However, it appears to be unimproved and supports good overall diversity, which justifies its inclusion.

### **Condition Statement**

Favourable.

#### **Management Issues**

Although generally favourable, a reduction in mowing frequency would allow the western grassland in particular to achieve greater conservation significance.

#### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This complex site is focussed on the now disused parts of Tiptree Quarry, comprising wet woodland, ponds, reedbeds and acid grassland, together with an old strawberry field to the east and some smaller meadows.

The quarry part of the site is made up of a series of lagoons, some containing deeper standing water, some shallower with broad fringes of Common Reed (*Phragmites australis*), emergent willow (*Salix* sp.) scrub and floating mats of pondweed (*Potamogeton* sp.), and some with different aged stands of wet willow woodland. Emergent and marginal plants species include Bulrush (*Typha latifolia*), Gipsywort (*Lycopus europaeus*), Softrush (*Juncus effusus*) and Water-plantain (*Alisma plantago-aquatica*) with the Essex Red Data List species Common Spike-rush (*Eleocharis palustris*). The fringes of the larger lagoons are now mostly shaded by willows.

Between the lagoons, the topography is varied with banks of exposed substrate, hummocks and hollows, which should provide good conditions for invertebrates. In the northwest part of the site is an extensive area landscaped to produce acid grassland, including an enclosure with introduced Heather (*Calluna vulgaris*). Other open parts support sparse swards and rough grassland, depending on their age and soil profile. Acid grassland species include Sheep's Sorrel (*Rumex acetosella*), Wood Sage (*Teucrium scorodonia*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Cudweed (*Filago vulgaris*), Common Centaury (*Centaurium erythraea*), Red Bartsia (*Odontites vernus*), Creeping Cinquefoil (*Potentilla reptans*) and parsleypiert (*Aphanes* sp.).

In places there is scattered scrub, with Bramble (*Rubus fruticosus* agg.), Gorse (*Ulex europaeus*), birch (*Betula* sp.) and Broom (*Cytisus scoparius*) amongst young Pedunculate Oaks (*Quercus robur*). There are some small areas of young oak woodland, planted in the 20<sup>th</sup> Century, and also scattered older oaks predating the quarry.

The former strawberry field to the east and the meadows to the south support unimproved grassland, albeit of recent origin. Six species of orchid have been recorded across this area including a significant population of Green-winged Orchid (*Orchis morio*) with smaller numbers of Bee Orchid (*Ophrys apifera*), Southern Marsh Orchid (*Dactylorhiza praetermissa*), Pyramidal Orchid (*Anacamptis pyramidalis*), Common Spotted Orchid (*Dactylorhiza fuchsii*) and Common Twayblade (*Neottia ovata*). The sward is dominated by Yorkshire-fog (*Holcus lanatus*) and bent (*Agrostis* sp.) and dense growth of willows. Other species in the meadows include Hope Trefoil (*Trifolium campestre*), Smooth Tare (*Vicia tetrasperma*), Fleabane (*Pulicaria dysenterica*) and Common Centaury (*Centaurium erythraea*).

The site also supports a good assemblage of breeding birds including in recent years more noteworthy species such as Pochard, Lapwing, Little Ringed Plover, Cuckoo, Skylark, Song Thrush, Cetti's Warbler, Willow Warbler and Linnet.

#### **Ownership and Access**

The site is in private ownership. Restoration activity still occurs in some areas and access is restricted to public footpaths along the southern and eastern edges of the quarry. The meadows have no public rights of way, but are heavily used by local residents.

#### Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land

#### Selection Criteria

HC3 – Other Priority Woodland Habitat Types on Non-ancient Sites HC11 – Other Neutral Grasslands HC13 – Heathland and Acid Grassland HC27 – Post-industrial Sites HC28 – Small-component Mosaics SC1 – Vascular Plants

#### Rationale

Much of this site could be classed as post-industrial and it includes a wide range of features that are likely to be of significant benefit to invertebrates, although there is a lack of records to confirm this at present. Within the post-industrial area there are also clear examples of acid grassland and wet woodland communities that would meet HPIE descriptions. The meadows outside of the quarry area are essentially unimproved, despite a recent origin and their conservation value is sufficient to justify their selection, but here the Other Neutral Grasslands criterion is primarily used to define the extent of the habitat that is supporting the significant Greenwinged Orchid population.

#### **Condition Statement**

Mostly favourable.

#### **Management Issues**

The field and its orchid populations are vulnerable to inappropriate management or the lack of it. Willow has become dominant over large parts of the field, although it has been cut during this review period. The field has also been proposed as a site for housing development. The habitats in the quarry part of the site will decline naturally as succession takes place and so management will be necessary to slow this process if the diversity of habitats and species is to be maintained.

#### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (extended)

Eden Wood is old woodland made up of old Hornbeam (*Carpinus betulus*) and Hazel (*Corylus avellana*) coppice amongst large oak (*Quercus robur*) standards. Other canopy species include Sweet Chestnut (*Castanea sativa*), Aspen (*Populus tremula*), Crab Apple (*Malus sylvestris*), Sycamore (*Acer pseudoplatanus*) and Ash (*Fraxinus excelsior*). The understorey is scattered and open with occasional Elder (*Sambucus nigra*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*) and Midland Hawthorn (*Crataegus laevigata*). The ground layer is very sparse, consisting mainly of leaf litter and bare ground, but there are some patches of Bluebell (*Hyacinthoides non-scripta*) and Nettle (*Urtica dioica*).

A small area of woodland along the southern margins of Messing Park, part of a larger Eden Wood that existed before clearance at the end of the 19<sup>th</sup> Century, is included in this Local Wildlife Site for its varied canopy and ground flora. Trees include Horse-chestnut (*Aesculus hippocastanum*), Pedunculate Oak, Hornbeam and Wild Cherry (*Prunus avium*) along with Hazel, Ash and Field Maple coppice. Willows (*Salix* spp.) grow at the bottom of the slope where a damp swampy area forms. The ground flora is rich supporting dominant stands of Dog's Mercury (*Mercurialis perennis*) alongside Bluebell, Red Campion (*Silene dioica*) and Moschatel (*Adoxa moschatellina*). Butchers Broom (*Ruscus aculeatus*) is also present on the upper slopes.

#### **Ownership and Access**

The site is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

There is insufficient evidence from maps or species composition to conclude that this is ancient woodland, although it is clearly old.

### **Condition Statement**

Favourable

#### **Management Issues**

Sycamore has invaded the wood and should be controlled to prevent adverse effects on ground flora through a thickening of the canopy.

### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This small churchyard has a good range of grasses including Crested Dog's-tail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), meadow-grasses (*Poa* spp.) and Yellow Oat-grass (*Trisetum flavescens*). The herb flora includes Common Knapweed (*Centaurea nigra*), Field Scabious (*Knautia arvensis*), Primrose (*Primula vulgaris*) and Cowslip (*Primula veris*). However, this site is unusual in that there are also a few species that require more calcareous soils including Hoary Plantain (*Plantago media*), Burnet Saxifrage (*Pimpinella saxifraga*), Rough Hawk-bit (*Leontodon hispidus*) and Sulphur Clover (*Trifolium ochroleucon*), which is Nationally Scarce.

### **Ownership and Access**

The churchyard is open to the public.

Habitats of Principal Importance in England

Lowland Meadows

### **Selection Criteria**

HC9 – Lowland Meadows SC1 – Vascular Plants

#### Rationale

As with many churchyards, this site represents a small area of relatively unimproved, flower-rich grassland that conforms to the MG5 NVC community, corresponding to the Lowland Meadows Habitat of Principal Importance in England. The presence of the Nationally Scarce species Sulphur Clover satisfies the SC1 criteria.

### **Condition Statement**

Favourable, but declining in parts

#### **Management Issues**

The current management regime is unknown, but appears to be largely maintaining the site's interest. Some marginal areas suffer from shading and there are areas of coarser herb-poor grassland that would benefit from more frequent management with cuttings removed to decrease the nutrient levels.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This is a regularly mown churchyard, which contains a diverse range of herb species and fine grasses associated with acid and neutral grassland habitats. The majority of plants are found on the mounded graves which escape the regular cuts and provide interesting micro-climates.

Plant species include Agrimony (Agrimonia eupatoria), Common Knapweed (Centaurea nigra), Wild Carrot (Daucus carota), Oxeye Daisy (Leucanthemum vulgare), Common Bird's-foot-trefoil (Lotus corniculatus), Heath Speedwell (Veronica officinalis), Barren Strawberry (Potentilla sterilis), Tormentil (Potentilla erecta), Mouse-ear-hawkweed (Pilosella officinarum), Creeping Cinquefoil (Potentilla reptans), Sheep's Sorrel (Rumex acetosella), Trailing St John's-wort (Hypericum humifusum) and Harebell (Campanula rotundifolia), the latter being an Essex Red Data List species.

### **Ownership and Access**

The site is assumed to be in the ownership of the Church of England

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

#### **Selection Criteria**

HC13 – Heathland and Acid Grassland

### Rationale

The grassland in the churchyard is a mosaic of acidic and more neutral communities, but the majority is attributable to acid grassland, matching the Lowland Dry Acid Grassland Habitat of Principal Importance England description.

### **Condition Statement**

Moderate

#### **Management Issues**

Although the intensive management reduces the prevalence of coarse grasses, the flora would benefit greatly from a less frequent cutting regime.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (minor reduction)

Conyfield Wood consists of Ash (*Fraxinus excelsior*) and birch (*Betula* sp.) with Hornbeam (*Carpinus betulus*), Aspen (*Populus tremula*) and occasional Pedunculate Oak (*Quercus robur*). Some Corsican Pine (*Pinus nigra var. maritima*) remains from earlier coniferisation and there remain blocks of planted Beech (*Fagus sylvatica*). Sycamore (*Acer pseudoplatanus*) is well established in the northern part of the wood and Field Maple (*Acer campestre*) and Crab Apple (*Malus sylvestris*) are occasional around the edges.

The ground flora reflects the acidic soil, being characterised by Bracken (*Pteridium aquilinum*), Wood Sage (*Teucrium scorodonia*), Foxglove (*Digitalis purpurea*) and Honeysuckle (*Lonicera periclymenum*), although Bluebell (*Hyacinthoides non-scripta*) is dominant in most parts. Wood Spurge (*Euphorbia amygdaloides*), Barren Strawberry (*Potentilla sterilis*), Remote Sedge (*Carex remota*) and Pignut (*Conopodium majus*) are also noteworthy amongst the ground flora. A pond towards the northern end supports a small population of Lesser Spearwort (*Ranunculus flammula*).

Pods Wood is an ancient Hornbeam coppice woodland previously extensively replanted with conifers including Scots (*Pinus sylvestris*) and Corsican Pine, with Hornbeam largely restricted to the periphery. Other broadleaved species present include Pedunculate Oak, Sweet Chestnut, elm and Beech. Parts of the woodland are dominated by dense birch and Bramble, where conifers have previously grown. The ground layer is most diverse along the network of rides and is typified by Bluebell, Wood Sage, Bracken, Bramble, Creeping Softgrass (*Holcus mollis*) and Foxglove. Wood Anemone (*Anemone nemorosa*) and Yellow Archangel (*Lamiastrum galeobdolon*) are found amongst areas of Hornbeam coppice. The north-eastern block has been cleared of its conifers and is now a valuable additional habitat containing brash and Bramble scrub, scattered Hornbeam coppice, birch and Bluebell, Sheep's Sorrel (*Rumex acetosella*) and Wood Sage.

## **Ownership and Access**

It is understood that the site is in private ownership, but is leased and managed by the Forestry Commission. Both woods are crossed by one public footpath, but there are other, permissive footpaths that allow access to the majority of the site's area.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

#### Rationale

Concyfield Wood is considered to be ancient, as is the majority of Pods Wood, their boundaries not having changed in over 150 years. The Ancient Woodland Inventory shows a large, rectangular block in the northeast corner of Pods Wood not to be ancient, but it is unclear why this is the case.

## Condition Statement

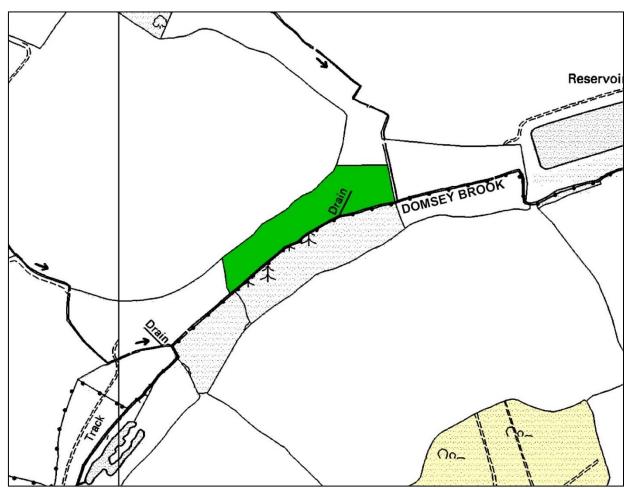
Recovering

#### Management Issues

The wood is being actively managed and in the process being reverted to broad leaf composition, many of the pines having now been removed.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)



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Located to the north side of Domsey Brook, the majority of this meadow is dry grassland with a sward including Sweet Vernal-grass (*Anthoxanthum odoratum*), Meadow Barley (*Hordeum secalinum*), Red Fescue (*Festuca rubra*), Creeping Bent (*Agrostis stolonifera*), Yorkshire-fog (*Holcus lanatus*) and Rough Meadow-grass (*Poa trivialis*). The most interesting area is in the vicinity of a drain where wet and waterlogged grassland supports two Essex Red Data List plants: Common Meadow-rue (*Thalictrum flavum*) and Common Sedge (*Carex nigra*). In addition, Ragged-Robin (*Silene flos-cuculi*), a species also in decline within the county, is also found where the drainage is poor, alongside Meadowsweet (*Filipendula ulmaria*), Common Fleabane (*Pulicaria dysenterica*) and Water Mint (*Mentha aquatica*).

## **Ownership and Access**

The site is in private ownership and there is no public access.

## Habitats of Principal Importance in England

None

## **Selection Criteria**

HC10 – River Floodplain SC1 – Vascular Plants

## Rationale

The site represents a meadow in the floodplain of Domsey Brook, being at least in part seasonally inundated, hence the presence of damp grassland flora. The presence of significant populations of Common Meadow-rue and Common Sedge, albeit localised, justifies the Vascular Plants criteria.

## **Condition Statement**

Declining overall, but favourable in parts

#### **Management Issues**

The current management regime is unknown, but is insufficient to control coarser grasses across the whole meadow. Grazing or low-intensity cutting, with the arisings removed, would improve grassland diversity, which is currently relatively herb poor. There are opportunities to expand the area of marshy grassland supporting Common Meadow-rue through sensitive water level management.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

Birch Wood comprises Pedunculate Oak (*Quercus robur*) and Sessile Oak (*Quercus petraea*) standards with Hornbeam (*Carpinus betulus*) coppice. The southern corner contains Ash (*Fraxinus excelsior*) coppice with Hornbeam and elsewhere there are occasional Sweet Chestnut (*Castanea sativa*) and Silver Birch (*Betula pendula*). The understorey is generally sparse and is made up of Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*) and, on the southeast bank of the reservoir, abundant Elder (*Sambucus nigra*).

The ground flora is generally poor, as is often the case with mature Hornbeam coppice, but does include Red Currant (*Ribes rubrum*), Wood Anemone (*Anemone nemorosa*), Honeysuckle (*Lonicera* periclymenum), Wood Sedge (*Carex sylvatica*), Greater Stitchwort (*Stellaria holostea*) and Bluebell (*Hyacinthoides non-scripta*), with Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus* agg.). In a recently coppiced area, Trailing St John's-wort (*Hypericum humifusum*) is present.

The central reservoir is surrounded by scrub and supports limited marginal vegetation and so has been excluded from the Local Wildlife Site.

#### **Ownership and Access**

The site is in private ownership, but a public footpath runs along the northeast edge of the wood.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria** HC1 – Ancient Woodland Sites

## Rationale

The wood is included in the Ancient Woodland Inventory.

## **Condition Statement**

Favourable

#### Management Issues

Coppicing has recently begun after an interval with no management, and the continuation of this practice should maintain the condition of the wood. There is a small amount of Rhododendron (*Rhododendron ponticum*) present and this should be removed before it spreads.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

Hoe Wood comprises Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) standards with Hazel (*Corylus avellana*) coppice understorey, alongside some old Sweet Chestnut (*Castanea sativa*) and Hornbeam (*Carpinus betulus*) coppice. The presence of Wild Service Tree (*Sorbus torminalis*) and Small-leaved Lime (*Tilia cordata*) is of note.

The ground flora includes Early Purple Orchid (*Orchis mascula*), Bluebell (*Hyacinthoides non-scripta*), Hairy St. John's-wort (*Hypericum hirsutum*), Dog's Mercury (*Mercurialis perennis*), Remote Sedge (*Carex remota*), Primrose (*Primula vulgaris*) and Hairy Wood-rush (*Luzula pilosa*).

#### **Ownership and Access**

The site is owned and managed by the Woodland Trust. There is no public access, although a public footpath runs along the eastern boundary.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 - Ancient Woodland Sites

#### Rationale

This woodland appears on the Ancient Woodland Inventory and supports several ancient woodland indicator plants.

## **Condition Statement**

Unmanaged

#### **Management Issues**

There is no active management of the wood at present, which would be advisable in the form of rotational coppicing, in order to maintain a favourable structure and floral diversity.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This ancient wood consists of Pedunculate Oak (*Quercus robur*) standards with coppiced Hornbeam (*Carpinus betulus*), Ash (*Fraxinus excelsior*) and Sweet Chestnut (*Castanea sativa*). Silver Birch (*Betula pendula*) and Wild Service-tree (*Sorbus torminalis*) can also be found in the canopy. The understorey includes Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*) with Field Maple (*Acer campestre*), Blackthorn (*Prunus spinosa*) and elm (*Ulmus sp.*) prominent along the northern edge.

The ground flora is relatively species-poor due to heavy shading, but does include Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*), Foxglove (*Digitalis purpurea*), Male Fern (*Dryopteris filix-mas*) and Broad Buckler Fern (*Dryopteris dilatata*). A small pond in the centre of the wood has become shaded and lacks marginal or aquatic vegetation.

## **Ownership and Access**

The wood is in private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### Selection Criteria

HC1 – Ancient Woodland Sites

#### Rationale

The wood is included in the Ancient Woodland Inventory, although there is little in the plant species composition to support this conclusion.

Condition Statement Moderate

#### **Management Issues**

There are a few small, planted conifers within the wood and poplars (*Populus* sp.) on the northern edge and these non-native species should be removed to restore the wood to a more natural community.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This ancient wood comprises elm (*Ulmus* sp.) with Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) standards over Hazel (*Corylus avellana*) coppice, Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and Holly (*Ilex aquifolium*). The understorey also includes a large amount of regeneration largely comprising Ash, Hazel and elm saplings.

The ground flora is densely shaded and is typified by Dog's Mercury (*Mercurialis perennis*), Bramble (*Rubus fruticosus*) and Common Nettle (*Urtica dioica*). Species of interest include Primrose (*Primula vulgaris*), Bluebell (*Hyacinthoides non-scripta*) and Three-nerved Sandwort (*Moehringia trinervia*) as well as Wood-sedge (*Carex sylvatica*) and Common Marsh-bedstraw (*Galium palustre*), which are found along some of the damp grassy rides.

#### **Ownership and Access**

The site is believed to be in private ownership. There is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

#### Rationale

This main body of woodland appears on the Ancient Woodland Inventory. The site includes a strip of modern scrub woodland adjacent to the road that forms a natural ecological extension to the main wood, hence the addition of HC2.

#### **Condition Statement**

Neglected coppice

#### **Management Issues**

As with all old unmanaged woodlands, a resumption of coppicing would be beneficial to maintain the high biodiversity associated with ancient woodland sites. Areas of cluttered semi-mature oaks would benefit from some selective felling.

**Review Schedule** Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This narrow strip of woodland is dominated by tall Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) coppice in the canopy with Hazel (*Corylus avellana*), Elder (*Sambucus nigra*), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*) forming a scattered shrub layer.

Bluebell (*Hyacinthoides non-scripta*) is abundant throughout the ground flora, interspersed with patches of Dog's Mercury (*Mercurialis perennis*). Goldilocks Buttercup (*Ranunculus auricomus*), an indicator of ancient woodland, is also present.

#### **Ownership and Access**

The site is in private ownership. There is no public access, although a bridleway passes its western boundary.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### Selection Criteria

 $HC1-Ancient \ Woodland \ Sites$ 

#### Rationale

Although this strip is too small to be listed on the Ancient Woodland Inventory, a strong wood bank and ditch on the west edge of the wood combined with the general woodland structure and flora allude to this being an ancient wood fragment.

#### **Condition Statement**

Favourable

## Management Issues

There are no particular management issues. This small, linear woodland has good structure and does not appear to require active management at present.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

These small woodlands are similar in character and in the past were probably linked as part of a larger woodland block. Both Long Grove and Round Grove have an Ash (*Fraxinus excelsior*), Field Maple (*Acer campestre*) and elm (*Ulmus* sp.) canopy with Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) present in the dense understorey. Long Grove also contains some larger oak standards (*Quercus robur*) and Hazel coppice (*Corylus avellana*).

The ground flora in both woods includes Dog's Mercury (*Mercurialis perennis*), but is mainly rank with an abundance of Common Nettles (*Urtica dioica*), Cow Parsley (*Anthriscus sylvestris*) and Cleavers (*Galium aparine*). Long Grove contains a greater number of species than the smaller Round Grove, including Enchanter's-nightshade (*Circaea lutetiana*), Meadowsweet (*Filipendula ulmaria*) and Wood Avens (*Geum urbanum*).

#### **Ownership and Access**

The site is in private ownership. There is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## Selection Criteria

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites SC1 – Vascular Plants

#### Rationale

The woodlands do not appear to be ancient based on their structure and poor ground flora. However, these have been shown to be wooded since at least 1870s and are considered to match the description of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England.

#### **Condition Statement**

Unfavourable

#### **Management Issues**

The woods are not currently managed and selective coppicing would benefit their structure and ground flora, but given the size of these woodlands, this should be limited. A large Pheasant enclosure within Long Grove is having a negative impact on structure and ground flora.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

Church House Wood has a mixed canopy of Pedunculate Oak (*Quercus robur*), Sweet Chestnut (*Castanea sativa*) and Alder (*Alnus glutinosa*) with an understorey which includes Spindle (*Euonymus europaeus*), Holly (*Ilex aquifolium*), Hazel (*Corylus avellana*) and Midland Hawthorn (*Crataegus laevigata*).

The ground flora is dominated by Bluebell (*Hyacinthoides non-scripta*) and has localised patches of Dog's Mercury (*Mercurialis perennis*) and Red Campion (*Silene dioica*), which are in places succeeded by locally dominant Bracken (*Pteridium aquilinum*) later in the season. Other species recorded include Wood Sage (*Teucrium scorodonia*) and Foxglove (*Digitalis purpurea*), confined to the drier areas of the woodland, and Wood Speedwell (*Veronica montana*) found in the damper locations.

#### **Ownership and Access**

The site is in private ownership. Public access is restricted to a central path leading from Rectory Road to the north.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

This woodland appears on the Ancient Woodland Inventory and supports a small number of woodland indicator plants.

## **Condition Statement**

Unmanaged

#### **Management Issues**

There appears to be no active management of the wood at present, which would be advisable in order to maintain a favourable structure and floral diversity.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site has developed from low-intensity clay extraction over a period in excess of 100 years. This has resulted in a rich mosaic of brownfield wildlife habitats, including wet willow (*Salix* spp.) scrub woodland, marsh, open water habitats and flower-rich, sparsely vegetated ground.

Areas of open ground support a range of short perennials and other herbs such as Common Centaury (*Centaurium erythraea*), Wild Teasel (*Dipsacus fullonum*), Bristly Oxtongue (*Helminthotheca echioides*) and Common Ragwort (*Senecio jacobaea*). The low-lying centre of the quarry supports locally dominant willows (*Salix* spp.) alongside lush open areas of willowherbs (*Epilobium* spp.), horsetails (*Equisetum* sp.), Hard Rush (*Juncus inflexus*), Common Fleabane (*Pulicaria dysenterica*) and Lesser Bulrush (*Typha angustifolia*). There are patches of locally dominant Common Reed (*Phragmites australis*) alongside Tufted Hair-grass (*Deschampsia cespitosa*) and Water Mint (*Mentha aquatica*).

Adjacent higher banks support dense areas of Brambles (*Rubus fruticosus* agg.) with birch (*Betula* sp.) interspersed with Traveller's-joy (*Clematis vitalba*). Semi-mature woodland lies on the raised western ridge at the original ground level, with some large Pedunculate Oak (*Quercus robur*) standards with underlying Bluebell (*Hyacinthoides non-scripta*) and Dog's Mercury (*Mercurialis perennis*).

The brownfield invertebrate fauna includes the Nationally Rare (RDB3) Small Blue Carpenter-bee (*Ceratina cyanea*), which utilises old Bramble scrub and the flowers of ragwort whilst the numerous other banks of sand and clay across the upper parts of the site provide habitat for many other invertebrate groups. This Local Wildlife Site lies within a larger Geological Site of Special Scientific Interest.

#### **Ownership and Access**

The site is in private ownership. There is no public access.

## Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land Lowland Mixed Deciduous Woodland Wet Woodland

## **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites HC27 – Post-industrial Sites

#### Rationale

This site has been selected on the basis of the mosaic habitat types that have become established on this postindustrial site, including wet willow scrub (HC3) and non-ancient Lowland Mixed Deciduous Woodland (HC2) alongside vegetation growing on the nutrient-poor clay substrate. The presence of the Small Blue Carpenter-bee, an Essex Red Data List species, suggests that the Important Invertebrate Assemblages criteria (SC19) may be justified, although further surveys would be required to fully explore the invertebrate assemblage.

#### **Condition Statement**

Favourable, declining

#### **Management Issues**

The site's condition is favourable, though inevitably declining through natural succession of its vegetation, in particular with increasing cover of willow, birch and Bramble scrub. Maintenance of open conditions with bare substrates is essential, which is already taking place at a localised level as fresh cutting of clay for small scale brick production still takes place. The site would benefit greatly from a comprehensive Conservation Management Plan.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

Cadgers Wood and the nearby Long Wood were once both part of the much larger Park Wood, illustrated on the 18<sup>th</sup> Century Chapman and Andre map. In the latter part of the 20<sup>th</sup> Century, part of Cadgers Wood was cleared and re-planted with broad-leafed trees, but this part is excluded from the LoWS. To the southwest of Cadgers Wood is the Park Lane Nature Reserve a mosaic of acid grassland, scrub and young oak woodland, and Park Lane itself, which is an old green lane.

## Cadgers Wood

The canopy consists of Pedunculate Oak (*Quercus robur*), Sessile Oak (*Quercus petraea*) and Ash (*Fraxinus excelsior*) with coppiced Hornbeam (*Carpinus betulus*) and Small-leaved Lime (*Tilia cordata*). Other tree species include Aspen (*Populus tremula*), birch (*Betula sp.*), elm (*Ulmus sp.*) and Wild Service-tree (*Sorbus torminalis*). The understorey is scattered and made up primarily of Hawthorn (*Crataegus spp.*), Blackthorn (*Prunus spinosa*) and Elder (*Sambucus nigra*) with Bramble (*Rubus fruticosus agg.*) dominating parts of the ground flora.

The ground flora is richest in the southern half where it includes abundant Bluebell (*Hyacinthoides non-scripta*) alongside Wood Anemone (*Anemone nemorosa*), Three-nerved Sandwort (*Moehringia trinervia*), Enchanter's Nightshade (*Circaea lutetiana*), Wavy Hair-grass (*Deschampsia flexuosa*), Remote Sedge (*Carex remota*), and Primrose (*Primula vulgaris*). Cuckooflower (*Cardamine pratensis*) and Bugle (*Ajuga reptans*) are found along the damp rides in the north-west. Recently coppiced areas include Foxglove (*Digitalis purpurea*), Trailing St John's-wort (*Hypericum humifusum*) and Marsh Thistle (*Cirsium palustre*), with locally dominant Bracken (*Pteridium aquilinum*).

#### Park Lane Nature Reserve

This area of local amenity comprises tussocky grassland with scattered young Pedunculate Oak trees and Bramble thickets with dense Blackthorn scrub adjacent to Cadger's Wood. The grassland sward is grazed short in places by rabbits but is generally thick and lacking in flowers. Yorkshire-fog (*Holcus lanatus*) is abundant with Common Bent (*Agrostis capillaris*) and Creeping Bent (*Agrostis stolonifera*). Herbaceous species include Common Bird's-foot-trefoil (*Lotus corniculatus*), Greater Bird's-foot-trefoil (*Lotus uliginosus*), Common Sorrel (*Rumex acetosa*), Compact Rush (*Juncus conglomeratus*), Trailing Tormentil (*Potentilla anglica*), Agrimony (*Agrimonia eupatoria*), Sheep's Sorrel (*Rumex acetosella*) and Common Centaury (*Centaurium erythraea*). Cuckooflower and Velvet Bent-grass (*Agrostis canina*), a scarce grass in Essex, have previously been recorded.

## Park Lane

This ancient lane comprises mature hedge banks either side of the track with good structure and an assemblage of woody species, including both Sessile Oak (*Quercus petraea*) and Pedunculate Oak, Hazel coppice (*Corylus avellana*), Ash, elm, Midland Hawthorn (*Crataegus laevigata*) and Field Maple (*Acer campestre*). The ground flora is mostly unremarkable, although Bluebell, Primrose, Giant Fescue (*Festuca gigantea*) and Wood Sedge (*Carex sylvatica*) are present. The lane continues over the district border into Maldon district and forms a woodland corridor linking a cluster of woodland Local Wildlife Sites.

#### **Ownership and Access**

Cadgers Wood is in private ownership and there is no public access. Park Lane Nature Reserve is owned and managed by Tiptree Parish Council and has open access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Hedgerows

#### **Selection Criteria**

HC1 – Ancient Woodland Sites HC8 – Hedgerows and Green Lanes HC13 – Heathland and Acid Grassland HC31 – Accessible Natural Greenspace

#### Rationale

Cadgers Wood is included in the Ancient Woodland Inventory, although a part of the site in the southern corner that was not cleared is omitted by mistake. Although not hugely diverse, the ground flora supports ancient status. Park Lane has ecological significance by virtue of its species composition, but also by linking other LoWS. The grassland of the Park Lane Nature Reserve is mostly acidic in character, with several key indicator species still present, and the Accessible Natural Greenspace criterion is used to include the remainder of the nature reserve, which is important for local amenity purposes.

#### **Condition Statement**

Moderate

#### Management Issues

Cadgers Wood is being managed appropriately by coppicing, which should maintain the woodland communities present. The grassland of Park Lane Nature Reserve is being dominated by coarser species and invaded by scrub, both of which threaten its diversity. Spring and autumn cutting, with the cuttings removed will improve the grass, while some of the scrub oaks and bramble thickets should be removed to retain the balance in favour of open habitats.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (extended)

Long Wood includes the remains of a much larger ancient wood known as Park Wood, which is shown on the 18<sup>th</sup> Century Chapman and Andre map. Parts of the current woodland area lie across the border in Maldon District.

The canopy mostly consists of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Hornbeam (*Carpinus betulus*) standards with Hornbeam coppice, including within the easternmost block. Silver Birch (*Betula pendula*) and Sessile Oak (*Quercus petraea*) are also present with localised Small-leaved Lime (*Tilia cordata*) coppice and occasional Sweet Chestnut (*Castanea sativa*). The understorey includes Holly (*Ilex aquifolium*), Hazel (*Corylus avellana*) and Elder (*Sambucus nigra*), but is generally sparse in areas of pure Hornbeam coppice. The edges of the wood support occasional Wild Service-tree (*Sorbus torminalis*), Field Maple (*Acer campestre*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), elm (*Ulmus sp.*) and Aspen (*Populus tremula*).

The ground flora includes Wood Anemone (*Anemone nemorosa*), Primrose (*Primula vulgaris*), Bluebell (*Hyacinthoides non-scripta*), Butcher's Broom (*Ruscus aculeatus*), Scaly Male Fern (*Dryopteris affinis*), Wood Sage (*Teucrium scorodonia*), Wood Speedwell (*Veronica montana*), Honeysuckle (*Lonicera periclymenum*) and Ramsons (*Allium ursinum*).

The eastern part of the main woodland strip, which is secondary woodland, is dominated by elm with Hawthorn scrub, some Ash and Oak and Bramble more dominant in the understorey. Damp rides in this part of the wood support Enchanter's Nightshade (*Circaea lutetiana*), Remote Sedge (*Carex remota*), Tufted Hair-grass (*Deschampsia cespitosa*), Foxglove (*Digitalis purpurea*) and Fleabane (*Pulicaria dysenterica*) as well as the uncommon woodland moss *Thuidium tamariscinum*.

#### **Ownership and Access**

The wood is in private ownership, but it is crossed by a public footpath towards its western end.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

## Rationale

The whole wood is included in the Ancient Woodland Inventory, but maps from the second half of the 19<sup>th</sup> Century show that the eastern half of the site and the north, eastern block were open fields, so both woodland criteria are applied.

## **Condition Statement**

Largely favourable

#### **Management Issues**

The wood is being managed, but large quantities of Sycamore (*Acer pseudoplatanus*) are now present, especially in the central part of the site. This species should be removed in order to maintain natural, diverse woodland communities.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

The ancient Potash Wood comprises Hornbeam (*Carpinus betulus*) coppice with Pedunculate Oak (*Quercus robur*) standards throughout. The canopy also includes Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) and the open understorey contains Elder (*Sambucus nigra*), Hawthorn (*Crataegus monogyna*) and Hazel (*Corylus avellana*) coppice. The ground cover is dominated by a carpet of Bluebells (*Hyacinthoides non-scripta*) with frequent Red Campion (*Silene dioica*) and some Pignut (*Conopodium majus*) growing along the eastern track. There is a large central Pheasant enclosure.

Seller Wood comprises Hornbeam coppice with Pedunculate Oak standards along with Ash, Field Maple, Sycamore (*Acer pseudoplatanus*) and Hazel. Replanting with conifers has occurred in two compartments, although a large eastern section has been cleared and left to the regeneration of broad-leaved woodland. The understorey is relatively sparse and includes Elder, Holly (*Ilex aquifolium*) and Midland Hawthorn (*Crataegus laevigata*). The ground flora includes abundant Bluebell and also Primrose, Wood Speedwell (*Veronica montana*) and Three-nerved Sandwort (*Moehringia trinervia*). Bracken (*Pteridium aquilinum*) is locally abundant replacing Bluebell later in the season.

These two woods are linked by Seller Lane, comprising a former trackway now only passable along the section north of Seller Wood, the other two sections forming dense bands of scrub with standards and trees grown from coppice. The hedgerows include a number of woody species including Field Maple, Hornbeam, Hazel, Pedunculate Oak, Dogwood (*Cornus sanguinea*) and Spindle (*Euonymus europaeus*). The ground flora is relatively limited but includes Bluebell and Primrose (*Primula vulgaris*). Wood Melick (*Melica uniflora*) has also been recorded.

#### **Ownership and Access**

The site is believed to be in private ownership. Public access is limited to the 500 metre section of Seller Lane, which runs along the western side of Seller Wood.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Hedgerows

#### **Selection Criteria**

HC1 – Ancient Woodland Sites HC8 – Hedgerows and Green Lanes

#### Rationale

Both Potash and Seller Wood appear on the Ancient Woodland Inventory and support appropriate indicator species, although two compartments in Seller Wood have been replanted with conifers. The green lane supports a number of woodland indicators and provides a wildlife corridor that connects both woodlands, hence the inclusion of criteria HC8.

#### **Condition Statement**

Declining overall, but favourable in parts

#### **Management Issues**

There has been some localised management but more selective felling and coppicing would be beneficial. Seller Wood would be improved by the removal of the remaining conifers, as well as control of Sycamore, which is becoming dominant in places within the northern portion. Cherry Laurel (*Prunus laurocerasus*) should be removed from Potash Wood, as it can dominate the understorey to the exclusion of ground flora. A large Pheasant pen dominates the central portion of Potash Wood, and measures to minimise the impacts would help regeneration of the ground flora here.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This ancient wood comprises Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Silver Birch (*Betula pendula*) and coppiced Hazel (*Corylus avellana*) with some planted Beech (*Fagus sylvatica*) and a scrub layer of Blackthorn (*Prunus spinosa*) and Elder (*Sambucus nigra*). Sweet Chestnut (*Castanea sativa*) dominates the central compartment.

The ground flora, though largely dominated by Bramble (*Rubus fruticosus* agg), includes areas where Bluebell (*Hyacinthoides non-scripta*) and Wood Anemone (*Anemone nemorosa*) are abundant. Also present are Remote Sedge (*Carex remota*), Broad Buckler-fern (*Dryopteris dilatata*), Male-fern (*Dryopteris filix-mas*) and locally abundant Bracken (*Pteridium aquilinum*).

## **Ownership and Access**

The site is in private ownership. A footpath runs outside the western periphery of this woodland, although there is no public access within the site.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

## Rationale

This woodland appears on the Ancient Woodland Inventory and supports a small number of associated indicator species.

## **Condition Statement**

Unmanaged, declining

#### **Management Issues**

Sycamore (*Acer pseudoplatanus*) standards and regenerating saplings are becoming increasingly dominant to the north-west and the control of this locally non-native species, including both standards and spreading saplings, is a priority. The remainder of the wood would benefit from some selective felling and a resumption of coppicing to benefit the structure and promote diversity within the ground flora.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Situated in old gravel pit workings, this wood has an undulating topography and sandy underlying substrate. It supports a diverse canopy and scrub composition with Pedunculate Oak (*Quercus robur*), including some large standards, alongside Ash (*Fraxinus excelsior*), Hornbeam (*Carpinus betulus*) and Field Maple (*Acer campestre*) standing over Spindle (*Euonymus europaeus*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*), elm (*Ulmus sp.*) and Hazel (*Corylus avellana*) coppice within the understorey.

The developing woodland flora is dominated by Dog's Mercury (*Mercurialis perennis*) and Bramble (*Rubus fruticosus* agg), with Bracken (*Pteridium aquilinum*) dominant on the higher banks to the woodland margins. Primrose (*Primula vulgaris*), Wood Sedge (*Carex sylvatica*) and Three-nerved Sandwort (*Moehringia trinervia*) are found mostly near the woodland paths. Ponds forming in the hollows have a variety of marginal species including Marsh Marigold (*Caltha palustris*), Common Marsh-bedstraw (*Galium palustre*) and Cyperus Sedge (*Carex pseudocyperus*).

#### **Ownership and Access**

The site is owned and managed by the Forestry Commission. There is public access via a footpath that crosses the wood diagonally, although an unofficial circular route is regularly frequented by dog walkers.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

## Rationale

The site is not ancient, but satisfies the definition of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England.

## **Condition Statement**

Favourable

#### **Management Issues**

Selective coppicing would benefit the woodland structure, but given the relatively small size of the wood, this should be limited to targeted compartments. Some small scale planting has been carried out recently within the north-eastern corner of the wood.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This grassland by the River Colne is part of the extensive Fordham Hall Estate, now owned and managed by the Woodland Trust. This site supports swamp habitat within the river floodplain with stands of Reed Canarygrass (*Phalaris arundinacea*), Common Reed (*Phragmites australis*), Reed Sweet-grass (*Glyceria maxima*), Soft-rush (*Juncus effusus*) and Greater Pond-sedge (*Carex riparia*) each locally dominant in a matrix of wet grassland.

Of most significance, are the large stands of Common Spike-rush (*Eleocharis palustris*), a notable species which is now uncommon in the Essex countryside due to loss of wetland habitat. Herbaceous species found within the site include Water Mint (*Mentha aquatica*), Meadowsweet (*Filipendula ulmaria*), Purple-loosestrife (*Lythrum salicaria*), Skullcap (*Scutellaria galericulata*), Common Fleabane (*Pulicaria dysenterica*) and Cuckooflower (*Cardamine pratensis*).

## **Ownership and Access**

The Woodland Trust own and manage the site. There is public footpath to the north of the site. An open stile provides access to the hay meadow to the south.

## Habitats of Principal Importance in England

Lowland Fens

## Selection Criteria

HC14 – Lowland Fen Vegetation

#### Rationale

The diverse stands of vegetation within this floodplain site represent an increasingly scarce habitat type that is consistent with the Lowland Fens Habitat of Principal Importance in England.

#### **Condition Statement**

Favourable, unmanaged

#### **Management Issues**

Hydrology is key to retaining the damp, periodically inundated conditions, and this should be monitored to ensure the diverse associated plant assemblage is maintained. Otherwise, non-intervention is largely appropriate. There are opportunities to expand the wetland habitat into the improved meadow to the south which itself previously formed part of the Local Wildlife Site.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (Reduced)

Stands of Alder (*Alnus glutinosa*) wood are scarce in Essex, thus making this streamside wood of considerable interest. Some old Alder coppice exists, along with Ash (*Fraxinus excelsior*), Hazel (*Corylus avellana*) coppice, Pedunculate Oak (*Quercus robur*), Field Maple (*Acer campestre*) and Holly (*Ilex aquifolium*) on higher ground.

The marshy ground flora is of interest for the extensive cover of Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), as well as less frequent Moschatel (*Adoxa moschatellina*). On higher ground the diverse ground flora includes Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*), Wood Speedwell (*Veronica montana*), Wood Anemone (*Anemone nemorosa*) and Hart's-tongue (*Asplenium scolopendrium*) with Red Currant (*Ribes rubrum*) in the low shrub layer.

The western portion contains open willow carr supporting tall herbs such as Meadowsweet (*Filipendula ulmaria*), Marsh Thistle (*Cirsium palustre*) and willowherbs (*Epilobium* sp.), as well as Cuckooflower (*Cardamine pratensis*) and Marsh-marigold (*Caltha palustris*).

#### **Ownership and Access**

The site is in private ownership. There is no public access.

## Habitats of Principal Importance in England Wet Woodland

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC1 – Ancient Woodland HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites SC1 – Vascular Plants

#### Rationale

The woodland does not appear on the Ancient Woodland Inventory for Essex, but the diverse ground flora and presence of large Alder coppice stools would strongly suggest the site is at least in part ancient. The Alder and willow carr represents wet woodland which satisfies the HC3 criteria. The criteria SC1 is included due to the large population of Opposite-leaved Golden-saxifrage, an Essex Red Data List species.

#### **Condition Statement**

Favourable

#### **Management Issues**

The current management regime appears to be maintaining the site's ecological interest. A general non-intervention policy would be appropriate within the sensitive marshy areas of Aldercar.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This small ancient woodland remnant comprises mainly Pedunculate Oak (*Quercus robur*) standards with Hazel (*Corylus avellana*) coppice and occasional Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*). Bramble (*Rubus fruticosus* agg) scrub is frequent throughout.

Amongst the ground flora is Wood Anemone (*Anemone nemorosa*), a plant with a strong affinity to ancient woodland, whilst Goldilocks Buttercup (*Ranunculus auricomus*), Remote Sedge (*Carex remota*) and Woodsedge (*Carex sylvatica*), additional indicator species, are present.

## **Ownership and Access**

The site is believed to be in private ownership. There is public access along the western site margins along a public footpath, but none within the main body of woodland.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

Although not listed as ancient wood on the English Nature Inventory, the structure and, in particular, the ground flora composition suggests that it is an ancient fragment.

#### **Condition Statement**

Favourable; unmanaged

## Management Issues

The woodland is too small for any extensive coppicing, although some small scale selective felling and coppicing would be likely to be beneficial within more heavily shaded central areas.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

The main body of this wood comprises two close, parallel and likely ancient watercourse hedgerows that have grown out into the intervening field to form damp woodland with an unusually rich flora.

Alder (Alnus glutinosa) is locally frequent, along with Ash (Fraxinus excelsior), Pedunculate Oak (Quercus robur) and, more recently, invasive Sycamore (Acer pseudoplatanus). There is some old Hazel (Corylus avellana) coppice, Hawthorn (Crataegus monogyna), Holly (Ilex aquifolium) and Elder (Sambucus nigra) on drier ground.

The ground flora is unusually rich in ancient woodland indicator species, including Moschatel (Adoxa moschatellina), Wild Garlic (Allium ursinum), Wood Anemone (Anemone nemorosa), Pendulous Sedge (Carex pendula), Pignut (Conopodium majus), Giant Fescue (Schedonorus giganteus), Bluebell (Hyacinthoides non-scripta), Dog's Mercury (Mercurialis perennis) and Three-nerved Sandwort (Moehringia trinervia).

#### **Ownership and Access**

The site is in private ownership. A public footpath crosses the woodland and two watercourses centrally.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 - Ancient Woodland Sites

# Rationale

Although this woodland does not appear on the Ancient Woodland Inventory, due to its small size, the presence of several key woodland indicator species strongly suggests the site is derived from woodland that is ancient, possibly as a fragment of a previously larger wooded area.

# **Condition Statement**

Unmanaged, declining

#### **Management Issues**

Sycamore has become increasingly dominant with significant regeneration of saplings and management should aim to limit its spread to maintain the overall diversity in ground flora.

# **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This green comprises species-rich grassland with acidic influences and a small pond with surrounding scrub. Cuckooflower (*Cardamine pratensis*) flourishes in the damp areas near the pond, which itself supports Lesser Spearwort (*Ranunculus flammula*) and Lesser Bulrush (*Typha angustifolia*).

The grassland varies in character with areas of freer-draining soils supporting species such as Red Fescue (*Festuca rubra*), Field Wood-rush (*Luzula campestris*), Tormentil (*Potentilla erecta*), Heath-grass (*Danthonia decumbens*) and Zigzag Clover (*Trifolium medium*). The Essex Red Data List species Sneezewort (*Achillea ptarmica*) and Velvet Bent (*Agrostis canina*) have also been recorded.

Other areas including the upper slopes support taller, coarser grasses such as Yorkshire-fog (*Holcus lanatus*) alongside Sweet Vernal-grass (*Anthoxanthum odoratum*), meadow-grasses (*Poa spp.*), Common Knapweed (*Centaurea nigra*), Grass Vetchling (*Lathyrus nissolia*) and Yellow-rattle (*Rhinanthus minor*).

#### **Ownership and Access**

The site is owned and managed by the local council. There is public access throughout.

# Habitats of Principal Importance in England

Lowland Meadows Lowland Dry Acid Grassland

#### **Selection Criteria**

HC9 – Lowland Meadows HC13 – Heathland and Acid Grassland

# Rationale

The site clearly has acidic influences with much of the grassland being consistent with Lowland Dry Acid Grassland communities. However, areas such as the upper slopes, support coarser grasses and herbs including Common Knapweed and Yellow-rattle which match the description of the Lowland Meadows HPIE.

# **Condition Statement**

Unfavourable, declining

# **Management Issues**

Several planted Ash (*Fraxinus excelsior*) trees to the lower northern portion, are now well established and are serving to shade out the grassland vegetation below; their removal would benefit the rare acid grassland flora. In addition a central portion of the site has been disturbed and enriched, possibly due to a fire. Management should aim to enhance the scarce acid grassland vegetation within the site which, in the absence of grazing, may require more frequent cutting with the arisings being removed.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Tye Grove is thought to be a small ancient woodland fragment, with a few old Hornbeam (*Carpinus betulus*) coppice stools in a canopy of mainly Ash (*Fraxinus excelsior*) and some Pedunculate Oak (*Quercus robur*) and Field Maple (*Acer campestre*). Sycamore (*Acer pseudoplatanus*) is becoming well established with locally abundant growth of saplings.

The understorey includes Spindle (*Euonymus europaeus*) and Holly (*Ilex aquifolium*) and the ground flora features abundant Bluebell (*Hyacinthoides non-scripta*) with Three-nerved Sandwort (*Moehringia trinervia*), Red Campion (*Silene dioica*) and Lesser Celandine (*Ficaria verna*).

#### **Ownership and Access**

The site is in private ownership. There is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

The structure of the wood and its flora suggest that this is an ancient woodland site, although it is too small to be listed on the inventory.

# **Condition Statement**

Unmanaged, declining

# Management Issues

Sycamore invasion is well-advanced and should be controlled to preserve an open woodland structure with a diverse ground flora.

# **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (eastern boundary amended)

This site comprises scrubby wood in the northern section and relict acidic grassland and heath to the south. The open area of Fordham Heath to the south supports a wide variety of herbs within grassland types that varies from fine acid grassland and heathland to taller neutral grassland.

In the grassland, there is locally abundant Common Knapweed (*Centaurea nigra*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Lesser Stitchwort (*Stellaria graminea*) with lesser amounts of Heath Bedstraw (*Galium saxatile*), Tormentil (*Potentilla erecta*) and Yellow-rattle (*Rhinanthus minor*). The Essex Red Data List species Sneezewort (*Achillea ptarmica*) and Harebell (*Campanula rotundifolia*) are present and other notable heathland indicator species include Heather (*Calluna vulgaris*), Heath-grass (*Danthonia decumbens*) and Oval Sedge (*Carex leporina*), concentrated in central and northern portions.

The ponds support other interesting species including Marsh-marigold (*Caltha palustris*) and Lesser Spearwort (*Ranunculus flammula*). Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*) and Bramble (*Rubus fruticosus* agg.) are established within dense central compartments.

The woodland section to the north is a mix of young trees including Pedunculate Oak and Silver Birch with Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*) scrub and dense Bramble scrub. This is mainly a dry habitat, but small wetter areas exist.

#### **Ownership and Access**

The site is owned and managed by Eight Ash Green Parish Council. There is public access throughout, including to the two sports pitches contained within the site.

# Habitats of Principal Importance in England

Lowland Dry Acid Grassland Lowland Heathland Lowland Meadows Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC9 – Lowland Meadows HC13 – Heathland and Acid Grassland SC1 – Vascular Plants

# Rationale

Much of the site supports acid grassland and heathland, although the southern grassland and eastern fringe is more akin to the mesotrophic community specified in the Lowland Meadows Habitats of Principal Importance in England (HPIE). The woodland areas are not ancient, but satisfy the definition of the Lowland Mixed Deciduous Woodland HPIE. The vascular plant criteria is applied for the presence of populations of two ERDL species: Sneezewort and Harebell.

# **Condition Statement**

Favourable, declining

# Management Issues

Scrub has steadily encroached onto previously open areas of grassland and heathland in recent decades and management should focus on maintaining and increasing the extent of the areas of acid grassland. This will involve clearance of trees and bushes.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (boundary around football pitch amended)

This site comprises what remains of two disused sand pits following recent development within this area. Recent disturbance and landscaping work means that the vegetation and topography is much changed within the remaining areas of the former "Stanway Pit" to the south and "Oldhouse Farm Pit" to the north.

An extensive area of brownfield invertebrate habitat still remains comprising bare ground of nutrient poor sand and gravels alongside two notable sections of sparsely vegetated cliffs to the west, as well as an area of birch (*Betula* sp.) and willow (*Salix* sp.) scrub to the south-west. The disturbed ground has been colonised by short perennial and tall ruderal vegetation such as Blue Fleabane (*Erigeron acris*), Common Centaury (*Centaurium erythraea*), Wild Teasel (*Dipsacus fullonum*) and willowherbs (*Epilobium* sp.), providing nectar sources for a range of invertebrates.

Previous records for the site include the Red Data Book and UK SPIE digger wasp *Cerceris quinquefasciata* (RDB3), its brood parasite cuckoo-bee *Hedychrum niemelai* (RDB3) and the Small Blue Carpenter-bee *Ceratina cyanea* (RDB3), with other notable records including the Small Woodlouse *Armadillidium nasatum*, the Nationally Scarce (Nb) Adonis' Ladybird and the Golden-rod Nomad Bee *Nomada rufipes*, although it is not known how many of these species persist.

#### **Ownership and Access**

The site is owned by a housing developer. There is public access along a new landscaped track within the main western portion, which appears to have been set aside as a public open space.

# Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land

#### **Selection Criteria**

HC27 – Post-industrial Sites SC19 – Important Invertebrate Assemblages

#### Rationale

The site still presents features and habitats that are likely to support good invertebrate assemblages and the use of the Post-industrial Sites criteria defines the extent of these open mosaic habitats. Based on past records, criteria SC19 has been included as it is likely that a significant invertebrate assemblage still remains.

# **Condition Statement**

Declining, following catastrophic loss

# **Management Issues**

The site is in a state of flux with current development pressures; in terms of conservation management the priority should be to retain remaining brownfield habitats and features. Maintenance should be guided by a Conservation Management Plan which would ensure that scrub encroachment is kept in check, that some level of disturbance is maintained and that the amenity and conservation functions are balanced. Further changes to the site's boundary are likely as development progresses.

Review Schedule Site Selected: 2008 Reviewed: 2015 (reduced)

This large ancient wood is composed predominantly of Pedunculate Oak (*Quercus robur*) standards and some Ash (*Fraxinus excelsior*), Sweet Chestnut (*Castanea sativa*) and Alder (*Alnus glutinosa*). The varied understorey includes Hazel (*Corylus avellana*) coppice with both Hawthorn (*Crataegus monogyna*) and Midland Hawthorn (C. *laevigata*) and provides plentiful nesting habitat for birds, including a good population of Nightingale. A free-draining area to the north contains Silver Birch (*Betula pendula*) with dense underlying Bramble (*Rubus fruticosus agg.*) and patches of Bracken (*Pteridium aquilinum*).

An extensive carpet of Bluebell covers the drier slopes, beneath the canopy and in the open cleared areas, replaced by Bracken later in the season. The ground flora also includes Yellow Archangel (*Lamiastrum galeobdolon*) and Pignut (*Conopodium majus*) as well as the noteworthy Early Purple Orchid (*Orchis mascula*), confined to a small area on the north edge of the wood. The banks of the western stream support a dense patch of Ramsons (*Allium ursinum*). Otherwise, marshy streamside habitat supports plants such as Opposite-leaved Golden Saxifrage (*Chrysosplenium oppositifolium*), an Essex Red Data List species, and Marsh Marigold (*Caltha palustris*). The Nationally Scarce Species of Principal Importance in England White-letter Hairstreak butterfly is amongst the invertebrates recorded in this woodland.

#### **Ownership and Access**

The site is owned and managed by the Woodland Trust and is crossed by public footpaths, with additional courtesy paths allowing access to all parts of the wood.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites SC1 – Vascular Plants

# Rationale

The bulk of this woodland appears on the Ancient Woodland Inventory, which is consistent with the presence of several ancient woodland indicator plants including a significant Bluebell population. A more recent woodland compartment provides a valuable buffer and extension, which satisfies the description of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England.

#### **Condition Statement**

Favourable; neglected coppice

# **Management Issues**

There appears to be little active management at present, and a resumption of small-scale coppicing on a long term rotation would likely benefit the woodland structure and ground flora.

**Review Schedule** Site Selected: 1991

Reviewed: 2008, 2015 (extended)

This site comprises the less active parts of this large working sand pit, comprising steep, sparsely vegetated cliffs and banks, flower-rich ruderal grasslands, areas of developing scrub and several more or less permanent bodies of water. Older, undisturbed portions of the quarry support willow (*Salix* spp.) scrub, which forms a dense northern block and dominates the margins of the three main lakes. Bramble scrub (*Rubus fruticosus* agg.) covers the base of the cliffs in places. Areas of exposed sand and gravels within more recently disturbed areas support short perennials and tall ruderals such as Blue Fleabane (*Erigeron acris*), Common Centaury (*Centaurium erythraea*), Wild Teasel (*Dipsacus fullonum*), Sticky Groundsel (*Senecio viscosus*), Perforate St John's-wort (*Hypericum perforatum*), Marsh Cudweed (*Gnaphalium uliginosum*) and Common Evening-primrose (*Oenothera biennis*).

Soft Shield-fern (*Polystichum setiferum*), an Essex Red Data List species, occurs on the high eastern bank tops at the original ground level alongside a band of Brambles. The site includes a small woodland compartment south of Furze Hall, which supports some old Pedunculate Oak (*Quercus robur*) pollards with abundant Bluebell (*Hyacinthoides non-scripta*), which gives way to Bracken (*Pteridium aquilinum*) later in the season.

Brownfield sites such as this in the Colchester area are known to support important and characteristic invertebrate assemblages and past survey work undertaken from the accessible parts of this site revealed this to also be the case here. There are records of ten Nationally Scarce species of solitary bees and wasps, including *Lasioglossum xanthopus*, along with its Nationally Vulnerable (RDB2) brood-parasite *Sphecodes spinulosus* at its only known north Essex location. Smooth Newts, Common Frog and Common Toad (now a Species of Principal Importance in England) have also been recorded in the past together with breeding Sand Martins and Little Ringed Plovers.

# **Ownership and Access**

Tarmac own and manage this operational site and there is no public access apart from along a public footpath that crosses from north to south. Another public footpath runs alongside the eastern boundary.

#### Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC27 – Post-industrial Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites SC19 – Important Invertebrate Assemblages

# Rationale

The site supports a mosaic of habitats including standing water, sandy cliffs, scrub and flower-rich disturbed ground and is clearly post-industrial, the most active areas, at present, being excluded. The woodland compartment is not ancient, but satisfies the definition of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England and provides a valuable extension. Although there is no recent invertebrate data, the habitats and features present are such that it is likely that a significant assemblage still exists. Although an ERDL species, the Soft Shield-fern population is not sufficiently significant to satisfy the SC1 criteria.

# **Condition Statement**

Favourable, declining

# Management Issues

The ongoing operation of the site means that the habitats present are under continual change, with some formerly open areas being overtaken by scrub and other sections subject to physical disturbance. Further changes to boundaries are likely as the site's management continues to change.

# **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (boundary changes)

This large site comprises coppice with standards woodland, an old meadow and an area of former gravel pits now supporting ponds, scrub and secondary woodland. The meadow and coppice woodland make up the Iron Latch Nature Reserve.

The old, unimproved meadow supports a diverse flora including Common Spotted-orchid (*Dactylorhiza fuchsii*), Common Knapweed (*Centaurea nigra*), Yellow-rattle (*Rhinanthus minor*) and Hairy St. John's-wort (*Hypericum hirsutum*) and also includes herbs of free draining soils including Heath Speedwell (*Veronica officinalis*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Barren Strawberry (*Potentilla sterilis*). A small population of the Essex Red Data List Green-winged Orchid (*Orchis morio*) is also present. Rabbit grazing and disturbed ground from burrows is noticeable within the central grassland area which is finer and has acidic influences. Rosebay Willowherb (*Chamerion angustifolium*) and willows (*Salix spp.*) along with shrub species such as Hawthorn (*Crataegus monogyna*) are becoming increasingly established within marginal areas where the grassland is taller and coarser.

Adjoining to the west of the meadow is a small block of old woodland with a composition dominated by Sweet Chestnut (*Castanea sativa*) coppice, except for some scattered Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) standards towards the north edge. A sparse ground flora includes Bluebell (*Hyacinthoides non-scripta*), Bramble (*Rubus fruticosus* agg.) and Three-nerved Sandwort (*Moehringia trinervia*).

The largest block of habitat, to the west of the lane, has developed on the site of an old pit that had its origins in the late nineteenth century. This area comprises predominantly Pedunculate Oak (*Quercus robur*) alongside Silver Birch (*Betula pendula*) and Ash (*Fraxinus excelsior*) with willows (*Salix* spp.) in extensive low-lying areas that hold standing water for much of the year. Higher free draining ground supports Hawthorn

(*Crataegus monogyna*), Gorse (*Ulex europaeus*) and Bramble (*Rubus fruticosus* agg.) scrub. The drier slopes support Sheep's Sorrel (*Rumex acetosella*), Wood Sage (*Teucrium scorodonia*) and Heath Speedwell in open situations not dominated by Bracken (*Pteridium aquilinum*). New and restored seasonally wet waterbodies to the east support Great Crested Newts and Smooth newts, and exhibit a diverse range of planted and naturally colonised marginal vegetation including Gipsywort (*Lycopus europaeus*), Lesser Spearwort (*Ranunculus flammula*), Water Mint (*Mentha aquatica*) and Ragged-Robin (*Silene flos-cuculi*).

# **Ownership and Access**

The site is largely in private ownership. The northern meadow and adjacent wood are managed by Essex Wildlife Trust, and this has a peripheral courtesy footpath accessed Iron Latch Lane, which is a bridleway. The former pits are unofficially frequented by many dog walkers, and mountain bikers who have constructed elaborate tracks.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Lowland Meadows

# **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites HC9 – Lowland Meadows HC11 – Other Neutral Grasslands

#### Rationale

The site includes wet woodland, a Priority Habitat Woodland Type, as well as deciduous woodland which is non-ancient but satisfies the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England description. Portions of the unimproved grassland appear to conform to a MG5 NVC community, with other areas better fitting the criteria for Other Neutral Grasslands.

#### **Condition Statement**

Favourable in part; the meadow is declining

#### Management Issues

Scrub invasion is a continual problem on the meadow, with current management barely maintaining the grassland area. Intense mountain bike and BMX activity has a localised impact on the ground flora in the former gravel pits. The ponds, some of which have been restored or created as mitigation for Great Crested Newts, should be monitored and managed appropriately to encourage this species and other pond life.

#### **Review Schedule**

Site Selected: 1991 (in part) Reviewed: 2008; 2015 (reduced)

This secluded woodland is managed as a recreational area for naturists and contains many cabins and several pathways created through the woodland. A high security fence has been erected immediately inside the woodland boundary.

Pedunculate Oak (*Quercus robur*) dominates the high canopy, along with Ash (*Fraxinus excelsior*), Field Maple (*Acer campestre*) and elm (*Ulmus* sp.), while Hazel (*Corylus avellana*) forms a shrub layer. A limited ground flora includes patches of Bramble (*Rubus fruticosus* agg) and Dog's Mercury (*Mercurialis perennis*) and Bracken (*Pteridium aquilinum*). The western woodland margins include Alder (*Alnus glutinosa*), Holly (*Ilex aquifolium*) and Hazel coppice.

A more recent wooded compartment to the east contains some large Crack Willow (*Salix fragilis*) along a central drain that supports a small area of marshy vegetation including Common Marsh-bedstraw (*Galium palustre*). On higher ground oak dominates the canopy with Hazel coppice, Blackthorn and Bramble in the understorey, and Dog's Mercury, Foxglove (*Digitalis purpurea*), Red Campion (*Silene dioica*), a currant (*Ribes* sp.) and Common Nettle (*Urtica dioica*) in the ground layer.

A southern meadow compartment provides a valuable addition to the woodland and scrub within the site, containing relatively unimproved freely draining turf with a number of anthills created by the Yellow Meadow Ant (*Lasius flavus*) in the absence of mowing. The grassland is maintained by Rabbit grazing and supports finer bents (*Agrostis* spp.) and meadow-grasses (*Poa* spp.) with Sheep's Sorrel (*Rumex acetosella*) and Field Scabious (*Knautia arvensis*) amongst the relatively herb-poor sward. The grassland area is flanked by Blackthorn (*Prunus spinosa*) and Bramble scrub with some large overhanging oaks to the north.

# **Ownership and Access**

The site is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC28 – Small-component Mosaics

# Rationale

Spring Wood appears on the Ancient Woodland Inventory. The eastern woodland extension is more recent but contains a varied structure and flora that satisfies the description of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England. The southern grassland and scrub mosaic form a valuable addition to the site and are included under HC28.

#### **Condition Statement**

Unfavourable (ancient woodland); favourable in parts (grassland, scrub and non-ancient woodland)

#### Management Issues

The ancient Spring Wood is heavily used as a naturist retreat, and there are significant associated impacts on the woodland structure and ground layer relating to the ongoing disturbance and infrastructure. Within the grassland compartment, rabbit grazing appears to be largely maintaining the open habitat, although scrub encroachment threatens the current mosaic.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (extended, internal boundary remapped)

Stitching Wood has a broadleaved canopy of Pedunculate Oak (*Quercus robur*) standards and mature Ash (*Fraxinus excelsior*) coppice, with Hazel (*Corylus avellana*) coppice dominating most of the sub-canopy layer. Other tree species include Sweet Chestnut (*Castanea sativa*) and Silver Birch (*Betula pendula*), whilst scrubby Hawthorn (*Crataegus monogyna*) is found on the wood margins.

Bluebell (*Hyacinthoides non-scripta*) and Wood Anemone (*Anemone nemorosa*) are frequent in the ground flora beneath with Bracken (*Pteridium aquilinum*) dominating later in the summer. The largest of several glades occurs in the west of the woodland where an open area adjacent to a pheasant pen supports tall grasses and locally dominant Bracken. Other typical species within the ground layer include Greater Stitchwort (*Stellaria holostea*), Dog's Mercury (*Mercurialis perennis*), Bramble (*Rubus fruticosus* agg.) and Honeysuckle (*Lonicera periclymenum*).

#### **Ownership and Access**

The site is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 - Ancient Woodland Sites

#### Rationale

This woodland appears on the Ancient Woodland Inventory and supports a small number of indicator plants.

# Condition Statement

Favourable

# **Management Issues**

A resumption of small scale coppicing and selective felling in cluttered areas of younger oak and birch would benefit the overall structure and allow light into the ground layer.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This wood on a gentle south-facing slope is dominated by Pedunculate Oak (*Quercus robur*), with Wild Cherry (*Prunus avium*) scattered throughout. Coppiced Hazel (*Corylus avellana*) forms a patchy shrub canopy, alongside Holly (*Ilex aquifolium*), Bramble (*Rubus fruticosus* agg.) and Honeysuckle (*Lonicera periclymenum*).

Bluebell (*Hyacinthoides non-scripta*) is dominant within the ground layer throughout the majority of this ancient woodland, being replaced later in the season by local Bracken (*Pteridium aquilinum*) and Foxglove (*Digitalis purpurea*). Wood Anemone (*Anemone nemorosa*) is also present, being mostly confined to the northeast corner of the wood.

#### **Ownership and Access**

The site is in private ownership and there is no public access.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

This woodland appears on the Ancient Woodland Inventory, containing some large oak standards and a small number of indicator plants.

# Condition Statement

Favourable

# **Management Issues**

The woodland appears to be well-managed, falling within the grounds of the adjacent property. Small scale tree works is maintaining an open canopy which includes some small glades, although some of these have been planted with young conifers.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (minor reduction)

This small churchyard, though kept closely mown, contains areas of relict unimproved grass where species of interest survive. Pignut (*Conopodium majus*) is found in a localised area to the north of the church, with Cuckooflower (*Cardamine pratensis*) nearby. Shining Crane's-bill (*Geranium lucidum*) is found near tombs and marginal bank habitat. During late summer, a number of waxcap mushrooms (*Hygrocybe* sp.) are found within the short grass to the south-east of the church, these being indicative of unimproved free-draining turf.

# **Ownership and Access**

The churchyard is open to the public.

# Habitats of Principal Importance in England

None

# Selection Criteria

HC11 – Other Neutral Grasslands

# Rationale

As with many churchyards, this site represents a small area of relatively unimproved grassland, although the flora is relatively species-poor. The grassland is included under HC11 as the species do not conform to the NVC MG5 community, as required for Lowland Meadows.

# **Condition Statement**

Unfavourable

# **Management Issues**

Areas of the churchyard appear to be suffering from nutrient enrichment, resulting in the flora associated with older unimproved grassland being out-competed. Sympathetic management including more frequent cutting, with the arisings removed, would encourage a finer and more diverse sward.

# **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (minor reduction)

This ancient wood is composed of Pedunculate Oak (*Quercus robur*) standards, Sweet Chestnut (*Castanea sativa*) trees from coppice and Silver Birch (*Betula pendula*) over Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*). The ground flora displays a range of woodland species, including Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*) and Primrose (*Primula vulgaris*), with damper areas supporting Skullcap (*Scutellaria galericulata*) and Moschatel (*Adoxa moschatellina*). Species indicative of freely draining acidic soils are also present in drier areas, including Climbing Corydalis (*Ceratocapnos claviculata*), Wood Sage (*Teucrium scorodonia*), Foxglove (*Digitalis purpurea*) and Bracken (*Pteridium aquilinum*).

An area of sloping woodland adjacent to Coppins Meadow appears to be more recent woodland that comprises mainly elm (*Ulmus* sp.), Hazel coppice, Pedunculate Oak standards, Field Maple (*Acer campestre*), birch (*Betula* sp.) and willow (*Salix* sp.). The ground flora is diverse across both dry upper slopes and damp lower ground, with notable species on the upper slopes including Wood Speedwell (*Veronica montana*), Three-nerved Sandwort (*Moehringia trinervia*), Wood Spurge (*Euphorbia amygdaloides*), Barren Strawberry (*Potentilla sterilis*), Dog's Mercury (*Mercurialis perennis*) and Bluebell (*Hyacinthoides non-scripta*). A number of wet flushes and drains promote a marshy flora which includes Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), an Essex Red Data List species, as well as Common Marsh-bedstraw (*Galium palustre*), Yellow Pimpernel (*Lysimachia nemorum*), Bugle (*Ajuga reptans*), Wood-sedge (*Carex sylvatica*), Remote Sedge (*Carex remota*) and Moschatel.

#### **Ownership and Access**

The site is in private ownership. A public right of way runs within the western woodland margins alongside Coppins Meadow, and skirts the north-eastern margins of Cook's Wood.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

# Rationale

The majority of the woodland appears on the Ancient Woodland Inventory and supports ancient woodland indicator plants. The western compartment adjacent to Coppins Meadow is not certainly ancient, but has been included as an addition to Cook's Wood for its significant diverse ground flora and structure. Although an ERDL species, the Opposite-leaved Golden-saxifrage population is not sufficiently significant to satisfy the SC1 criteria.

# **Condition Statement**

Favourable; neglected coppice

# **Management Issues**

Overall, the current management appears to be maintaining a remarkably diverse flora within this varied woodland site. Selective removal of Rhododendron (*Rhododendron ponticum*) and Cherry Laurel (*Prunus laurocerasus*) to the northwest of the site is important before these invasive species become further established. Thinning out the conifers in the northwest would allow the neighbouring oaks to become better established, although some could remain to benefit associated birds such as Goldcrest and Coal Tit.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site includes a series of willow plantations and native wet woodland, comprising a mosaic of semi-natural and planted woodlands over a grassy and marshy ground cover, forming a valuable part of the Roman River Valley wildlife corridor. The sloping banks to the west of Ram Plantation are owned by Colchester Zoo and have been subject to various enhancement works associated with the creation of a new wildlife area, which includes ponds, marshy areas and board walks.

#### Ram Plantation and Willow Carr

South of the Roman River and west of Ram Plantation lies a large willow carr plantation with Bramble (*Rubus fruticosus* agg.), Meadowsweet (*Filipendula ulmaria*), Common Nettle (*Urtica dioica*), Wild Angelica (*Angelica sylvestris*) and willowherbs (*Epilobium* spp.) dominating much of the ground cover. Some large Alders (*Alnus glutinosa*) line sections of the riverbank along with Crack Willows (*Salix fragilis*). Small Teasel (*Dipsacus pilosus*) is locally abundant along the southern margins of the plantation.

Ram Plantation itself includes Ash (*Fraxinus excelsior*) and Pedunculate Oak standards, which make way for large Sweet Chestnut (*Castanea sativa*) which, in turn, are replaced by Alders along the lower slopes. The ground flora is generally sparse and is typified by Bracken (*Pteridium aquilinum*) and Foxglove (*Digitalis purpurea*) on higher ground and occasional Dog's Mercury (*Mercurialis perennis*) and Opposite-leaved Golden-saxifrage amongst the Alders.

A small area of older elm (*Ulmus* sp.), Hazel (*Corylus avellana*) and Pedunculate Oak (*Quercus robur*) woodland towards Heckfordbridge supports Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*) along a small tributary.

# Cansdale's Garden and Aldercar

This area of sloping wet woodland contains large areas of Alder carr and a diverse flora associated with the combination of marshy and dry woodland habitats. The upper slopes support a canopy of Pedunculate Oak, Hazel, Ash and Field Maple (*Acer campestre*) with Dog's Mercury and Bluebell (*Hyacinthoides non-scripta*) being dominant amongst the ground flora, which also includes Wood Anemone (*Anemone nemorosa*). On lower ground, the wet flushes and damp ground beneath the Alder and willow canopy support a range of flowering plants including Marsh-marigold (*Caltha palustris*), Moschatel (*Adoxa moschatellina*), Yellow Pimpernel (*Lysimachia nemorum*) and Small Teasel with Opposite-leaved Golden-saxifrage and Dog's Mercury being locally dominant. There are also localised stands of pond-sedge (*Carex* sp.) amongst Yellow-flag (*Iris pseudacorus*), Gipsywort (*Lycopus europaeus*) and Bittersweet (*Solanum dulcamara*).

#### Eastern Woods

Much of this area of wet woodland comprises willow and poplar plantation with extensive stands of sedges and tall herbs dominating the ground flora, including pond-sedges (*Carex* spp.), willowherbs, Common Nettle, Bramble, Meadowsweet, Marsh Woundwort (*Stachys palustris*) and Small Teasel. Amongst the more open areas the plants of interest include Moschatel, Wood Anemone, Skullcap (*Scutellaria galericulata*) and Remote Sedge (*Carex remota*). Along the northern slopes there are marginal patches of dense and scrubby woodland comprising Pedunculate Oak, Hazel coppice, Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*), birch (*Betula* sp.) and Field Maple. To the north of the Roman River is a small but extraordinary piece of Alderwood, which is relatively dry on its lower slopes but has developed a large, very wet and presumably spring-fed sedgebed in the upper, northern section.

# **Ownership and Access**

The site is in private ownership. There is no public access to the site with the exception of a footpath that crosses the Roman River and follows to the west of Cansdale's Garden aldercar.

# Habitats of Principal Importance in England

Wet Woodland Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

- HC1 Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites
- HC3 Other Priority Habitat Woodland Types on Non-ancient Sites
- $SC1-Vascular\ Plants$

#### Rationale

The woodland does not appear on the Ancient Woodland Inventory for Essex and most is relatively recent, but the locally rich ground flora and presence of large Alder coppice stools would strongly suggest that Aldercar itself is at least in part ancient. The Alder and willow carr represent wet woodland which satisfies the HC3 criteria. The criteria SC1 is appropriate due to the presence of significant populations of Opposite-leaved Golden-saxifrage and Small Teasel, both Essex Red Data List species.

#### **Condition Statement**

Favourable

#### Management Issues

The current management regime, which appears to be concentrated on periodic willow harvesting and planting, appears to be maintaining the botanical interest within the site. Some targeted removal of Cherry Laurel (*Prunus laurocerasus*) within Ram Plantation would prevent its further spread.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Oliver's Thicks lies on sloping ground and ranges from freely draining Silver Birch (*Betula pendula*) and Pedunculate Oak (*Quercus robur*) wood to the north, down to old, coppiced Alder (*Alnus glutinosa*) on wetter ground close to the stream and around spring lines. A significant central portion is dominated by large Alder coppice with lush underlying marshy vegetation including Creeping Jenny (*Lysimachia nummularia*), Malefern (*Dryopteris filix-mas*), Broad Buckler-fern (*Dryopteris dilatata*) and three Essex Red Data List species: Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), Soft Shield-fern (*Polystichum setiferum*) and Lady-fern (*Athyrium filix-femina*).

Other canopy trees include some Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*), with Hazel (*Corylus avellana*) and Holly (*Ilex aquifolium*) in the understorey. The varied ground flora includes Moschatel (*Adoxa moschatellina*), Wood Anemone (*Anemone nemorosa*), Dog's Mercury (*Mercurialis perennis*), Butcher's Broom (*Ruscus aculeatus*) and abundant Bluebells (*Hyacinthoides non-scripta*). Climbing Corydalis (*Ceratocapnos claviculata*), Wood Sage (*Teucrium scorodonia*) and locally dominant Bracken (*Pteridium aquilinum*) are present within freely draining areas of birch woodland.

Butcher's Wood has been extensively cleared and replanted, leaving only a narrow belt of remaining ancient wood along its western and southern boundaries. Here, the canopy cover includes some very large coppice stools of Sweet Chestnut (*Castanea sativa*) with standards of Pedunculate Oak, Silver Birch and Ash. Holly and Hawthorn (*Crataegus monogyna*) are found in the understorey and the ground flora is dominated by Bluebells. The central portion of Butcher's Wood represents a valuable addition to the adjacent more established woodland compartments, containing a mosaic of young plantation woodland, extensive Bramble

(*Rubus fruticosus* agg.) thickets and open grassland glades and rides supporting a free-draining acidic turf that includes species such as Sheep's-sorrel (*Rumex acetosella*).

This site also includes a short section of green lane, providing a habitat link to the extensive woodlands along the Roman River to the south. The tall hedges include Alder and willows (*Salix* spp.) along with Hawthorn, Blackthorn (*Prunus spinosa*) and Elder (*Sambucus nigra*).

#### **Ownership and Access**

The site is in private ownership and public access is restricted to public footpaths running alongside all of the site's boundaries, except the northern one.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Wet Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites HC29 – Habitat Extension Mosaic SC1 – Vascular Plants

# Rationale

This majority of this woodland appears on the Ancient Woodland Inventory and supports several ancient woodland indicator plants. Non-ancient portions of the woodland satisfy HC2 criteria as Lowland Mixed Deciduous Woodland Habitat of Principal Importance for England. The site includes wet woodland, a Priority Habitat Woodland Type. The grassland and scrub components within the central portions of Butcher's Wood provide an extension in habitat to the established neighbouring woodland compartments. The criteria SC1 is included due to the large populations of Opposite-leaved Golden-saxifrage, Soft Shield-fern and Lady-fern.

#### **Condition Statement**

Favourable in established areas; unfavourable in recent plantation areas

#### **Management Issues**

The current management regime for Oliver's Thicks appears to be maintaining the site's ecological interest and non-intervention would be appropriate within the sensitive marshy areas of Aldercar. Butcher's Wood would benefit from the removal of the central conifer plantation and maintenance of open mosaic of grassland, scrub and trees.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (large addition)

This small species-rich and diverse heath is a relic of Bergholt Heath which once covered most of the area of the village, but has now been replaced by housing. The site has small areas dominated by Heath-grass (*Danthonia decumbens*) with other notable indicator species of acid grassland/heathland including Harebell (*Campanula rotundifolia*), an Essex Red Data List species, and Heather (*Calluna vulgaris*). Damper grassland found towards the east of the site has an area dominated by taller tussocks of Purple Moor-grass (*Molinea caerulea*), an increasingly unusual species in Essex. Gorse (*Ulex europaeus*) and Bracken (*Pteridium aquilinum*) form two central islands that are left uncut, and also form part of the marginal scrub cover alongside Bramble (*Rubus fruticosus* agg.). Some large Pedunculate Oaks (*Quercus robur*) overhang the heath to the south and east.

# **Ownership and Access**

The site, lying south of West Bergholt Primary School, is a public open space believed to be owned and managed by the local council.

# Habitats of Principal Importance in England

Lowland Dry Acid Grassland Lowland Heathland

Selection Criteria HC13 – Heathland and Acid Grassland SC1 – Vascular Plants

# Rationale

The site supports acid grassland and heathland consistent with the corresponding Habitats of Principal Importance in England. Heathland is now an increasingly rare Essex habitat and West Bergholt Heath is one of only four non-Site of Special Scientific Interest (SSSI) areas in Colchester Borough recorded in the Natural England Lowland Heathland Inventory. The presence of a significant population Harebell justifies the inclusion of SC1.

#### **Condition Statement**

Favourable, declining

#### Management Issues

Management issues include the spread of scrub and trees from the margins of the site and the slow process of soil enrichment brought about by leaf litter accumulation and dog fouling. Cuttings should be collected and removed from the site to avoid further enrichment and encourage the sensitive heathland flora.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (reduced)

This site comprises the wooded earthworks of Gryme's Dyke plus Stanway Green and, at the Dyke's northern end, an area of scrub. The linear embankment is largely dominated by Pedunculate Oak (*Quercus robur*), including some large veteran pollards, alongside Field Maple (*Acer campestre*), Sycamore (*Acer pseudoplatanus*), and an understorey of Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*).

The ground flora includes locally abundant Bluebell (*Hyacinthoides non-scripta*), along with Red Campion (*Silene dioica*), Pignut (*Conopodium majus*), Creeping Soft-grass (*Holcus mollis*), Wood Sage (*Teucrium scorodonia*), Greater Stitchwort (*Stellaria holostea*) and Honeysuckle (*Lonicera periclymenum*). Relict areas of open, sandy ground support species characteristic of acid grassland such as Common Bent (*Agrostis capillaris*), Sheep's Sorrel (*Rumex acetosella*) and Sticky Groundsel (*Senecio viscosus*); Harebell (*Campanula rotundifolia*) has also been recorded.

There is invertebrate interest associated with both the dead wood and dry sandy ground along the dyke, with the nationally rare (RDBK) digger wasp *Stigmus pendulus* at one of its few Essex locations. Other species of interest that have been previously recorded include the Nationally Scarce (Nb) digger wasp *Ectemnius sexinctus* and the Scarce (Na) mining bee *Andrena labiata*.

Stanway Green is a small remnant of largely unimproved free-draining grassland, comprising Common Bent, Red Fescue (*Festuca rubra*), Common Cat's-ear (*Hypochoeris radicata*), Sheep's Sorrel and Buck's-horn Plantain (*Plantago coronopus*), with Sticky Mouse-ear (*Cerastium glomeratum*), Pignut, Parsley-piert (*Aphanes arvensis* agg.), Field Wood-rush (*Luzula campestris*) and Blinks (*Montia fontana*) also being previously recorded. A Daubenton's bat maternity roost has been recorded within a large oak adjacent to Stanway Green.

# **Ownership and Access**

The site is believed to be owned and managed by Colchester Borough Council, and has public access throughout along a footpath and cycle route that spans the entire length of Gryme's Dyke.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC30 – Wildlife Corridors SC19 – Important Invertebrate Assemblages

# Rationale

Extending almost three kilometres in length, Gryme's dyke represents an important wildlife corridor through Western Colchester. The structure and flora suggest that this is at least in part derived from an ancient woodland site, although some portions of semi-mature oak are clearly of younger age matching the criteria HC2. It has previously supported a number of rare invertebrates and habitat features likely to favour such species are still present, hence the inclusion of SC19.

#### **Condition Statement**

Favourable in parts; grassland element declining

# **Management Issues**

A lack of management in recent years has seen much of the open acid grassland being overcome by dense scrub. Stanway Green, conversely, appears to be over-managed, exhibiting a short sward more akin to regularly mown amenity grassland. A more sensitive management regime guided by a Management Plan would benefit the acid grassland flora.

#### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This small churchyard exhibits acid grassland, with a good mix of species, and heathland and it complements the adjacent West Bergholt Heath, of which it was once a part.

Red Fescue (*Festuca rubra*), Sweet Vernal-grass (*Anthoxanthum odoratum*) and Field Wood-rush (*Luzula campestris*) are prominent in the sward with Sheep's Sorrel (*Rumex acetosella*), Mouse-ear-hawkweed (*Pilosella officinarum*), Heath Bedstraw (*Galium saxatile*), Heath Speedwell (*Veronica officinalis*) and Blue Fleabane (*Erigeron acris*).

A patch of Bracken (*Pteridium aquilinum*) is becoming established within the western corner, while Harebell (*Campanula rotundifolia*), an Essex Red Data List species, and Heather (*Calluna vulgaris*) grow in the more heath-like central area.

To the east of the site, a taller, coarser grassland sward is becoming established featuring Common Knapweed (*Centaurea nigra*), Meadow Buttercup (*Ranunculus acris*), Common Sorrel (*Rumex acetosa*) and False Oatgrass (*Arrhenatherum elatius*). Cuckooflower (*Cardamine pratensis*) is frequent within this area of grassland early in the growing season.

#### **Ownership and Access**

The churchyard, owned and managed by the Church of England, is open to the public.

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

# **Selection Criteria**

HC11 – Other Neutral Grasslands HC13 – Heathland and Acid Grassland SC1 – Vascular Plants

#### Rationale

The site supports small areas of acid grassland and relict heathland with the associated specialised plant assemblages, which satisfy the corresponding Habitats of Principal Importance in England. The south-eastern grassland portion is more akin to semi-improved neutral grassland and is included under HC11. The presence of a well-established population of Harebell, suggests that criteria SC1 is appropriate.

#### **Condition Statement**

Favourable, declining

# **Management Issues**

Certain areas, particularly close to the church, are becoming increasingly dominated by coarse grass threatening the sensitive acid grassland flora. Sympathetic management tailored to the acid grassland/heathland community would involve more regular cutting and the removal of arisings. The use of brush cutters instead of mowers would help to avoid impacts on the large anthills present.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (minor reduction)

This site comprises a mosaic of acidic grassland and broadleaved wood, and includes part of the Essex Wildlife Trust's Lexden Gathering Grounds nature reserve.

The grassland is characterised by Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Yorkshirefog (*Holcus lanatus*) and Sheep's Sorrel (*Rumex acetosella*). Herbs typical of dry acid grassland include Whitlow-grass (*Erophila verna*), Mouse-ear-hawkweed (*Pilosella officinarum*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Bird's-foot (*Ornithopus perpusillus*). The north-eastern portion of Lexden Gathering Grounds supports a number of waxcap mushrooms (*Hygrocybe* sp.) which require unimproved free-draining turf. Within the grassland there are groups of maturing, self-sown Pedunculate Oak (*Quercus robur*). Bramble (*Rubus fruticosus* agg.) is encroaching around the grassland margins and there is a small stand of Alder (*Alnus glutinosa*) within lower lying damp ground. Minotaur Beetle (*Typhaeus typhoeus*), an uncommon species in Essex, has also been seen here.

The western woodland area includes some large, overgrown Sweet Chestnut (*Castanea sativa*) coppice stools and standards of Pedunculate Oak alongside Silver Birch (*Betula pendula*), Field Maple (*Acer campestre*), Beech (*Fagus sylvatica*) and localised Scots Pine (*Pinus sylvestris*). The understorey includes much Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*), young Sycamore (*Acer pseudoplatanus*) and Hazel (*Corylus avellana*). The flora includes locally abundant Bluebell (*Hyacinthoides non-scripta*), along with Moschatel (*Adoxa moschatellina*), Lesser Celandine (*Ficaria verna*), Spindle (*Euonymus europaeus*) and Three-nerved Sandwort (*Moehringia trinervia*).

### **Ownership and Access**

The site to the east of Cooks Lane is owned by Anglian Water Services and managed by Essex Wildlife Trust. Cooks Lane is a public footpath and there is wider public access via permissive paths.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Lowland Dry Acid Grassland

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC13 – Heathland and Acid Grassland

### Rationale

This woodland appears to be at least in part ancient, based on the presence of some large standards and associated ground flora, although parts of the woodland are more recent satisfying the HC2 criteria for Lowland Mixed Deciduous Woodland. Lexden Gathering Grounds contains grassland that satisfies the description of the Lowland Dry Acid Grassland Habitats of Principal Importance in England.

#### **Condition Statement**

Favourable, declining

### **Management Issues**

The spread of scrub within the grassland areas should be controlled through targeted scrub clearance, rather than large-scale flailing. Woodland management should aim to remove Sycamore as well as Scots Pines although a small number of the latter could be retained having some value for bird species. Some selective felling would help diversify the age structure of the woodland and scrub and reinstate some open habitats.

### **Review Schedule**

Site Selected: 1991 (in part) Reviewed: 2008; 2015 (no change)

Pitchbury Wood is an ancient woodland, the main central core of which has been largely replanted, historically with conifers and in turn replaced by young plantations of Silver Birch (*Betula pendula*), Pedunculate Oak (*Quercus robur*) and Sweet Chestnut (*Castanea sativa*). The peripheral areas are in marked contrast to the younger planation, retaining large Pedunculate Oak and Ash (*Fraxinus excelsior*) standards over Hazel (*Corylus avellana*) coppice, giving way to old Sweet Chestnut coppice with birch standards towards the south of the site.

The ground flora is typified by Bracken (*Pteridium aquilinum*), Foxglove (*Digitalis purpurea*), Male-fern (*Dryopteris filix-mas*) and Bluebell (*Hyacinthoides non-scripta*) within free-draining areas, although Bramble (*Rubus fruticosus* agg) dominates large portions of the ground cover. However, the woodland retains a diverse ancient ground flora that is best established within the recent planted woodland, within small glades, narrow rides and wet flushes. These diverse areas include locally abundant Wood Sorrel (*Oxalis acetosella*) and Remote Sedge (*Carex remota*) alongside Wood Spurge (*Euphorbia amygdaloides*), Wood Sedge (*Carex sylvatica*), Wood Speedwell (*Veronica montana*) and Yellow Pimpernel (*Lysimachia nemorum*).

The partial remains of a Neolithic double bank and ditch earthwork, covered with a carpet of Bluebells, survives on the southern edge of the wood beneath some old oak and Sweet Chestnut coppice. Wet Alder (*Alnus glutinosa*) wood exists within a small compartment on the lower slopes of the eastern boundary, where old Alder coppice stands over a localised area of marshy vegetation that includes Common Marsh-bedstraw (*Galium palustre*), Yellow Pimpernel, Pendulous Sedge (*Carex pendula*) and the Essex Red Data List species Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*).

# **Ownership and Access**

The site is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

This woodland appears on the Ancient Woodland Inventory, and this status is supported by the presence of many ancient woodland indicator plants that persist even within areas that have been replanted first with conifers, then with broad-leaved species.

#### **Condition Statement**

Favourable, unmanaged

#### **Management Issues**

The current low-input management appears to be maintaining a notably rich ground flora. Coppicing or thinning in future years will retain the diverse glades and rides within the closely planted birch and Sweet Chestnut plantation. A resumption of small scale coppicing within the remaining areas of old coppice would be beneficial. A small localised patch of Parrot's feather (*Myriophyllum aquaticum*), an invasive, non-native aquatic plant, occurs to the north of the Neolithic double bank within a low muddy area, and this should be controlled before it spreads further.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This site includes the Essex Wildlife Trust's Roman River Valley Reserve, Chest Wood, Heather Fields, Charity Wood and Needles Eye Wood, comprising ancient woodland, secondary woodland, plantations, the river and a fen-like marsh, with an additional area of secondary woodland west of High Road.

## Roman River Valley Reserve

The Roman River Valley Reserve is a botanically and structurally diverse woodland complex supporting a large range of ancient woodland indicators including Wood Anemone (*Anemone nemorosa*), Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*), Wood Sorrel (*Oxalis acetosella*), Moschatel (*Adoxa moschatellina*), Yellow Archangel (*Lamiastrum galeobdolon*), Climbing Corydalis (*Ceratocapnos claviculata*), Three-nerved Sandwort (*Moehringia trinervia*), Remote Sedge (*Carex remota*) and Red Currant (*Ribes rubrum*). The canopy and understorey is varied between different woodland compartments, but comprises mainly Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Hornbeam (*Carpinus betulus*), birch (*Betula* sp.) and Sweet Chestnut (*Castanea sativa*) with Hazel (*Corylus avellana*) coppice, Elder (*Sambucus nigra*), Holly (*Ilex aquifolium*), Dogwood (*Cornus sanguinea*), Hawthorn (*Crataegus monogyna*) and Honeysuckle (*Lonicera periclymenum*) within the understorey.

The eastern section contains a large marsh and sedge beds overplanted with Cricket-bat Willows (*Salix alba* var. *caerulea*), including stands of pond sedge (*Carex* sp.) as well as Yellow Pimpernel (*Lysimachia nemorum*), Ragged-Robin (*Silene flos-cuculi*), Common Marsh-bedstraw (*Galium palustre*), Bog Stitchwort (*Stellaria uliginosa*), Skullcap (*Scutellaria galericulata*) and Small Teasel (*Dipsacus pilosus*).

The Roman River corridor supports a diverse range of wildlife, including rare invertebrate species associated with the freshwater habitat. The Roman River is one of only two sites in Essex for the Beautiful Demoiselle (*Calopteryx virgo*), an Essex Red Data List (ERDL) Species.

# Chest Wood

This large ancient wood comprises mainly Sweet Chestnut, including recent coppice, Pedunculate Oak and dense birch over a typical light-soil ground flora dominated by Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*). The understorey includes Hazel, Field Maple and Rowan (*Sorbus aucuparia*) with Blackthorn, Hawthorn and rose (*Rosa* sp.). Chest Wood exhibits a good diversity in structure and habitat types, and supports a correspondingly large woodland flora. The dry and well-drained upper slopes contain Barren Strawberry (*Potentilla sterilis*), Climbing Corydalis, Sheep's Sorrel (*Rumex acetosella*) and Heath Speedwell (*Veronica officinalis*), whilst damp rides and wet flushes include Ragged Robin, Yellow Pimpernel, Common Marsh-bedstraw and Skullcap. Along with Bluebell, Wood Sorrel and Wood Anemone, the ground flora also includes Wood Spurge (*Euphorbia amygdaloides*), Wood Speedwell (*Veronica montana*), Wood-sedge (*Carex sylvatica*) and Cyperus Sedge (*Carex pseudocyperus*).

# Heather Fields

This area comprises secondary and mixed planted woodland, within which the remaining density of conifers, such as Scots Pine (*Pinus sylvestris*) varies considerably. The dominant broadleaved species are Silver Birch (*Betula pendula*), Sweet Chestnut and Pedunculate Oak, with Hazel coppice, Blackthorn and Gorse (*Ulex europaeus*) amongst the understorey. The ground flora includes, Creeping Soft-grass (*Holcus mollis*), Bluebell, Wood Anemone, Heath Speedwell and Wood Sage (*Teucrium scorodonia*). A small patch of Heather (*Calluna vulgaris*) survives amongst encroaching Bramble scrub, which is heavily shaded by overhanging oaks. Skullcap and Common Marsh-bedstraw grow within a shallow damp depression inside the western boundary with Chest Wood.

# Charity Wood

Charity Wood in part comprises ancient Sweet Chestnut and Pedunculate Oak woodland, including some large standards, but also includes areas of spindly birch wood with Hazel and a dense Bramble/Elder understorey, as well as remnant patches of conifers. The ground flora is at its most diverse on the lower slopes by the stream and includes Bugle (*Ajuga reptans*), Wood Anemone, Wood-sedge, Remote Sedge, Moschatel and Common Cow Wheat (*Melampyrum pratense*), an ERDL species. Also recorded are Hairy Wood-rush (*Luzula pilosa*), Smooth-stalked Sedge (*Carex laevigata*) and Wood Melick (*Melica uniflora*). There is a rich fern assemblage, with Male Fern (*Dryopteris filix-mas*), Broad Buckler-fern (*Dryopteris dilatata*), Soft Shield-fern (*Polystichum setiferum*), Lady-fern (*Athyrium filix-femina*) and Narrow Buckler-fern (*Dryopteris carthusiana*) being recorded alongside the banks of the small southern tributary of the Roman River.

More recent woodland lies on the southern stream-valley side, opposite the ancient wood to the north. It comprises a high forest structure of Pedunculate Oak, Sweet Chestnut and Silver Birch with streamside Alder (*Alnus glutinosa*). Here the ground flora is largely dominated by Bracken and Bramble but includes Creeping Jenny, Wood Speedwell, Yellow Archangel and Bluebell.

## Rifle Ranges Woodland

This recent woodland, situated west of the rifle ranges and High Road, provides a valuable extension to the Roman River woodland complex, containing a variety of woody and herb species and exhibiting the undulating topography which reflects its former use for gravel workings. Hornbeam, Sweet Chestnut, oak, Ash and birch are present within the canopy and Hawthorn, Bramble, Gorse and Blackthorn take over in areas of dense scrub. The upper slopes are sandy, dry and well-drained, being covered in Sheep's Sorrel along with Heath Speedwell, Wood Sage and Foxglove. Notable species are a single shrub of Heather and Wood Small-reed (*Calamagrostis epigejos*). The vegetation along the damper lower slopes is more lush, comprising Red Campion (*Silene dioica*), Dog's Mercury, Bluebell, Three-nerved Sandwort and Scaly Male-fern (*Dryopteris affinis*). A small area of Aldercar to the north along the banks of the river contains Opposite-leaved Golden-saxifrage. A marginal piece of grassland included within this Local Wildlife Site, west of the secondary woodland, shows a good plant assemblage along its lower slopes. Creeping Jenny, Round-leaved Fluellen (*Kickxia spuria*), Heath Speedwell, Trailing St John's-wort (*Hypericum humifusum*) are all present and Devil's-bit Scabious (*Succisa pratensis*) persists along the meadow margins.

### **Ownership and Access**

The majority of the site is in private ownership, although Essex Wildlife Trust manages part. There is public access throughout much of the woodland complex via public footpaths and associated permissive routes.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Lowland Fens

## **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC14 – Lowland Fen Vegetation SC1 – Vascular Plants

### Rationale

The woodland complex contains both ancient (Chest and Needles Eye woods) and more recent woodland compartments with a corresponding diverse flora and structure matching the description of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England. The Roman River Reserve includes damp sedge bed vegetation that corresponds to the Lowland Fens Habitat of Principal Importance in England. The site supports good populations of several Essex Red Data List plants, including Devil's-bit Scabious, Small Teasel, Opposite-leaved Golden-saxifrage and the ferns: Soft Shield-fern, Lady-fern, Narrow Buckler-fern and Scaly Male-fern.

### **Condition Statement**

Favourable; declining in places

### **Management Issues**

Some woodland management takes place and the Cricket-bat Willows are a commercial crop, but more widespread coppicing is required to maintain the diversity of woodland structure. Heather Fields could be restored to heathland with the removal of conifers and other trees and shrubs. Invasive plants such as Japanese Knotweed (*Fallopia japonica*) adjacent to the gardens of New Cut, Cherry Laurel (*Prunus laurocerasus*) within Needles Eye Wood, and Himalayan Balsam (*Impatiens glandulifera*) within the Roman River Valley Reserve should be removed to prevent their spread.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (minor changes)

This site comprises Olivers Spinney, Olivers Copse and Walk Wood, all of which exhibit features consistent with remnant ancient woodland. The latter two woods show signs of "gardening" and appear to have long been associated with the formal gardens of the adjacent house.

Olivers Spinney has a canopy of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) over Hazel (*Corylus avellana*) coppice. The ground flora is co-dominated by patches of Bluebell (*Hyacinthoides non-scripta*) and Dog's Mercury (*Mercurialis perennis*), along with some Red Campion (*Silene dioica*), Common Nettle (*Urtica dioica*) and Primrose (*Primula vulgaris*).

Olivers Copse contains mown grassy paths and there has been some planting of herbaceous species along the central stream, as well as some tree planting including Wild Service-tree (*Sorbus torminalis*). It has little understorey and a more open ground layer with species including Wood Anemone (*Anemone nemorosa*), Lesser Celandine (*Ficaria verna*) and Pignut (*Conopodium majus*).

Wall Wood has suffered serious storm damage in the past and has been extensively replanted with broadleaved trees, including Pedunculate Oak, Hornbeam (*Carpinus betulus*), Sweet Chestnut (*Castanea sativa*) (also surviving as old, wind-blown coppice stools), Beech (*Fagus sylvatica*) and Wild Cherry (*Prunus avium*). There are some very old Hazel coppice stools to the west although otherwise there is almost no shrub layer. The ground flora is species-poor, being dominated by Bluebell.

#### **Ownership and Access**

The site is in private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

### **Selection Criteria**

HC1 - Ancient Woodland Sites

#### Rationale

The structure of these woodlands suggests they are at least derived from ancient woodland, although they are not listed on the Ancient Woodland Inventory, possibly because of their small size.

## **Condition Statement**

Favourable in parts

### **Management Issues**

Over-management and a gardening approach within parts of Olivers Copse and Walk Wood could have detrimental consequences on woodland biodiversity. However, the current owners appear to have some conservation interest, with the planting of Wild Service-trees and protective dead hedging preventing deerbrowsing on old Hazel coppice stools. An improvement of the woodland structure by enhancing the shrubby understorey would be beneficial.

### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This site comprises woodland blocks of very different character. The southwest block, formerly known as Cardy's Wood, has a mixed broadleaved canopy of Pedunculate Oak (*Quercus robur*) standards with Ash (*Fraxinus excelsior*) coppice and scattered Hazel (*Corylus avellana*) coppice beneath. Upslope, away from the stream, the Hazel forms a high sub-canopy with some Silver Birch (*Betula pendula*) coppice mixed in. Bluebell (*Hyacinthoides non-scripta*) is abundant throughout this area of the wood. Primroses (*Primula vulgaris*) are found on a narrow internal bank, whilst Soft Shield-fern (*Polystichum setiferum*), listed as an Essex Red Data List species, grows on the banks by St Botolph's Brook, alongside small patches of Moschatel (*Adoxa moschatellina*) and Ramsons (*Allium ursinum*).

In contrast, the larger eastern block of woodland has a structure of Pedunculate Oak standards with scattered Silver Birch and patchy Elder (*Sambucus nigra*) and Holly (*Ilex aquifolium*). This area, lacking a good coppice structure, is clearly recent secondary woodland. The less species-rich ground flora is mainly Bramble (*Rubus fruticosus* agg) and Bracken (*Pteridium aquilinum*) with some Foxglove (*Digitalis purpurea*) and Dog's Mercury (*Mercurialis perennis*).

#### **Ownership and Access**

The site is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## Selection Criteria

HC1 – Ancient Woodland Sites

## HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

The former Cardy's Wood is likely to be ancient, based on its structure and associated ground flora, but the more recent part satisfies the HC2 criterion for Lowland Mixed Deciduous Woodland. Although an ERDL species, the Soft Shield Fern population is not sufficiently significant to satisfy the Vascular Plant criterion.

## **Condition Statement**

Favourable, unmanaged

#### **Management Issues**

There has been no management in recent years and selective coppicing would benefit the woodland structure.

Review Schedule Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Sodom Wood is thought to comprise a core of ancient streamside wood that has expanded laterally by the growth of mature, but relatively recent woodland. The canopy is mainly composed of Pedunculate Oak (*Quercus robur*), Downy Birch (*Betula pubescens*) and Ash (*Fraxinus excelsior*) with some Alder (*Alnus glutinosa*) and locally frequent Sycamore (*Acer pseudoplatanus*) and Sweet Chestnut (*Castanea sativa*). The dense understorey comprises Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*) and willows (*Salix* spp.).

The ground flora is characterised by frequent Bracken (*Pteridium aquilinum*), Bluebell (*Hyacinthoides non-scripta*), Bramble (*Rubus fruticosus* agg.), Red Campion (*Silene dioica*) and Common Nettle (*Urtica dioica*). Climbing Corydalis (*Ceratocapnos claviculata*), Three-nerved Sandwort (*Moehringia trinervia*) and Butcher's Broom (*Ruscus aculeatus*) are also present, and Lady Fern (*Athyrium filix-femina*), an Essex Red Data List species has been recorded. A spring seepage has allowed the formation of a small Lesser Pond-sedge (*Carex acutiformis*) bed, and a central damp flush within the Alder wood supports locally abundant ERDL species Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*) alongside Remote Sedge (*Carex remota*) and Yellow Pimpernel (*Lysimachia nemorum*).

#### **Ownership and Access**

The site is in private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Wet Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

HC3 - Other Priority Habitat Woodland Types on Non-ancient Sites

SC1 – Vascular Plants

## Rationale

This woodland appears to be at least in part ancient, based on the structure and associated rich ground flora, although parts within the upper slopes are more recent and satisfy the criterion for the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England. Areas of stream side Alder wood satisfy the definition of wet woodland. A good population of Opposite-leaved Golden-saxifrage satisfies the SC1 criterion.

### **Condition Statement**

Favourable; unmanaged

### **Management Issues**

The current low-input management regime appears to be maintaining the woodland's ecological interest, as it exhibits a good structure and diversity within the understorey and ground flora. No action is immediately necessary, although some coppicing or thinning may be advisable in future years.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site represents an important public open space and site for wildlife within a built up area of Colchester. The majority of the site is wooded, with a canopy comprising mainly Pedunculate Oak (*Quercus robur*), including some notable veteran oaks along the high western ridge, alongside Sweet Chestnut (*Castanea sativa*), Holly (*Ilex aquifolium*) and Silver Birch (*Betula pendula*). The ground flora includes abundant Bluebell (*Hyacinthoides non-scripta*) along with Climbing Corydalis (*Ceratocapnos claviculata*) and Wood Sage (*Teucrium scorodonia*), whilst Bracken (*Pteridium aquilinum*) dominates large parts of the ground layer later in the season. Brambles (*Rubus fruticosus agg.*) form locally dominant thickets and Sycamore (*Acer pseudoplatanus*) and Cherry Laurel (*Prunus laurocerasus*) are becoming established in places.

The grassland sward is typified by Crested Dog's-tail (*Cynosurus cristatus*) and Sweet Vernal-grass (*Anthoxanthum odoratum*) with locally abundant Lady's Bedstraw (*Galium verum*), Yellow-rattle (*Rhinanthus minor*) and Common Knapweed (*Centaurea nigra*) as well as Common Bird's-foot-trefoil (*Lotus corniculatus*) and Oval Sedge (*Carex leporina*).

### **Ownership and Access**

The site is owned and managed by Colchester Borough Council and the majority is accessible to the public, the exception being the central woodland compartment.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Lowland Meadows

### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC9 – Lowland Meadows HC31 – Accessible Natural Greenspace

## Rationale

Although located largely on man-made earthworks, at least a portion of the woodland appears to be ancient, with some very large oak standards and pollards. In addition, there is a more recent element of woodland that matches the HC2 criterion. Lexden Park is of significance to the Essex urban HAP, allowing for a diverse wildlife experience within the environs of Colchester town and therefore satisfies HC31. The site supports grassland that appears to be largely unimproved and conforms broadly to the NVC MG5 community.

#### **Condition Statement**

Favourable

### **Management Issues**

Some control of the non-native species Cherry Laurel and Sycamore is needed, and some targeted selective tree removal in cluttered areas would improve the woodland structure. The grassland appears to be retaining its diversity although cuttings should be removed and dog fouling minimised to avoid enrichment. The impact of public pressure on the site is further demonstrated by the loss of two veteran oak pollards to deliberate fires in recent years.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This sloping meadow shows a transition from freely draining grassland through to marsh, with a consequently rich flora. The drier upper slopes are typified by Common Bent (*Agrostis capillaris*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Pignut (*Conopodium majus*) and Lady's Bedstraw (*Galium verum*), with Essex Red Data List (ERDL) species Harebell (*Campanula rotundifolia*) being previously recorded. A rabbit fence has been erected around the main body of grassland, resulting in increasingly coarse vegetation such as False Oat-grass (*Arrhenatherum elatius*). ERDL plants Velvet Bent-grass (*Agrostis canina*) and Devil's-bit Scabious (*Succisa pratensis*) are present within free-draining marginal areas maintained by rabbit grazing. The lower northern grassland is damp, with Bog Stitchwort (*Stellaria uliginosa*), Cuckooflower (*Cardamine pratensis*) and Meadowsweet (*Filipendula ulmaria*) being recorded, although this is becoming rank with locally abundant Common Nettle (*Urtica dioica*), Common Ragwort (*Senecio jacobaea*) and Creeping Thistle (*Cirsium arvense*). The grassland and scattered marginal trees support a good population of bumblebees and the Minotaur Beetle (*Typhaeus typhoeus*), an uncommon species in Essex, has also been recorded.

#### **Ownership and Access**

Colchester Borough Council own and manage the site, which is open to the public.

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

#### **Selection Criteria**

HC11 – Other Neutral Grasslands HC13 – Heathland and Acid Grassland SC1 – Vascular Plants

### Rationale

The grassland is a mixture of neutral grassland, falling outside the NVC MG5 community, as well as marginal acid grassland communities which conform to the description of the relevant Habitat of Principal Importance in England, Lowland Dry Acid Grassland. The presence of Velvet Bent-grass and a good population of Devil's-bit Scabious justify the inclusion of SC1.

# **Condition Statement**

Unfavourable, declining

#### **Management Issues**

Both the upper and lower grassland areas are becoming increasingly rank and are in danger of losing their original floristic diversity. The recent erection of a rabbit fence around the main southern meadow compartment was carried out to counter grazing pressures, but this appears to be resulting in a coarser and herb-poor sward, whilst other areas are mown overly frequently. Sensitive grassland management guided by a management plan is required, including close monitoring of the effect the fencing and, if necessary, its removal.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site is an Essex Wildlife Trust nature reserve and comprises mainly ancient wood, with a strip of more recent wood along the northern edge. It has a canopy of mainly Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) with localised Small-leaved Lime (*Tilia cordata*) over an understorey of old Hazel (*Corylus avellana*) coppice with Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and locally dominant Holly (*Ilex aquifolium*).

The ground flora is characterised by large quantities of Bluebell (*Hyacinthoides non-scripta*), Wood Anemone (*Anemone nemorosa*), Moschatel (*Adoxa moschatellina*), Wood-sedge (*Carex sylvatica*) and Red Campion (*Silene dioica*), as well as more local Pignut (*Conopodium majus*), Gooseberry (*Ribes uva-crispa*) and Barren Strawberry (*Potentilla sterilis*). Two central ponds support Marsh-bedstraw (*Galium palustre*), Soft-rush (*Juncus effusus*), Bittersweet (*Solanum dulcamara*), Water-plantain (*Alisma plantago-aquatica*) and Yellow Iris (*Iris pseudacorus*).

#### **Ownership and Access**

The site is owned and managed by Essex Wildlife Trust. A public right of way runs along the western boundary of the wood and there are permissive paths through it.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

The ground flora and presence of old Small-leaved Lime coppice, suggests ancient status, even though the woodland is not listed on the Ancient Woodland Inventory. The northern more recent compartment forms a valuable addition and satisfies HC2.

# **Condition Statement**

Favourable; neglected coppice

#### **Management Issues**

Some coppicing has taken place in recent years within a small compartment of Small-leaved Lime and Hazel coppice. A resumption of rotational coppice within other areas would be beneficial to maintain the high biodiversity and rich ground flora of the site.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This village green comprises short acidic grassland separated by roads into three triangular areas, with a small southern pond and surrounding scrub providing additional habitat. The turf is typified by Common Bent (*Agrostis capillaris*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Cock's-foot (*Dactylis glomerata*) and Field Wood-rush (*Luzula campestris*). Amongst the relatively few herb species present are Sheep's Sorrel (*Rumex acetosella*), Common Knapweed (*Centaurea nigra*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Red Clover (*Trifolium pratense*), Meadow Buttercup (*Ranunculus acris*), Yarrow (*Achillea millefolium*) and Common Mouse-ear (*Cerastium fontanum*).

Heath Grass (*Danthonia decumbens*), Velvet Bent-grass (*Agrostis canina*) and the declining species Blinks (*Peplis portula*), have been recorded in the past. A source of enrichment is leaf debris from planted Horse-chestnut (*Aesculus hippocastanum*) and Turkey Oaks (*Quercus cerris*) adjacent to the pond.

## **Ownership and Access**

The site is owned and managed by the Parish Council and there is public access throughout.

# Habitats of Principal Importance in England

None

## Selection Criteria

HC11 - Other Neutral Grasslands

### Rationale

The site supports grassland that appears to be largely unimproved, but it does not conform to the NVC MG5 community required for the Lowland Meadow criterion.

#### **Condition Statement**

Unfavourable

### **Management Issues**

The meadow is mown very frequently, resulting in an almost permanently short sward and reducing its value to wildlife. In addition, the cuttings do not appear to be collected, which will, over time, result in a build-up in nutrient levels and a decrease in plant species associated with old unimproved grassland.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This site comprises as small block of clearly ancient Small-leaved Lime (*Tilia cordata*) woodland, strips of possibly ancient woodland along the Lexden Dyke earthwork and a small extent of relic acidic grassland with scattered tree and scrub cover.

The southern portion of the dyke contains some small areas of acid grassland, with encroaching Gorse (*Ulex europaeus*), Broom (*Cytisus scoparius*) and Brambles (*Rubus fruticosus* agg.). A small sloping unimproved meadow to the east of the dyke, periodically horse-grazed, is included in the site, as it is continuous with the dyke habitat and shares some of the herbs, notably Harebell (*Campanula rotundifolia*), an Essex Red Data List plant, and Sheep's Sorrel (*Rumex acetosella*).

The northern broadleaved wood, bisected by the railway line, comprises standards of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and overgrown Small-leaved Lime coppice, along with stands of Aspen (*Populus tremula*), Wild Cherry (*Prunus avium*), elm (*Ulmus sp.*) and Holly (*Ilex aquifolium*). The ground flora here includes Moschatel (*Adoxa moschatellina*), Creeping Soft-grass (*Holcus mollis*), abundant Bluebell (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*), Red Campion (*Silene dioica*) and Lesser Celandine (*Ficaria verna*).

## **Ownership and Access**

The site ownership is unknown. There is no public access within the site, but a public footpath crosses the dyke and runs along part of the western boundary.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Lowland Dry Acid Grassland

### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC13 – Heathland and Acid Grassland

## Rationale

The structure and flora strongly suggest that at least the northern portion of the woodland is ancient. More recent areas of woodland are included under the Lowland Mixed Deciduous Woodland criterion. The small southern grassland areas conform to the Lowland Dry Acid Grassland Habitat of Principal Importance in England description. Although an ERDL species, Harebell does not occur in sufficient quantities to satisfy the SC1 criterion.

### **Condition Statement**

Favourable in parts; grassland declining

#### **Management Issues**

Areas of acid grassland are being lost to scrub encroachment in the absence of management. Targeted scrub clearance would be appropriate whilst appreciating that scrub forms an interesting feature within its own right, and management should aim to strike a balance between vegetation types.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (minor addition)

This site comprises an area of willow and aldercar, which constitutes an addition to the Roman River wildlife corridor supporting a range of species indicative of wet woodland. The canopy changes from well-spaced Cricket-bat Willows (*Salix alba* var. *caerulea*) in the east, to dense areas of Alder (*Alnus glutinosa*) and Crack Willow (*Salix fragilis*) in the west, becoming increasingly scrubby and impenetrable. Some of the large fallen Crack Willows provide good habitat for invertebrates. Some old Hazel (*Corylus avellana*) coppice stools line the southern boundary.

Much of the ground layer is dominated by a dense tangle of sedges and tall herbs, the main species being pondsedges (*Carex* sp.), Reed Sweet-grass (*Glyceria maxima*), Common Nettle (*Urtica dioica*), Wild Angelica (*Angelica sylvestris*), Meadowsweet (*Filipendula ulmaria*), Great Willowherb (*Epilobium hirsutum*), Marsh Thistle (*Cirsium palustre*) and Hedge Bindweed (*Calystegia sepium*). Small Teasel (*Dipsacus pilosus*), an Essex Red Data List (ERDL) Species, Water Chickweed (*Myosoton aquaticum*), Purple-loosestrife (*Lythrum salicaria*) and Red Currant (*Ribes rubrum*) are also present amongst the tall herbs. Under the closed Alder and willow canopy the ground flora includes Dog's Mercury (*Mercurialis perennis*), Remote Sedge (*Carex remota*), Common Polypody (*Polypodium* vulgare) and ERDL species Scaly Male-fern (*Dryopteris affinis*).

#### **Ownership and Access**

The site is in private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites

#### Rationale

The Alder and willow carr represent wet woodland which satisfies the HC3 criterion, being a Habitat of Principal Importance in England (HPIE). The remainder of the woodland on higher ground is probably not ancient although it has good structure and corresponds to the Lowland Mixed Deciduous Woodland HPIE, providing an extension to the wet woodland.

#### **Condition Statement**

Favourable

### **Management Issues**

The current non-intervention management appears to be maintaining the sensitive habitat types present, although in the longer term some coppicing or thinning may be advisable.

**Review Schedule** Site Selected: 2008 Reviewed: 2015 (no change)

King's Ford Grove itself is a small area of possibly ancient woodland lying adjacent to Layer Road, the remaining part of a larger woodland block mostly now subsumed into the gardens to the north and south.

It comprises old Hornbeam (*Carpinus betulus*) coppice with standards of oak (*Quercus* spp.). The wood canopy also includes Silver Birch (*Betula pendula*) over a ground flora dominated by Bluebell (*Hyacinthoides non-scripta*) and Creeping Soft-grass (*Holcus mollis*). Wood Anemone (*Anemone nemorosa*), Wood Sage (*Teucrium scorodonia*), and Wood Sorrel (*Oxalis acetosella*) also occur in the ground layer. Lady Fern (*Athyrium filix-femina*), an Essex Red Data List species, has also been recorded. Bracken (*Pteridium aquilinum*) and Brambles (*Rubus fruticosus* agg.) dominate parts of the upper slopes.

The remainder of this site, to the east, comprises acid grassland and heathland with scattered mature Pedunculate Oak (*Quercus robur*) wood and Hawthorn (*Crataegus monogyna*) scrub. The relict heath is predominantly acidic grassland typified by Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue (*Festuca rubra*), Field Wood-rush (*Luzula campestris*) and Sheep's Sorrel (*Rumex acetosella*), with Heath Bedstraw (*Galium saxatile*) and Heather (*Calluna vulgaris*) in smaller quantities. Wood Sage (*Teucrium scorodonia*), Gorse (*Ulex europaeus*), Broom (*Cytisus scoparius*) and Bramble are present within the grassland margins.

#### **Ownership and Access**

The site is owned and managed by Defence Infrastructure Organisation. There is public access via paths around the heathland and grassland, including one public right of way connecting it with Friday Woods to the east.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Lowland Dry Acid Grassland

## **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC13 – Heathland and Acid Grassland

## Rationale

The structure and flora strongly suggest that at least the western portion of the woodland is ancient and it is illustrated on the 1777 Chapman and Andre map of Essex. More recent areas of woodland are included as representing the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England (HPIE). The eastern areas of grassland conform to the Lowland Dry Acid Grassland HPIE description.

### **Condition Statement**

Favourable

### **Management Issues**

The current management regime is unknown, but appears to be maintaining the site's interest. Scrub encroachment into grassland areas should be monitored and controlled and the woodland would benefit from periodic rotational coppicing and selective felling within areas of close-growing trees.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This small abandoned urban orchard comprises a mosaic of old fruit trees, rough grassland and spreading scrub and young woodland. The western boundary hedgerow is old and contains a number of mature Pedunculate Oaks (*Quercus robur*). As well as apples (*Malus pumila*), the orchard contains Pear (*Pyrus communis*), Sweet Chestnut (*Castanea sativa*), Walnut (*Juglans regia*) and cherry (*Prunus avium*, unknown cultivar).

The grassland in the more open parts of the site is largely made up of False Oat-grass (*Arrhenatherum elatius*) and Yorkshire-fog (*Holcus lanatus*), with Creeping Bent (*Agrostis stolonifera*) and Cock's-foot (*Dactylis glomerata*) with Meadow Fox-tail (*Alopecurus pratensis*), Rough Meadow-grass (*Poa trivialis*), Common Cat's-tail (*Phleum pratense*) and Red Fescue ((*Festuca rubra*), the latter abundant on the tops of the frequent ant hills. Herbaceous species include Cow Parsley (*Anthriscus sylvestris*), Cut-leaved Crane's-bill (*Geranium dissectum*) and Lesser Stitchwort (*Stellaria graminea*) with small quantities of Common Vetch (*Vicia sativa*), Self-heal (*Prunella vulgaris*) and Creeping Buttercup (*Ranunculus repens*).

Standing dead wood can be found within the orchard trees and some noteworthy invertebrates associated with this resource have been recorded, including the solitary wasps *Monosapyga clavicornis* and *Crossocerus cetratus*. The site also supports a locally important population of the Rose Chafer (*Cetonia aurata*), rarely recorded in Essex away from Colchester. Hedgehog and Grass Snake are also known to be present

#### **Ownership and Access**

The site is in private ownership and there is no public access.

# Habitats of Principal Importance in England

Traditional Orchards

## **Selection Criteria**

 $HC7 - Old \ Orchards$ 

## Rationale

The site fits the HPIE description for Traditional Orchards, featuring low density fruit trees interspersed with herbaceous vegetation and never having been managed intensively

## **Condition Statement**

Favourable, declining

### **Management Issues**

Although still retaining wildlife interest at a local level, as an orchard the site is declining, with no management of the fruit trees or other vegetation in recent years. The grassland is becoming rank through lack of management and *Prunus* scrub is spreading, already being dominant in some areas. The northern edge of the site is being managed inappropriately, from a conservation point of view, by the neighbouring resident without the site owner's consent.

### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (minor reduction to remove track)

The canopy comprises mainly Sweet Chestnut (*Castanea sativa*) and Hazel (*Corylus avellana*) coppice, with some large Sweet Chestnut standards, alongside Pedunculate Oak (*Quercus robur*), birch (*Betula* sp.), Ash (*Fraxinus excelsior*), Wild Cherry (*Prunus avium*) and Sycamore (*Acer pseudoplatanus*). The understorey is varied in structure and composition and includes Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Honeysuckle (*Lonicera periclymenum*) and Elder (*Sambucus nigra*).

Bramble (*Rubus fruticosus* agg.) is dominant in places but gives way to a diverse ground flora comprising abundant Bluebell (*Hyacinthoides non-scripta*) and Greater Stitchwort (*Stellaria holostea*) as well as Red Currant (*Ribes rubrum*), Wood Anemone (*Anemone nemorosa*), Three-nerved Sandwort (*Moehringia trinervia*) and Wood Sorrel (*Oxalis acetosella*).

#### **Ownership and Access**

The site is in private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

Despite the presence of several ancient woodland indicators, documentary evidence and the lack of older trees suggest that this woodland is not ancient. However, it does satisfy the definition of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England.

## **Condition Statement**

Favourable; unmanaged

### **Management Issues**

Selective removal of Sycamores would be beneficial. The overall structure of the woodland is good although some thinning and coppicing work will be needed in future years.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This streamside, wet area on the northern banks of the Roman River supports tall fen vegetation with alternating stands of Reed Sweet-grass (*Glyceria maxima*) and Great Pond-sedge (*Carex riparia*) alongside lush tall herbs such as Wild Angelica (*Angelica sylvestris*), Gipsywort (*Lycopus europaeus*) and Common Nettle (*Urtica dioica*). Common Agrimony (*Agrimonia eupatoria*) and Fragrant Agrimony (*Agrimonia procera*) have been previously recorded.

## **Ownership and Access**

The site is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Fens

## Selection Criteria

HC14 – Lowland Fen Vegetation

#### Rationale

This site forms part of an important chain of good quality wildlife habitats along the Roman River valley; although declining in quality through scrub encroachment, the site still currently contains Lowland Fen habitat corresponding to HC14.

#### **Condition Statement**

Unfavourable; declining

# **Management Issues**

A lack of management has resulted in scrub encroachment across much of the site which threatens the floristic diversity of the floodplain habitat; urgent management is required to stop the remainder being lost and to open up the former grassland areas.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

Hilly Fields comprises a complex mosaic of habitats that has developed on this strategic high point, which has seen Iron Age and Roman occupation and 17<sup>th</sup> Century forts. Named on old maps as 'Broom Heath', the site still retains significant areas of acid grassland, displaying a transition from freely draining soils near the summit, through to a neutral soil sward with scattered scrub to wet inundation grassland and swamp to the north. The southern extension has developed into mature woodland, providing contrasting habitat conditions to the more open and exposed hillslope.

The two main woodland compartments are dominated by Pedunculate Oak (*Quercus robur*), with Ash (*Fraxinus excelsior*) over what is in parts a dense understorey of Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*), Gorse (*Ulex europaeus*) and Bramble (*Rubus fruticosus* agg.). The low lying northern margins include permanently inundated ponds, a small area of wet willow (*Salix* sp.) scrub and marshy vegetation including Reed Sweet-grass (*Glyceria maxima*), Cuckooflower (*Cardamine pratensis*), Pendulous Sedge (*Carex pendula*), Marsh Thistle (*Cirsium palustre*), Tufted Hair-grass (*Deschampsia cespitosa*) and Meadowsweet (*Filipendula ulmaria*).

The upper, drier grasslands support a variety of species including Mouse-ear-hawkweed (*Pilosella officinarum*), Lady's Bedstraw (*Galium verum*), Squirreltail Fescue (*Vulpia bromoides*), Common Bent (*Agrostis capillaris*) and Sheep's Sorrel (*Rumex acetosella*). These freely draining lighter soils also support a good diversity of legumes, most notably Common Bird's-foot-trefoil (*Lotus corniculatus*), Bird's-foot (*Ornithopus perpusillus*), Fenugreek (*Trigonella foenum-graecum*) and the Essex Red Data List species Subterranean Clover (*Trifolium subterraneum*) and Spring Vetch (*Vicia lathyroides*). Bramble and Hawthorn are encroaching within the grassland, which is largely maintained by rabbit grazing. Taller semi-improved

and neutral grassland dominated by coarser grasses with fewer herb species, covers the lower open areas west of Sheepen Road and within Bunting Meadow, formerly arable land, to the north-west of the site.

The invertebrate fauna includes 11 species of bumblebee (over half the Essex total for this group), including the UK BAP species Red-shanked Carder-bee *Bombus ruderarius*, the Nationally Scarce *Bombus rupestris* and the recent UK colonist *Bombus hypnorum*. Also to be found here are the Nationally Scarce solitary bees *Andrena humilis, Andrena bimaculata, Andrena trimmerana* and *Lasioglossum quadrinotatum*; the Nationally Rare (RDB3) mining bee *Lasioglossum pauperatum* and the Nationally Scarce digger wasp *Crossocerus distinguendus*. Notable amongst the diverse butterfly fauna are Green Hairstreak (*Callophrys rubi*) and Purple Hairstreak (*Quercusia quercus*). Minotaur Beetle (*Typhaeus typhoeus*), an uncommon species in Essex, has been recorded as well as Stag Beetle (*Lucanus cervus*), a Species of Principal Important in England.

### **Ownership and Access**

The site is owned and managed by Colchester Borough Council, and is an important local public open space with access throughout.

### Habitats of Principal Importance in England

Lowland Dry Acid Grassland Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites
HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites
HC11 – Other Neutral Grasslands
HC13 – Heathland and Acid Grassland
HC31 – Accessible Natural Greenspace
SC1 – Vascular Plants
SC19 – Important Invertebrate Assemblages

# Rationale

The mosaic of habitats present within Hilly Fields form a site of high wildlife value within suburban Colchester providing an accessible green space for visitors that satisfies many separate selection criteria. The recent woodland and small area of wet willow satisfies the descriptions of the Lowland Mixed Deciduous Woodland and Wet Woodland Habitats of Principal Importance in England (HPIE). The acid grassland communities conform to the Lowland Dry Acid Grassland HPIE description and the neutral grassland, which falls outside the NVC MG5 community, forms a valuable addition to the site. The presence of Subterranean Clover and Spring Vetch justifies the inclusion of SC1, and the diverse range of invertebrates present, including SPIE and ERDL species, means that SC19 can also be applied.

#### **Condition Statement**

Favourable in parts, declining in places

#### **Management Issues**

The site's habitats are complex, and management should consider the requirements of different communities and features, according to a detailed Conservation Management Plan. This should consider how best to balance amenity requirements within a site under heavy pressures from visitors and dog walkers and its conservation maintenance. The clear priority should be to maintain or increase the areas of acid grassland habitat, which are suffering from scrub encroachment, and this will help maintain a diverse invertebrate fauna.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site comprises a series of pastures within the floodplain of the meandering River Colne, also including areas of marshland, numerous hedgerows and aquatic vegetation within the river channel itself. A wide range of grass species occur including Reed Canary-grass (*Phalaris arundinacea*), Meadow Foxtail (*Alopecurus pratensis*), Red Fescue (*Festuca rubra*), Common Bent (*Agrostis capillaris*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Yorkshire-fog (*Holcus lanatus*), Soft-brome (*Bromus hordeaceus*) and Smooth Meadow-grass (*Poa pratensis*). Wetter areas support Cuckooflower (Cardamine pratensis), Tufted Hair-grass (*Deschampsia cespitosa*), Common Marsh-bedstraw (*Galium palustre*), Reed Sweet-grass (*Glyceria maxima*), Sharp-flowered Rush (*Juncus acutiflorus*), Marsh Thistle (*Cirsium palustre*) and Lesser Pond-sedge (*Carex acutiformis*). Essex Red Data List species Brown Sedge (*Carex disticha*) also occurs locally in dense stands.

The western meadows were previously cultivated with cereal crops until 1990 when they were seeded with species of grass and wildflower as cattle pasture. They have largely retained a species-rich sward with herbs including Agrimony (*Agrimonia eupatoria*), Oxeye Daisy (*Leucanthemum vulgare*), Meadow Buttercup (*Ranunculus acris*), Common Knapweed (*Centaurea nigra*), Lady's Bedstraw (*Galium verum*), Field Scabious (*Knautia arvensis*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Wild Carrot (*Daucus carota*).

The banks of the River Colne have a diverse riverside flora, which includes stands of Reed Sweet-grass (*Glyceria maxima*), Branched Bur-reed (*Sparganium erectum*) and Water-cress (*Rorippa nasturtium-aquaticum*), alongside the marginal and aquatic species Marsh Woundwort (*Stachys palustris*), Common Water-plantain (*Alisma plantago-aquatica*), Flowering-rush (*Butomus umbellatus*), Water Figwort (*Scrophularia auriculata*), Water Mint (*Mentha aquatica*), Arrowhead (*Sagittaria sagittifolia*), Purple-loosestrife (*Lythrum salicaria*), Gipsywort (*Lycopus europaeus*) and Brooklime (*Veronica beccabunga*).

The river corridor supports a range of riparian species including invertebrates such as Banded Demoiselle along with other hunting dragonflies and damselflies, Kingfisher, Otter and a newly established population of Water Voles. Noctule bat is regularly recorded feeding over this grassland site.

### **Ownership and Access**

The site is owned and managed by Colchester Borough Council and there is widespread public access encouraged within the site along a series of public footpaths.

### Habitats of Principal Importance in England

None

## **Selection Criteria**

HC10 – River Floodplain HC11 – Other Neutral Grasslands SC12 – Breeding Water Vole Colonies

### Rationale

Extensive river flood plain sites are becoming an increasingly scarce habitat in Essex, and this site supports large areas of floodplain grassland that satisfy criteria HC10. In addition, on higher slopes the site supports neutral/semi-improved grassland (not NVC MG5 community) which satisfies criteria HC11 and provides a valuable habitat extension to the seasonally inundated lower meadows. Water Voles have recently become well-established within the site following an upstream re-introduction and Mink control measures, and the site supports ideal habitat for the expanding population.

### **Condition Statement**

Favourable in parts, declining in others

### **Management Issues**

The site is large and complex and grassland management should follow a detailed conservation management plan. The majority of grassland is actively grazed by sheep or cattle, and the timing and densities will largely dictate the structure and composition of each grassland unit. Over-grazing, as appears to be occurring within the large eastern sheep-grazed meadow, should be avoided and stocking densities carefully regulated to benefit the flora and maximise the wildlife value. The impacts of the annual circus, and other events, on the eastern meadow should be minimised where possible. Measures to control the invasive Water-fern (*Azolla filiculoides*) with the River Colne should be explored, although this species rarely dominates riverine sites and is naturally susceptible to hard winters.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This small wood is predominantly Hazel (*Corylus avellana*) and Sweet Chestnut (*Castanea sativa*) coppice with Silver Birch (*Betula pendula*), Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*) standards. Elder (*Sambucus nigra*) forms a scattered shrub canopy, alongside Holly (*Ilex aquifolium*) and Honeysuckle (*Lonicera periclymenum*). The small northern compartment contains some younger Sweet Chestnut coppice to the north of a conifer plantation. The ground layer reflects the freely draining soils, being dominated by Bramble (*Rubus fruticosus* agg) with patches of Bracken (*Pteridium aquilinum*) and Bluebell (*Hyacinthoides non-scripta*).

# **Ownership and Access**

The site is in private ownership, but a public footpath crosses the site centrally and runs alongside the western boundary.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

#### Rationale

The site appears on pre-1870s maps but does not appear to be ancient. It does, however, satisfy the definition of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England.

#### **Condition Statement**

Unmanaged

# **Management Issues**

Sycamore (*Acer pseudoplatanus*) is found throughout and should ideally be thinned out and removed over time to prevent overshading of the ground layer. Otherwise, no action is immediately necessary, although some coppicing or thinning may be advisable in future years.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site comprises woodland on the northern edge of Friday Wood that is not included within the Roman River SSSI. The woodland forms three distinct compartments, the first being a rather open canopy to the south and west along the streamside, made up of Pedunculate Oak (*Quercus robur*) and Downy Birch (*Betula pubescens*), with some Sweet Chestnut (*Castanea sativa*), Ash (*Fraxinus excelsior*), Hazel (*Corylus avellana*) and climbing Honeysuckle (*Lonicera periclymenum*). The ground flora here supports Wood Sage (*Teucrium scorodonia*), Bluebell (*Hyacinthoides non-scripta*), Remote Sedge (*Carex remota*), Three-nerved Sandwort (*Moehringia trinervia*), Stinging Nettle (*Urtica dioica*), Primrose (*Primula vulgaris*) and Lesser Celandine (*Ficaria verna*). Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus agg.*) dominate the ground cover in other areas.

A large central portion is almost entirely dominated by the exotic Cherry Laurel (*Prunus laurocerasus*), which suppresses any form of ground flora, and is spreading within the streamside woodland area. The northern compartment, within the ancient woodland boundary, has been planted with Scots Pine (*Pinus sylvestris*) and here Cherry Laurel is also becoming increasingly established at the expense of the ground flora, which includes Bramble and Bracken.

# **Ownership and Access**

The site is owned and managed by Defence Infrastructure Organisation with public access via a network of paths.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

Despite its unfavourable condition at present, the entire woodland, including the dense Cherry Laurel and Scots Pine compartments, appears on the Ancient Woodland Inventory and some ancient woodland indicator plants remain in the western area.

#### **Condition Statement**

Unfavourable, declining

#### **Management Issues**

The over-riding concern is the spread of Cherry Laurel within this woodland, and the spread of saplings into native deciduous woodland indicates a worsening situation that threatens the adjacent SSSI as well. The woodland would also be improved if the conifers would be gradually removed or significantly thinned out over time.

**Review Schedule** Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Layer Brook Pasture is a large area of sloping grassland which comprises a short sword composed of a good variety of grasses. Amongst the 14 species recorded are Sweet Vernal-grass (*Anthoxanthum odoratum*), Meadow Barley (*Hordeum secalinum*), Creeping Bent (*Agrostis stolonifera*), Crested Dog's-tail (*Cynosurus cristatus*), Yellow Oat-grass (*Trisetum flavescens*), Meadow Foxtail (*Alopecurus pratensis*) and Red Fescue (*Festuca rubra*). Field Wood-rush (*Luzula campestris*) and Soft-rush (*Juncus effusus*) are also present within the grassland sward.

The dominance of grasses results in a poor assemblage of herbs, the most common of which are Meadow Buttercup (*Ranunculus acris*), Lesser Stitchwort (*Stellaria graminea*), Creeping Thistle (*Cirsium arvense*) and Creeping Cinquefoil (*Potentilla reptans*). A number of waxcap (*Hygrocybe* sp.) and earth tongue (*Geoglossum sp.*) fungi grow within the grassland, these being indicators of short, unimproved free-draining turf.

A southern line of Pedunculate Oak (*Quercus robur*), including some large coppice stools, alongside Blackthorn (*Prunus spinosa*), Hawthorn (*Crataegus monogyna*) and Brambles (*Rubus fruticosus agg.*), is included as a complimentary habitat to the extensive grassland area.

# **Ownership and Access**

The site is owned and managed by the Defence Infrastructure Organisation. There is public access along two paths that cross the Roman River, one to the south of the tree and scrub line, the other to the north-west.

#### Habitats of Principal Importance in England

None

#### **Selection Criteria**

HC11 – Other Neutral Grasslands

#### Rationale

The Roman River constitutes part of the northern boundary and the site links the SSSI to the north and the south providing a valuable buffer area and complementary grassland habitat. The site supports grassland that appears to be largely unimproved, but it does not conform to the NVC MG5 community.

#### **Condition Statement**

Favourable

#### **Management Issues**

The meadow is kept short by rabbits and periodic sheep grazing. As with all grazed meadows, the grazing regime and stock density will determine the quality of the grassland.

#### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

The Roman town walls around Colchester are unique in the county and have developed a specialised flora, which includes several scarce species. Only the main remaining sections of the wall are indicated on the map, but the LoWS designation extends to any extant surfaces. The section between the upper and lower Castle Park is of particular significance.

Rue-leaved Saxifrage (Saxifraga tridactylites), Black Spleenwort (Asplenium adiantum-nigrum), Wall Rue (Asplenium ruta-muraria), Maidenhair Spleenwort (Asplenium trichomanes), Lesser Calamint (Clinopodium calamintha), Flattened Meadow-grass (Poa compressa) and Subterranean Clover (Trifolium subterraneum) are of particular note, all featuring on the ERDL. Other characteristic species include Hart's-tongue Fern (Asplenium scolopendrium), Thyme-leaved Sandwort (Arenaria serpyllifolia), Common Whitlowgrass (Erophila verna), Thale Cress (Arabidopsis thaliana), Fern-grass (Catapodium rigidum), Red Fescue (Festuca rubra) and Pellitory-of-the-wall (Parietaria diffusa). Non-native species such as Wallflower (Erysimum cheiri), Red Valerian (Centranthus ruber) and Ivy-leaved Toadflax (Cymbalaria muralis) also contribute to the distinctiveness of the community.

The lichen flora is exceptional and, amongst a taxonomically difficult group, may contain an as yet undescribed new species, discovered during earlier survey work. Where south-facing, areas of soft mortar support populations of solitary bees and wasps.

#### **Ownership and Access**

The ownership of the walls is uncertain, but it is assumed that most sections are in public ownership. Access to some sections is possible, on one side or the other, from public paths.

# Habitats of Principal Importance in England

None

# Selection Criteria

 $SC1-Vascular\ Plants$ 

# Rationale

The site is designated on the basis of its populations of ERDL plant species.

#### **Condition Statement**

Favourable

#### **Management Issues**

Restoration and maintenance work remain the most significant threats to the plant species for which the site has been designated.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site comprises an area of regenerating acid grassland that has developed following the clearance of a conifer plantation, forming a valuable extension of habitat to the adjacent Friday Woods SSSI.

The sward is dominated by Common Bent (Agrostis capillaris) but also includes Sweet Vernal-grass (Anthoxanthum odoratum), Red Fescue (Festuca rubra), Field Wood-rush (Luzula campestris), Wood Sage (Teucrium scorodonia) and localised Soft-rush (Juncus effusus). The fauna includes Green Hairstreak (Callophrys rubi), an uncommon Essex butterfly.

The northern portion of the site includes a strip of taller neutral grassland that supports coarse grasses and locally abundant Common Knapweed (*Centaurea nigra*), along an overgrown tree line containing Pedunculate Oak (*Quercus robur*), Brambles (*Rubus fruticosus* agg.) and Gorse (*Ulex europaeus*), providing structural diversity.

# **Ownership and Access**

The site is owned and managed by Defence Infrastructure Organisation. Ball Lane, to the east, is a public right of way and the site forms part of an extensive area with open access to the public.

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

# **Selection Criteria**

HC13 – Heathland and Acid Grassland HC28 – Small-component Mosaics

# Rationale

The site conforms to the Lowland Dry Acid Grassland Habitat of Principal Importance in England description. The northern strip of trees and semi-improved grassland would not qualify alone as individual habitats, but are included as an addition to the site under Small-component Mosaics.

#### **Condition Statement**

Favourable

#### **Management Issues**

In the absence of grazing, which is the preferable management regime, cutting appears to be maintaining the grassland structure, although Bramble and shrubs threaten to encroach from the margins.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (minor reduction)

As with many churchyards, this large, old cemetery has encapsulated and helped to preserve an area of old grassland, albeit modified by its use. The best flora lies in the older western section, where the Essex Red Data List plant Meadow Saxifrage (*Saxifraga granulata*) is particularly notable. Other characteristic acid grassland species include Field Scabious (*Knautia arvensis*), Mouse-ear-hawkweed (*Pilosella officinarum*), Bird's-foot (*Ornithopus perpusillus*), Knotted Clover (*Trifolium striatum*) and Heath Bedstraw (*Galium saxatile*).

Invertebrates recorded around the site include several Nationally Scarce species such as the SPIE Stag Beetle (*Lucanus cervus*), the solitary bee *Dasypoda hirtipes* and the micro-moth *Nemophora fasciella*. The Anglican Chapel supports roosting Long-eared Bat and Common Pipistrelle.

#### **Ownership and Access**

The cemetery is owned by Colchester Borough Council and has published opening times for public access.

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

#### **Selection Criteria**

HC13 – Heathland and Acid Grassland SC1 – Vascular Plants

#### Rationale

The significant plant communities in the cemetery are characteristically acid grassland ones and the population of Meadow Saxifrage justifies the use of the Vascular Plants criterion.

# **Condition Statement**

Favourable

# **Management Issues**

The main issue is in achieving a balance between management for public amenity and to maintain the favourable condition of plant communities.

# **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This riverside wet meadow is one of a series of remnant river flood plain sites that occur along the river Colne within Colchester and has a very diverse flora across several habitat types, with a dry stand of Common Reed at the eastern end, an extensive sedge (*Carex*) bed in the centre, damp rough grassland to the west, willow (*Salix* spp.) and Alder (*Alnus glutinosa*) woodland along the river and a broad, tall hedgerow along the northern boundary.

Significant plant species include Marsh Woundwort (*Stachys palustris*) and the rare (in Essex) Brown Sedge (*Carex disticha*) and Bottle Sedge (*Carex rostrata*). Other species include Meadowsweet (*Filipendula ulmaria*), Cuckooflower (*Cardamine pratensis*), Purple Loosestrife (*Lythrum salicaria*), Marsh Foxtail (*Alopecurus geniculatus*), Water Chickweed (*Myosoton aquaticum*) and Amphibious Bistort (*Persicaria amphibia*).

The varied invertebrate interest includes a good range of foraging bumblebees, the Nationally Scarce (Na) Long-winged Conehead (*Conocephalus discolor*) and several species of damselfly from the adjacent river, which use the meadow as hunting grounds. Common Toads, a Species of Principal Importance in England, also occur here.

#### **Ownership and Access**

The site is owned and managed by Colchester Borough Council and is publicly accessible at either end.

# Habitats of Principal Importance in England

Lowland Fens

# **Selection Criteria**

HC14 – Lowland Fens HC28 – Small-component Mosaics

# Rationale

The main sedge bed represents Lowland Fen vegetation, as the HPIE is described. The remaining habitats are not of sufficient quality to justify the application of individual habitat criteria, but do form a coherent ecological unit with the sedge bed and so the mosaic criterion is used to define the overall extent of the site.

#### **Condition Statement**

Favourable

#### **Management Issues**

The habitat could be enhanced by cutting the grassland annually and removing the cuttings, reducing the dominance of coarse grass species and encouraging other plant species.

**Review Schedule** Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This varied habitat comprises dry and damp grassland with a pond on the east side of the site that mostly dries out over the summer months.

The drier grassland is characterised by grasses including Yorkshire-fog (*Holcus lanatus*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue (Festuca rubra) Meadow Foxtail (*Alopecurus pratensis*) and meadow-grasses (*Poa* sp.) with Common Sorrel (*Rumex acetosa*), Sheep's Sorrel (*Rumex acetosella*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Lesser Stitchwort (*Stellaria graminea*). The presence of waxcap mushrooms (*Hygrocybe* sp.) and club fungi (*Calvulinopsis* sp.) indicate that this is unimproved grassland.

The damper zones are distinguished by a composition including Marsh Foxtail (*Alopecurus geniculatus*), Tufted Hair-grass (*Deschampsia cespitosa*) and Floating Sweet-grass (*Glyceria fluitans*). Herbs associated with these areas include Greater Bird's-foot-trefoil (*Lotus pedunculatus*), Cuckooflower (*Cardamine pratensis*), Marsh Thistle (*Cirsium palustre*) and species which has declined due to improved drainage of wet meadows.

The pond is dominated by Narrow-leaved Bulrush (*Typha angustifolia*) with encroaching Hawthorn (*Crataegus monogyna*) scrub and Grey Willow (*Salix cinerea*) particularly on the east and south sides. New Zealand Pigmyweed (*Crassula helmsii*) has invaded the pond and its margins. The west side of the pond displays open habitat where Water Horsetail (*Equisetum fluviatile*), an Essex Red Data List species, and Lesser Spearwort (*Ranunculus flammula*) form an extensive stand with Soft-rush (*Juncus effusus*) and Sharp-flowered Rush (*Juncus acutiflorus*).

#### **Ownership and Access**

The site is under private ownership and there is no public access.

# Habitats of Principal Importance in England None

Selection Criteria HC11 – Other Neutral Grasslands SC1 – Vascular Plants

#### Rationale

The grasslands are of undoubted interest and apparently unimproved, but do not meet the Lowland Meadows HPIE description. The population of Water Horsetail is sufficiently significant to warrant the use of the Vascular Plants criterion.

**Condition Statement** Declining

#### Management Issues

The pond is in need of significant management to reduce the scrub cover and control the New Zealand Pigmyweed. Grassland management appears to be variable, with close horse grazing in parts and no management elsewhere.

# **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

# Woodland

High Wood with Brinkley Grove is one of the largest ancient woods in the borough. The overgrown coppicewith-standards structure is composed of Pedunculate Oak (*Quercus robur*), Hazel (*Corylus avellana*), Sweet Chestnut (*Castanea sativa*), Hornbeam (*Carpinus betulus*), Small-leaved Lime (*Tilia cordata*), Silver Birch (*Betula pendula*) and Downy Birch (*B. pubescens*), with some planted conifers. Alder (*Alnus glutinosa*) is scattered along the small stream that runs through the wood to feed the main lake within the open grassland of the country park. The ground flora displays a wide range of species including Creeping Soft-grass (*Holcus mollis*), Dog's Mercury (*Mercurialis perennis*), Wood Anemone (*Anemone nemorosa*), Pignut (*Conopodium majus*), Remote Sedge (*Carex remota*), Wood Sorrel (*Oxalis acetosella*), Lesser Celandine (*Ranunculus ficaria*), Great Wood-rush (*Luzula sylvatica*), Common Cow-wheat (*Melampyrum pratense*), Yellow Pimpernel (*Lysimachia nemorum*) and Bluebell (*Hyacinthoides non-scripta*). Heather (*Calluna vulgaris*) still survives in some areas.

Friars Grove on the eastern margin of the site is also ancient wood and is being actively managed as Hornbeam and Ash (*Fraxinus excelsior*) coppice with Ash and Pedunculate Oak standards. The central stream supports a small stand of Alder with scrubby Oak/Ash wood adjacent to housing to the east. The diverse canopy and understorey also includes Field Maple (*Acer campestre*), Sweet Chestnut, Hazel, Common Hawthorn (*Crataegus monogyna*), Crab Apple (*Malus sylvestris*), Wild Cherry (*Prunus avium*) and Small-leaved Lime. The ground flora is varied, particularly with regard to ancient woodland species, including Moschatel, Wood Anemone, Pignut, Remote Sedge, Bluebell, Yellow Archangel (*Lamiastrum galeobdolon*), Hairy St. John'swort (*Hypericum hirsutum*), Dog's Mercury, Primrose (*Primula vulgaris*) (some of which are from garden origin) and Early Dog Violet (*Viola reichenbachiana*).

Elsewhere, blocks of relatively newly planted woodland are maturing and will need some management in the future to reduce crown density as they mature. Selective coppicing would greatly increase the habitat diversity of these areas of woodland, which currently comprise rather uniform stands of even-aged standards.

# Grassland

The grasslands range from areas of short-mown amenity swards, through tall, less intensively managed meadow to areas of wet rush-pasture, swamp and fen vegetation. Some grassland has been recently created from ex-arable fields, using an appropriate meadow seed mix and creating some of the most flower-rich grasslands in the site. Overall, the sward comprises a diverse mix of common grasses and herbs, including Meadow Foxtail (*Alopecurus pratensis*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Cock's-foot (*Dactylis glomerata*), Bent-grasses (*Agrostis* spp.), Yellow Oat-grass (*Trisetum flavescens*), Red Fescue (*Festuca rubra*), Crested Dog's-tail (*Cynosurus cristatus*), Yorkshire-fog (*Holcus lanatus*), Field wood-rush (*Luzula campestris*), Agrimony (*Agrimonia eupatoria*), Black Knapweed (*Centaurea nigra*), Bird's-foot Trefoil (*Lotus corniculatus*), Grass Vetchling (*Lathyrus nissolia*), Bulbous Buttercup (*Ranunculus bulbosus*), Lady's Bedstraw (*Galium verum*), Ox-eye Daisy (*Leucanthemum vulgare*), Clovers (*Trifolium spp.*) and Wild Parsnip (*Pastinaca sativa*). Species of particular note include Cowslip (*Primula veris*), Pepper-saxifrage (*Silaum silaus*) and Pignut (*Conopodium majus*). In damper areas, Tufted Hair-grass (*Deschampsia cespitosa*), rushes (*Juncus spp.*), Angelica (*Angelica sylvestris*), Cuckooflower (*Cardamine pratensis*), Purple Loosestrife (*Lythrum salicaria*) and Common Fleabane (*Pulicaria dysenterica*) can be found.

Scrub invasion is well-advanced in some areas of grassland and management will be needed to maintain a mosaic of scrub and open grassland in some parts of the site, but especially in the south-east close to Friars Grove. Across the site, old hedgerows and a section of ancient green lane provide additional habitat diversity.

# <u>Fauna</u>

The mosaic of habitats here supports a good variety of birds, insects, mammals, reptiles and amphibians, including many species of conservation concern. The main lake supports a good population of frogs and to ads, despite the fish present, whilst a small pond near Turner Rise supports Smooth Newts. These amphibian populations help to support Grass Snakes, whilst Common Lizards also occur here. The Turner Road pond supports at least nine species of dragon- and damselfly, including the Nationally Rare (RDB2, Vulnerable) Scarce Emerald (*Lestes dryas*). Of particular significance amongst the invertebrates is the White Admiral (*Limenitis camilla*) – a rare Essex butterfly, which inhabits High wood itself. Many other species of more common butterflies are found here, including the Small Heath, Speckled Wood, Ringlet, Common Blue and Meadow Brown. The invertebrate fauna also includes a rare Essex cuckoo-bee (*Psithyrus rupestris*) and also a recent UK colonist bumblebee *Bombus hypnorum* at one of its few known Essex locations. Planted Poplars in the open space near Mile End support the rare gall-forming bug *Pemphigus populi*.

# **Ownership and Access**

The site is owned and managed by Colchester Borough Council and there is public access throughout.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Lowland Meadows, Hedgerows

# **Selection Criteria**

HC1 – Ancient Woodland Sites

- HC2 Lowland mixed Deciduous Woodland on Non-ancient Sites
- HC11 Other Neutral Grasslands
- HC31 Accessible Natural Greenspace

#### Rationale

The mixture of ancient and secondary woodland in the country park is well documented. The history of the grassland is less easy to discern, but it is unlikely that there is any significant extent of original grassland that would meet the Lowland Meadows HPIE description. However, the grassland resource is diverse and of considerable significance to the overall value of the park and so the inclusion of the Other Neutral Grasslands criterion is appropriate. The site is one of the most important natural public open spaces in the town and

Borough and the use of the Accessible Natural Greenspace criterion reflects this and allows for the whole site to be defined.

#### **Condition Statement**

Favourable

# **Management Issues**

The site is currently maintained under a conservation management strategy.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (extended)

This site is a complex of river flood plain marsh, grassland, scrub and woodland, which provides an extension to the adjacent SSSI.

#### Manwood Grasslands

This series of riverside grasslands and marsh are of extreme importance as an extensive tract of a rare and declining Essex habitat with good species diversity and also as part of the Roman River wildlife corridor, notably interlinking the two sections of the Roman River SSSI. The fields show little signs of agricultural improvement and include some notable marshland species including Meadowsweet (*Filipendula ulmaria*), Common Marsh-bedstraw (*Galium palustre*), Purple-loosestrife (*Lythrum salicaria*), Marsh Woundwort (*Stachys palustris*), Marsh Dock (*Rumex palustris*) and Trifid Bur-marigold (*Bidens tripartita*); the latter two being on the Essex Red Data List.

The marsh comprises a patchwork of grasses, sedges and rushes, with the dominant species alternating between Reed Sweet-grass (*Glyceria maxima*), Common Reed (*Phragmites australis*), Sea Club-rush (*Bolboschoenus maritimus*), Floating Sweet-grass (*Glyceria* fluitans), pond-sedge (*Carex* sp.), Hard Rush (*Juncus inflexus*), Soft-rush (*Juncus effusus*), and Reed Canary-grass (*Phalaris arundinacea*), which in turn give way to Tufted Hair-grass (*Deschampsia cespitosa*) and rough grassland species on tussocky higher ground. Some areas are dominated by willow (*Salix* spp.) scrub.

The southern-most (adjacent to Oxley Hill) and northern-most (north of Ball Lane) meadows are drier, situated on the banks of the valley and support species such as Lady's Bedstraw (*Galium verum*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*)

and Meadow Vetchling (*Lathyrus pratensis*) amongst the tall grassland sward, which includes Meadow Barley (*Hordeum secalinum*) and Sweet Vernal-grass (*Anthoxanthum odoratum*). Disturbed areas hold Common Stork's-bill (*Erodium cicutarium*) and Sand Spurrey (*Spergularia rubra*) and structural diversity is provided by scattered scrub.

Other notable species that have been recorded within Manwood grasslands are Sharp-flowered Rush (*Juncus acutiflorus*), Pepper Saxifrage (*Silaum silaus*) and Fine-leaved Water-dropwort (*Oenanthe aquatica*).

A population of Glow Worms is present.

# Man Wood

This ancient wood has been extensively replanted by conifers, particularly Scots Pine (*Pinus sylvestris*). Native species, predominantly found around the margins of the wood and old internal boundary features, include Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*), Sweet Chestnut (*Castanea sativa*), with Hazel (*Corylus avellana*) and Holly (*Ilex aquifolium*) in the understorey and occasional Wild Service-tree (*Sorbus torminalis*). The ground flora is typical of light and well-drained soils, including Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus*), Bluebell (*Hyacinthoides non-scripta*) Wood Sage (*Teucrium scorodonia*) and Greater Stitchwort (*Stellaria holostea*). Other notable species are Wood Anemone (*Anemone nemorosa*), Climbing Corydalis (*Ceratocapnos claviculata*), Heath Speedwell (*Veronica officinalis*), Hairy Brome (*Bromopsis ramosus*), Slender St John's-wort (*Hypericum pulchrum*) and Remote Sedge (*Carex remota*).

#### Scrub and Woodland

The scrub and secondary woodland to the west of Man Wood, including Oxley Grove, exhibits a varied structure and composition of woody species, which includes large Pedunculate Oak standards and dense Silver Birch, Hazel coppice, Elder (*Sambucus nigra*) and Blackthorn (*Prunus spinosa*) along lower slopes. The underlying sand and gravels support associated species such as Broom (*Cytisus scoparius*), Gorse (*Ulex europaeus*), Bracken, Heath Speedwell, Sheep's-sorrel (*Rumex acetosella*), Foxglove (*Digitalis purpurea*) and Wood Sage. Bluebell, Primrose (*Primula vulgaris*) and Remote Sedge are also amongst the woodland flora. Other herbs found along disturbed tracks and open areas are Red Bartsia (*Odontites vernus*), Wild Carrot (*Daucus carota*), Agrimony, Common Centaury (*Centaurium erythraea*), Common Bird's-foot-trefoil and Hairy St John's-wort (*Hypericum hirsutum*). Parts of the site are used for clay pigeon shooting.

#### **Ownership and Access**

The land is owned by multiple private landowners. A public footpath runs south from Ball Lane across the river and along the western edge of Man Wood.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Lowland Fens, Coastal and Floodplain Grassland

#### **Selection Criteria**

- HC1 Ancient Woodland Sites
- HC2 Lowland Mixed Deciduous Woodland on Non-ancient Sites
- HC10 River Floodplain
- HC11 Other Neutral Grasslands
- HC14 Lowland Fen Vegetation
- SC20 Notable 'Flagship' Macro-invertebrates

#### Rationale

Although coniferised, Man Wood is documented to be ancient and is included in the Ancient Woodland Inventory, while map evidence demonstrates that other woodland blocks are secondary, but matching the Lowland Mixed Deciduous Woodland HPIE description. Most of the grasslands are floodplain and do flood in most winters, but the in the western part of the site the low-lying meadows are dominated by stands of Lowland Fen vegetation. The grasslands on the valley sides are not Lowland Meadows according to the HPIE description and are not sufficiently acidic in character to be selected under the Heathland and Acid Grassland

criterion, but they are largely unimproved and make a significant contribution to the overall conservation value of the site and so are included under the Other Neutral Grassland criterion.

#### **Condition Statement**

Favourable

# **Management Issues**

The restoration of Man Wood to broad-leaf would be desirable to maximise its conservation value.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (extended)

Originally a rush-pasture, the site was largely topsoil stripped and generally disturbed before being passed to Colchester Borough Council. However, since then it has recovered to form a damp marshland and wet woodland mosaic within the River Colne flood plain, of interest principally for its flora.

Typical marshland plants include Greater Pond Sedge (*Carex riparia*), Lesser Pond Sedge (*Carex acutiformis*), Common Reed (*Phragmites australis*), Soft-rush (*Juncus effusus*), Hard Rush (*Juncus inflexus*), Purple Loosestrife (*Lythrum salicaria*), Water Mint (*Mentha aquatica*) and Marsh Thistle (*Cirsium palustre*). Common Spike-rush (*Eleocharis palustris*) and Sharp-flowered Rush (*Juncus acutiflorus*) are of more significance. Drier grassland areas support Grass Vetchling (*Lathyrus nissolia*), Meadow Vetchling (*Lathyrus pratensis*) and Fleabane (*Pulicaria dysenterica*).

Areas of young wet scrub woodland are provided by Alder (*Alnus glutinosa*), Grey Alder (*Alnus incana*), Goat Willow (*Salix caprea*), Grey Willow (*S. cinerea*) and White Willow (*S. alba*), with some Pedunculate Oak (*Quercus robur*) appearing around the drier margins.

Records suggest that the site supports a significant population of Common Toad, with Common Frog and Smooth Newt also known to be present. There have been records of several nationally noteworthy invertebrates from the site, but their current status is unknown.

#### **Ownership and Access**

The site is owned and managed by Colchester Borough Council and public access is possible by viewing from the adjacent footpath to the north.

# Habitats of Principal Importance in England

None

**Selection Criteria** HC14 – Lowland Fen Vegetation

# Rationale

Although not matching the Lowland Fen HPIE description, the tall fen communities present are comparable in character and an increasingly scarce resource in the county.

#### **Condition Statement**

Favourable, declining

#### **Management Issues**

The principle problems on this site are the spread of willow across the open marsh communities and the maintenance of appropriate water levels. A management plan for the site is now in place.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (minor reduction)

This site comprises a mosaic of ancient woodland, recent woodland, rough grassland and, in the southeast corner, an old, species-rich meadow.

The most significant species in the largely free-draining meadow are Green-winged Orchid (*Orchis morio*), Adder's-tongue Fern (*Ophioglossum vulgatum*), Lesser Calamint (*Clinopodium calamintha*) and Fairy Flax (*Linum catharticum*), amongst Musk Mallow (*Malva moschata*), Barren Strawberry (*Potentilla sterilis*), Bird's-foot-trefoil (*Lotus corniculatus*), Red Fescue (*Festuca rubra*), Common Sorrel (*Rumex acetosa*), Agrimony (*Agrimonia eupatoria*), Crested Dog's-tail (*Cynosurus cristatus*), Creeping Cinquefoil (*Potentilla reptans*), Lesser Stitchwort (*Stellaria graminea*) and Heath Speedwell (*Veronica officinalis*). Waxcap mushrooms, an indicator of unimproved grassland, are present and, the lower, southern part of the meadow is damp, with Marsh Thistle (*Cirsium palustre*).

The northern grasslands, pylon rides and other clearings are taller and unmanaged, but still retain an acid grassland flora, which includes Common Bent (*Agrostis tenuis*), Common Centaury (*Centaurium erythraea*), Mouse-ear-hawkweed (*Pilosella officinarum*), Heath Speedwell, Sheep's Sorrel (*Rumex acetosella*), Wood Sage (*Teucrium scorodonia*) and Field Wood-rush (*Luzula campestris*). Common Knapweed (*Centaurea nigra*), Lesser Stitchwort, Bird's-foot-trefoil and Perforate St John's-wort are also present.

The central area of woodland, around a spring and seepage, is the remnant ancient Ball Grove, which is typically old Hazel (*Corylus avellana*) and Sweet Chestnut (*Castanea sativa*) coppice with Pedunculate Oak (*Quercus robur*) standards and occasional Ash (*Fraxinus excelsior*), Holly (*Ilex aquifolium*) and Crab Apple (*Malus sylvestris*). The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Remote Sedge (*Carex*)

*remota*), Enchanter's-nightshade (*Circaea lutetiana*), Foxglove (*Digitalis purpurea*) Dog's Mercury (*Mercurialis perennis*) and Wood Anemone (*Anemone nemorosa*). Along the spring are Alder (*Alnus glutinosa*) and Creeping-jenny (*Lysimachia nummularia*) with frequent ferns.

To the north and west of the ancient wood are blocks of maturing, but recent, scrubby oak woodland with a ground flora dominated by Bramble (*Rubus fruticosus*) and, in more open areas, some remaining grassland species such as Agrimony.

#### **Ownership and Access**

The site is partially owned by the Ministry of Defence, but parts of it are believed to be in private ownership. There is public access

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Lowland Meadows

# **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC10 – Lowland Meadows HC13 – Heathland and Acid Grassland

#### Rationale

Map evidence and the species present indicate that Ball Grove is ancient, although some of the other woodland blocks are equally clearly secondary, but still within the definition of the Lowland Mixed Deciduous Woodland HPIE. The southeast meadow falls within the range of the NVC MG5 community, of a type that reflects the acidic nature of the soils in the area, but the composition of other grassland areas suggests a lack of the grazing history that characterises that community and more resemble acid grassland.

**Condition Statement** 

Variable

#### Management Issues

The larger block of grassland at the northern end of the site is in need of management to control the abundance of the coarse grass species – False Oat-grass (*Arrhenatherum elatius*) and Cock's-foot (*Dactylis glomerata*) – tall ruderals such as thistles (*Cirsium* spp.) and Rosebay Willowherb (*Chamerion angustifolium*), and invading scrub. The meadow in the southeast is closely horse-grazed at present, but has suffered from scrub encroachment in the past; more balanced management is required.

#### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This site contains freely draining and swampy woodland, marsh, tall grassland, stream and lake habitats of great intrinsic interest, especially given its place in the urban environment.

The woodland south of Bourne Pond is very old, if not ancient, comprising Sweet Chestnut (*Castanea sativa*) coppice with some Pedunculate Oak (*Quercus robur*) and an understorey of Holly (*Ilex aquifolium*). The flora here includes abundant Bluebell (*Hyacinthoides non-scripta*) and Creeping Soft-grass (*Holcus mollis*). Alder (*Alnus glutinosa*) and willow (*Salix*) wood fringes the pond with Pendulous Sedge (*Carex pendula*) and Tufted Hair-grass (*Deschampsia cespitosa*). Eastwards, past planted poplars (*Populus* sp.) and large willows, this grades into young oak wood with Ash (*Fraxinus excelsior*), Alder, Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*) and Holly. The ground flora consists of Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*) with Wood Avens (*Geum urbanum*) and Honeysuckle (*Lonicera periclymenum*).

The stream and adjacent marshes support species such as Reed Canary-grass (*Phalaris arundinacea*), Fool's-water-cress (*Apium nodosa*), Great Willowherb (*Epilobium hirsutum*), Gipsywort (*Lycopus europaeus*) and Lesser Pond-sedge (*Carex acutiformis*). Pignut (*Conopodium majus*) is present in grassy areas.

The Willow (*Salix spp.*) and Alder woodland surrounding Distillery Pond has a diverse swamp flora which includes Cuckooflower (*Cardamine pratensis*), Lesser Pond-sedge, Meadowsweet (*Filipendula ulmaria*), Reed Sweet-grass (*Glyceria maxima*), Yellow Flag (*Iris pseudacorus*) and Skullcap (*Scutellaria galericulata*). Invertebrate surveys have revealed an interesting fauna associated with the stream and wet woodland communities, including the Nationally Scarce (Na) Pale-lemon Sallow Moth (*Xanthia ocellaris*). Common Toad, SPIE, breeds here.

#### **Ownership and Access**

Part of the site is under the control of Colchester Borough Council and part the National Trust

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Wet Woodland

# **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC28 – Small-component Mosaics HC30 – Wildlife Corridors HC31 – Accessible Natural Greenspace

#### Rationale

There is insufficient evidence to suggest that the western woodland is ancient, but it does conform to the Lowland Mixed Deciduous Woodland HPIE, as do other more recent woodland sections. The site contains wet woodland, scrub, grassland and fen vegetation in insufficient quantity, or quality, for individual criteria to be applied, but they combine to form a valuable block of habitat and this is strengthened by the site's amenity and corridor functions.

#### **Condition Statement**

Mostly favourable

#### Management Issues

The site contains a number of invasive non-native species including Japanese Knotweed (*Fallopia japonica*), Cherry Laurel (*Prunus laurocerasus*) and, in Blythe Pond, Floating Pennywort (*Hydrocotyle ranunculoides*). In places it is suffering from heavy use, resulting in trampling and compaction of the ground and the tipping of garden rubbish occurs in some areas.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

The vegetation here comprises tall sward grassland and scrub to the north and south, short-mown acidic turf over the rifle ranges and scrubby acidic grassland behind the main butts.

The northern-most field is hay-cut and species-poor, but retains an acidic character with Red Fescue (*Festuca rubra*) and Common Bent (*Agrostis tenuis*), along with Common Sorrel (*Rumex acetosa*), Sheep's Sorrel (*Rumex acetosella*), Autumn Hawkbit (*Scorzoneroides autumnalis*). To the south of this the grassland has been invaded by scrub, which now includes Pedunculate Oaks (*Quercus robur*) of considerable size, with elm (*Ulmus sp.*), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*). The open grassland is marginally more diverse here, with Sweet Vernal Grass (*Anthoxanthum odoratum*), Field Wood-rush (*Luzula campestris*), meadow-grass (*Poa sp.*), Yarrow (*Achillea millefolium*) and Bird's-foot-trefoil (*Lotus corniculatus*). However, False Oat-grass (*Arrhenatherum elatius*) and Cock's-foot Grass (*Dactylis glomerata*) are frequent and there is abundant Gorse (*Ulex europaeus*) and Broom (*Cytisus scoparius*) scrub. A population of the Nationally Scarce Lesser Calamint (*Clinopodium calaminta*) can be found on the western edge of the site here.

To the south of the butts there is a combination of Gorse scrub, bare ground and sparse sward acidic grassland over uneven ground. Although not floristically diverse on the whole, there are patches of lichen heath, dominated by *Cladonia* lichens. The meadow to the south of this area, beyond some more scrubby Pedunculate Oak woodland, is more diverse, in part, with Common Bent, Red Fescue, timothy (*Phleum* sp.), Wild Carrot (*Daucus carota*), Lesser Stitchwort (*Stellaria graminea*), Common Knapweed (*Centaurea nigra*) and Hare's-foot Clover (*Trifolium arvense*).

The principal value of this site, however, is it invertebrate populations. The main rifle butts at the south end of the site, along with smaller sandy banks to the north, provide significant nesting habitat for a range of insects, whilst the extensive grasslands surrounding them, including those areas kept closely mown over the active parts of the rifle range, provide the necessary additional foraging grounds. The best-studied group of insects here is the hymenoptera (bees, wasps and ants), within which seven nationally threatened (Red Data Book) and eight Nationally Scarce species have been recorded. The most significant species are the SPIE digger wasps *Cerceris quadricincta* (RDB1) and *Cerceris quinquefasciata* (RDB3), the latter's brood-parasite cuckoo-wasp *Hedychrum niemelai* (RDB3) and the Small Blue Carpenter-bee *Ceratina cyanea* (RDB3). Some of the short-mown sandy banks bordering the range roads support a large population of the RDB2 Bee-wolf (*Philanthus triangulum*).

# **Ownership and Access**

The site is owned by the Ministry of Defence. There are public footpaths that cross the site and most parts of it are effectively open access except when the range is in use.

#### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

#### **Selection Criteria**

HC11 – Other Neutral Grasslands HC13 – Heathland and Acid Grassland SC18 – SPIE Invertebrates SC19 – Important Invertebrate Assemblages

#### Rationale

In parts, this site supports good quality Lowland Dry Acid Grassland, but other sections do not fit that HPIE description, although still acidic in nature and largely unimproved. The presence of the SPIE *Cerceris quinquefasciata* and *Cerceris quadricincta* is of significance as is the overall assemblage of nationally rare and scarce invertebrates.

# **Condition Statement**

Largely favourable

#### Management Issues

The spread of scrub, as a result of low levels of management work in parts, is reducing the extent of open flower-rich grassland.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (extended)

East Wood was largely destroyed by a supermarket and housing development. However, a number of fragments and boundary banks survived, scattered through the development. The canopy of those blocks clustered around Highwoods Approach largely comprises Pedunculate Oak (*Quercus robur*) standards amongst Sweet Chestnut (*Castanea sativa*) trees from coppice with some Rowan (*Sorbus aucuparia*) and Silver Birch (*Betula pendula*). The ground flora is dominated by Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*), although a surprisingly varied ground flora has survived in places where human disturbance is not significant. Characteristic species include Pendulous Sedge (*Carex pendula*), Wood Sedge (*Carex sylvatica*), Wavy Hair-grass (*Deschampsia flexuosa*), Wood Spurge (*Euphorbia amygdaloides*), Creeping soft-grass (*Holcus mollis*), Bluebell (*Hyacinthoides non-scripta*), Great Wood-rush (*Luzula sylvatica*) and Wood Meadow-grass (*Poa nemoralis*).

A small remnant of the southern part of East Wood also survives adjacent to the road Chanterelle. Here, Hornbeam (*Carpinus betulus*) coppice is frequent, along with some Sweet Chestnut and Pedunculate Oak. The ground flora is being heavily trampled by general pedestrian traffic, but still includes frequent Creeping soft-grass, Bluebell and Bramble.

#### **Ownership and Access**

Unknown. There are footpaths through or beside most of the sections of this site.

# Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

# **Selection Criteria**

HC1- Ancient Woodland Sites HC31 – Accessible Natural Greenspace

#### Rationale

East Wood is on the Ancient Woodland Inventory, as a cleared ancient wood, and sufficient indicator species remain to support this conclusion. The proximity of this habitat to a large residential population is of significance in its status.

#### **Condition Statement**

Only fragments remain.

#### **Management Issues**

The remaining narrow strips of woodland don't require much in the way of management, although their longterm viability will be in question once standard trees pass maturity. There is some Cherry Laurel (*Prunus laurocerasus*) in the understorey, which inhibits ground flora and the location of the woodland fragments means that they are vulnerable to the pressures of human use.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This unusual site comprises beds of Common Reed (*Phragmites australis*), woodland, rough grassland and ruderal communities that have developed an unusual flora and fauna. In the mid-19<sup>th</sup> Century this area supported a series of riverside meadows either side of a meander in the River Colne, but by the turn of the 20<sup>th</sup> Century the river had been straightened, presumably to allow bigger boats to reach the East Mills upstream.

Common Reed forms dense fringes along the river's banks and a large stand is found on low lying ground between the river and the railway line. More interesting plant species include Hemlock Water-dropwort (*Oenanthe crocata*), Wormwood (*Artemisia absinthum*), the Essex Red Data List species Small Teasel (*Dipsacus pilosus*) and the Nationally Scarce Dittander (*Lepidium latifolium*), with Wild Celery (*Apium graveolens*) and Marsh Woundwort (*Stachys palustris*) on the banks of the tidal River Colne also being of note. In general, away from the river, the site supports rough grassland with scattered bushes and patches of dense scrub. Along the southern edge there is an old boundary hedge and a band of Sycamore (*Acer pseudoplatanus*) and willow (*Salix* sp.) woodland on damp land fed by springs.

The invertebrate populations are of note, with Wormwood Shark moth (*Cucullia absinthii*), several interesting hoverflies and, unusually for Colchester, a good mollusc fauna. Also present are a good range of bumblebees and butterflies, and populations of Slow Worm and Common Lizard.

#### **Ownership and Access**

Unknown, but there is open public access to the south of the river including a surfaced footpath.

# Habitats of Principal Importance in England

Reedbeds

#### **Selection Criteria**

HC15 – Reedbeds HC28 – Small-component Mosaics HC31 – Accessible Natural Greenspace SC1 – Vascular plants

#### Rationale

The stand of reed present is significant in a local context. The scrub, willow woodland and grassland habitats are of insufficient quality for individual criteria to be applied, but they combine to form a site of significant conservation value and one that is readily accessible to the large, nearby residential population.

#### **Condition Statement**

Favourable, but declining

#### Management Issues

The most significant management issue is the spread of scrub to the south of the river, which will reduce the diversity of habitats present. The invasive non-native Japanese Knotweed (*Fallopia japonica*) is present in the southeast corner of the site.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site consists of an old streamside woodland strip together with more recent planted woodlands that augment the adjacent Donyland Woods part of the Roman River SSSI.

The northern end of the narrow, streamside wood has Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) standards with occasional Alder (*Alnus glutinosa*) and a Hazel (*Corylus avellana*) coppice and Holly (*Ilex aquifolium*) understorey. The ground flora includes Dog's Mercury (*Mercurialis perennis*), Primrose (*Primula vulgaris*), Enchanter's Nightshade (*Circaea lutetiana*), Foxglove (*Digitalis purpurea*), Remote Sedge (*Carex remota*), Common Marsh-bedstraw (*Galium palustre*) and abundant Bluebell (*Hyacinthoides non-scripta*) in the ground flora. To the west of the stream is a block of maturing planted Pedunculate Oak and Beech (*Fagus sylvatica*) into which Ash, Bluebell and Dog's Mercury have spread. Further south there is more Ash with Sweet Chestnut (*Castanea sativa*) and Elm (*Ulmus sp.*).

The blocks to the east of the stream were planted with conifers in the 1960s/70s, but are now being converted to broad-leaved woodland. The central one of these three blocks consists of Pedunculate Oak woodland with Elm, Hazel and Silver Birch (*Betula pendula*) over an acidic ground flora of Heath Speedwell (*Veronica officinalis*), Sheep's Sorrel (*Rumex acetosella*), Wood Sage (*Teucrium scorodonia*), Common Bent (*Agrostis capillaris*), *Polytrichum* moss and *Cladonia* lichens. The north, eastern block is the oldest of the recent woodland, planted in the early 20<sup>th</sup> Century and now made up of Pedunculate Oak and poplar (*Populus* sp.) with Hawthorn (*Crataegus monogyna*) and elm (*Ulmus* sp.). It includes some old Pedunculate Oak pollards and coppiced Ash, which may derive from old field boundary features.

#### **Ownership and Access**

The site is in private ownership with no public rights of way. Public access is possible to some parts, but only when Middlewick Ranges are not in use.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

#### Rationale

It is possible that the immediate stream valley contains the remains of ancient woodland, as Donyland Woods once extended north as far as Roman Hill House, but there is little remaining evidence that this is the case. However, these secondary woodlands have good conservation value, especially as an extension to the adjacent SSSI woodland.

# Condition Statement

Improving

#### Management Issues

The removal of the majority of the remaining conifers, and other non-native species, will allow the development of native woodland communities in the future. Thinning and other ongoing woodland management will be needed to maintain the diversity of the ground flora.

#### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (extended)

Although now predominantly a woodland site, Birch Grove, towards the eastern end, is the only section of any age, with a flora that suggests it may be ancient in origin. The remainder of the site supports secondary woodland, spreading from old field boundaries, wet woodland along the brook and in lower lying areas and localised areas of acid grassland.

On the higher, dry ground the woodland consists of Pedunculate Oak (*Quercus robur*), Elm (*Ulmus* sp.) and Birch (*Betula* spp.) with Holly (*Ilex aquifolium*) and Hazel (*Corylus avellana*) in the understorey and a ground flora that includes Bracken (*Pteridium aquilinum*) and Wood Sage (*Teucrium scorodonia*). Scrubbier margins include Hawthorn (*Crataegus monogyna*) and, in places, Gorse (*Ulex europaeus*) while larger Pedunculate Oaks mark old hedge lines.

The wet woodland is largely made up of Crack Willow (*Salix fragilis*) and Grey Willow (*S. cinerea*), with some Silver Birch (*Betula pendula*). In more open areas there are localised sedge (*Carex* sp.) beds with Marsh Thistle (*Cirsium palustre*) and Skullcap (*Scutellaria galericulata*).

Birch Grove consists of Pedunculate Oak and Ash (*Fraxinus excelsior*) with Alder (*Alnus glutinosa*) along the streamside. The ground flora is rich in ferns, with the Essex Red Data List (ERDL) species Narrow Buckler-fern (*Dryopteris carthusiana*), Lady Fern (*Athyrium filix-femina*), Hard Fern (*Blechnum spicant*) and Scaly Male Fern (*Dryopteris affinis*) of particular note. Other noteworthy plant species include Hart's-tongue Fern (*Asplenium scolopendrium*), Wood Anemone (*Anemone nemorosa*), Pignut (*Conopodium majus*), Dog's Mercury (*Mercurialis perennis*), Enchanter's Nightshade (*Circaea lutetiana*), Bluebell (*Hyacinthoides non-*

*scripta*), Creeping Jenny (*Lysimachia nemorum*), Wood Sorrel (*Oxalis acetosella*), Remote Sedge (*Carex remota*) and the ERDL Wood Horsetail (*Equisetum sylvaticum*) at one of its few Essex locations.

The area around the Redoubt comprises dry acid grassland and scrub, providing additional habitat diversity. The ground flora includes Red Fescue (*Festuca rubra*), Common Bent (*Agrostis capillaris*), Sheep's Sorrel (*Rumex acetosella*), *Hieracium sabaudum* (a hawkweed) and Bracken, with Pedunculate Oak, Gorse, Bramble (*Rubus fruticosus*) and Broom (*Cytisus scoparius*) scrub. A further area of sparse acid grassland is found on the southern edge of the site near its eastern end. Plant species here include Common Bent, Sheep's Sorrel, *Hieracium sabaudum*, Common Centaury (*Centaurium erythraea*), Blue Fleabane (*Erigeron acris*), Heath Speedwell (*Veronica officinalis*), *Cladonia* lichens and Hoary Cinquefoil (*Potentilla argentea*).

## **Ownership and Access**

The site is under private ownership, but it is crossed by a number of public footpaths, most of which can't be used when Middlewick Ranges are being used.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Wet Woodland

## **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites HC13 – Heathland and Acid Grassland SC1 – Vascular Plants

## Rationale

The frequency of ancient woodland indicator species in Birch Grove strongly suggests that it is ancient in origin, but map evidence demonstrates that the other areas of dry woodland are secondary. Along the brook, the willow woodland meets the description of the Wet Woodland HPIE. Around the redoubt and at the eastern end of the site are communities made up of characteristically acid grassland species. The Vascular Plant criterion is applied because of the assemblage of locally rare fern species, rather than for any one of them individually.

#### **Condition Statement**

Mostly favourable

#### **Management Issues**

The acid grassland around the Redoubt is rapidly scrubbing over and should be cleared to maintain the distinctive plant communities found there. None of the woodland is managed, which will lead to a decline in the ground flora in time.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (minor extensions)

This site comprises the remnant western edge of Magdalen Wood, the rest of which has been lost to housing. It is a well-walked wood and brings ancient woodland ecology right into the lives of those people living around it. The rather heavily trampled ground flora still includes locally frequent Wood Anemone (*Anemone nemorosa*), Bluebell (*Hyacinthoides non-scripta*) and Lesser Celandine (*Ranunculus ficaria*), as well as Pignut (*Conopodium majus*). The canopy comprises mainly Pedunculate Oak (*Quercus robur*), with Hornbeam (*Carpinus betula*) and some very large overgrown coppice stools (now to canopy height) of Sweet Chestnut (*Castanea sativa*) and, curiously for an essentially dry site, Alder (*Alnus glutinosa*).

## **Ownership and Access**

Unknown, but the site is accessible via well-used footpaths.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

This remaining fragment is too small to be included within the Ancient Woodland Inventory, but its composition and the remnant ground flora indicate that it is ancient.

# **Condition Statement**

Declining

#### **Management Issues**

A number of non-native species, including Norway Maple (*Acer platanoides*), Cherry Laurel (*Prunus laurocerasus*) and Cotoneaster (*Cotoneaster* sp.) has been introduced and these could swamp the remaining natural vegetation if not controlled. Heavy public use is adding pressure to the ground flora.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This ancient wood has been modified by human use since the Second World War, when it became part of Langham Airfield, and some of the airfield buildings are now used for light industry. A large block on the western side of the track through the wood has been re-planted with Scots Pine (*Pinus sylvestris*) and houses a large Pheasant-rearing pen.

The northwest and northeast sections of the wood consist of Pedunculate Oak (*Quercus robur*) standards with Sweet Chestnut (*Castanea sativa*), Ash (*Fraxinus excelsior*), Alder (*Alnus glutinosa*) and Hazel (*Corylus avellana*) coppice. The understorey includes Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*) and the ground flora is dominated by Bramble (*Rubus fruticosus agg*) and Common Nettle (*Urtica dioica*) with Bluebell (*Hyacinthoides non-scripta*). The southern half of the wood is made up of Pedunculate Oak with Silver Birch (*Betula pendula*) and Hazel coppice. Bracken and Bluebell are both present.

Poplars have been planted in the southeast corner of the wood and in a triangle on the eastern edge of the wood, outside its original boundary, which also contains Alder and Pedunculate Oak. Parts of the wood have been cleared, leaving open ground that is being encroached by Bramble and Aspen (*Populus tremula*) scrub. The remaining open areas display slightly acid flora including Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Common Centaury (*Centaurium erythraea*), Fleabane (*Pulicaria dysenterica*), Creeping Cinquefoil (*Potentilla reptans*), Red Bartsia (*Odontites vernus*), Bird's-foot Trefoil (*Lotus corniculatus*) and Marsh Thistle (*Cirsium palustre*) and Bee Orchid (*Ophrys apifera*) has also been recorded.

#### **Ownership and Access**

The wood is believed to be in private ownership. There is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

## Rationale

The majority of the wood is ancient, as shown on the Ancient Woodland Inventory, including the area replanted with conifers, but a small section on the eastern edge is more recent.

## **Condition Statement**

Declining

## **Management Issues**

There is no evidence of recent, positive woodland management. Cleared areas should be replanted and the pines removed in order to restore the whole site to broad-leaved woodland. There is some intrusion of Sycamore (*Acer pseudoplatanus*), which will spread if not controlled.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This is the area of a former mineral extraction site and supports significant populations of breeding amphibians, most notably a large colony of Common Toad, a SPIE, with Common Frog and Smooth Newt

The northern section comprises a broad, shallow lake that draws down in the summer. The shallow margins support dense willow (*Salix* spp.) woodland with swamp vegetation and some rough grassland. The lake supports a dense population of pondweed (*Potamogeton* sp.) and breeding Little Grebe and Tufted Duck. Great Green Bush-cricket (*Tettigonia viridissima*) (an Essex Red Data List species) has been recorded here.

The southern section comprises a deep flooded pit, which is now a fishing lake, and sloping rough grassland dropping down to the adjacent Birch Brook LoWS. The fishing lake is fringed with scrub and Reedmace (*Typha latifolia*) and is well used by waterfowl in the winter. Along its western edge is an old lane with large Pedunculate Oaks (*Quercus robur*).

The grassland is recent in origin, following the disturbance of quarrying operations, including the main processing area at its eastern end. It includes exposed sandy banks and damp hollows, with significant patches of Bramble scrub becoming established. Plant species include Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Red Bartsia (*Odontites vernus*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Creeping Cinquefoil (*Potentilla reptans*) and Perforate St John's-wort (*Hypericum perforatum*). In some more open areas, including where rabbits have grazed, the mineral origin of the soils is revealed by the presence of Red Fescue (*Festuca rubra*), Common Stork's-bill (*Erodium cicutarium*) and Common Centaury (*Centaurium erythraea*).

## **Ownership and Access**

The site is believed to be in private ownership. Public access is only possible by public footpaths to the east of the northern section and to the west of the southern section.

## Habitats of Principal Importance in England

Wet woodland

## **Selection Criteria**

HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites HC8 – Hedgerows and Green Lanes HC11 – Other Neutral Grassland HC16 – Lakes and Reservoirs SC13 – Hotspots for Amphibian Diversity

## Rationale

The willow scrub in the northern section qualifies as the Wet Woodland HPIE. The lane on the western edge contains a significant number of old Pedunculate Oak trees and acts as a corridor of movement to and from the adjacent Birch Brook LoWS. Although the southern grassland is not old, it supports a diverse flora that is of considerable benefit in association with adjacent habitats. The lake qualifies by virtue of supporting significant amphibian populations and is used here to define the extent of the site.

#### **Condition Statement**

Declining in part

## **Management Issues**

In the northern section, the willow scrub is becoming very dense and would benefit from clearance and ongoing management. The remaining open water area has been colonised by the invasive, non-native New Zealand Pigmyweed (*Crassula helmsii*), which could take over the entire water column. At the southern end the spread of Bramble scrub is affecting the quality of the grassland and there us a stand of the invasive, non-native Japanese Knotweed (*Fallopia japonica*).

#### **Review Schedule**

Site Selected: 1991 (part) Reviewed: 2008; 2015 (extended)

This extensive mosaic of habitats associated with the Black Brook between Boxted and Langham provides a valuable wildlife corridor through a distinctive local landscape.

To the west of the site, willow (*Salix* spp.) and Alder (*Alnus glutinosa*) dominates a very wet narrow woodland corridor. The waterlogged ground supports several plant species of interest including Marsh-marigold (*Caltha palustris*), Common Marsh-bedstraw (*Galium palustre*), Bog Stitchwort (*Stellaria uliginosa*), Lesser Spearwort (*Ranunculus flammula*), Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*) and abundant Cuckooflower (*Cardamine pratensis*). Drier areas have tall Ash (*Fraxinus excelsior*) over a ground flora dominated by Broad Buckler-fern (*Dryopteris dilatata*), with small patches of Climbing Corydalis (*Ceratocapnos claviculata*).

Between Boxted Cross and Old Mill Road, a small compartment of probable ancient woodland to the north of the Black Brook has Ash (*Fraxinus excelsior*), Alder and some Pedunculate Oak (*Quercus robur*) forming the high canopy, with Grey Willow (*Salix cinerea*) in the shrub canopy. Here, the higher ground is drier with Bluebell (*Hyacinthoides non-scripta*) and Pignut (*Conopodium majus*). Down slope, this grades into damper conditions that favour Wood Sorrel (*Oxalis acetosella*) and Yellow Archangel (*Lamiastrum galeobdolon*). Towards the Black Brook the ground is very wet, typically supporting more Opposite-leaved Golden-saxifrage.

An unusual feature either side of Old Mill Road, are banks with very old Holly (*Ilex aquifolium*) coppice with Pedunculate Oak standards. To the east of the road, the habitat changes and is characterised by grassland and plantation woodland. The higher grassy slopes exhibit a sandy acid soil with species such as Early Hair-grass (*Aira praecox*), Common Stork's-bill (*Erodium cicutarium*) and Sheep's Sorrel (*Rumex acetosella*). The lower

streamside grassland has in contrast, species of neutral grassland including Sweet Vernal-grass (*Anthoxanthum odoratum*) and Meadow-grasses (*Poa* spp.).

East of Greyhound Hill, grazed open grassland lies to the south of Black Brook, with plantation blocks with Sycamore (*Acer pseudoplatanus*), Sweet Chestnut (*Castanea sativa*) and Alder coppice. The grassland is most interesting near to a pond west of Grove Hill. Here, Lesser Spearwort and Cuckooflower are found in the wet grassland.

The easternmost block of habitat has shallow water located north of the Black Brook with tussocks of emergent and marginal rush (*Juncus* sp.). Other species found in the waterlogged zone include Skullcap (*Scutellaria galericulata*), Water Mint (*Mentha aquatica*), Bog Stitchwort and Water Forget-me-not (*Myosotis scorpioides*). This habitat grades into drier neutral grassland, which in turn grades to a semi-acid grassland slope.

## **Ownership and Access**

The site is believed to be in private ownership, with multiple landowners likely. It is crossed by several public footpaths and highways.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Lowland Dry Acid Grassland, Wet Woodland

## Selection Criteria

HC1 – Ancient Woodland Sites
HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites
HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites
HC11 – Other Neutral Grasslands
HC13 – Heathland and Acid Grassland

## Rationale

The woodland between Boxted Cross and Old Mill Road is believed to be ancient due to the indicator plant species present. The Grove, further east, is also very old, but there is no clear evidence to suggest that it is also ancient and so the non-ancient criteria are used for this and other more obviously recent woodland blocks, including areas of wet woodland.

#### **Condition Statement**

Variable

#### **Management Issues**

Many parts of the site are not being managed and this will lead to a decline in condition over time. Rhododendron (*Rhododendron ponticum*) is scattered throughout the various planted compartments; it is a non-native species that can invade and overwhelm woodland understorey to the detriment of its ground flora.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (minor extension)

This series of post-industrial habitats includes an old sand pit, disused parts of a sewage treatment work and an area of old grazing marsh modified by sludge deposition. Such areas are known to be important for invertebrates, and the old sand pit cliff in particular supports a nationally important assemblage of solitary bees and wasps, including the Nationally Rare (RDB3) *Cerceris quinquefasciata*, a UK BAP Priority species; its cuckoo-wasp brood parasite *Hedychrum niemelai*, the nomad bee Nomada fulvicornis and the Small Blue Carpenter-bee *Ceratina cyanea* (all also RDB3), along with numerous other Nationally Scarce species. Much of the surrounding brownfield grassland provides essential foraging habitat for these and many other invertebrates.

The grassland at Place Farm is varied according to ground conditions. On the higher ground, the sward features Red Fescue (*Festuca rubra*), Common Bent (*Agrostis tenuis*), Sheep's Sorrel (*Rumex acetosella*), Bird's-foot-trefoil (*Lotus corniculatus*) and Autumn Hawkbit (*Scorzoneroides autumnalis*), reflecting the acidic nature of the soil. On lower ground to the south and west it is more varied with Crested Dog's-tail (*Cynosurus cristatus*), cat's-tail (*Phleum* sp.), Creeping Bent (*Agrostis stolonifera*), Common Knapweed (*Centaurea nigra*), Meadow Buttercup (*Ranunculus acris*). To the north of the meadow is a pool and associated marshy grassland that supports Nodding Bur-marigold (*Bidens cernua*), Floating Sweet-grass (*Glyceria fluitans*), Jointed Rush (*Juncus articulates*), Brooklime (*Veronica beccabunga*) and a water-crowfoot (*Ranunculus* sp.).

#### **Ownership and Access**

The site is under private ownership. There is no public access.

## Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land

#### **Selection Criteria**

HC11 – Other Neutral Grassland HC13 – Heathland and Acid Grassland HC27 – Post-industrial Sites SC19 – Important Invertebrate Assemblages

## Rationale

Place Farm supports an acid grassland community, sloping down to a damp neutral grassland community in the north. Both parts are the result of past industrial activity. The site is known to support a SPIE, *Cerceris quinquefasciata*.

#### **Condition Statement**

Favourable

## Management Issues

Horse grazing at the current intensity is preserving the characteristic plant communities and maintaining a degree of bare ground, but any change in management could have an adverse effect. The sewage works part of the site may be subject to development pressure should the treatment facilities be changed.

## **Review Schedule**

Site Selected: 1991 (part) Reviewed: 2008; 2015 (extended and boundary with adjacent LoWS adjusted)

This churchyard in the Greenstead area of Colchester retains unimproved grassland, although it is, for the most part, regularly mown. Although not species rich, the site has a diverse mix of common grasses and herbs including Red Fescue (*Festuca rubra*), Meadow grasses (*Poa* spp.), Common Bent (*Agrostis tenuis*), Yellow Oat-grass (*Trisetum flavescens*), Sheep's Sorrel (*Rumex acetosella*), Hairy Sedge (*Carex hirsuta*), Oxeye Daisy (*Leucanthemum vulgare*) and Common Knapweed (*Centaurea nigra*). Of note is a localised population of Lesser Calamint (*Clinopodium calamintha*), an Essex Red Data List species that occupies sunny locations near the church.

## **Ownership and Access**

The site is an active churchyard and so under the ownership of the Church of England. There is no public right of access, but the site is freely accessible at most times.

#### Habitats of Principal Importance in England

None

**Selection Criteria** HC11 – Other Neutral Grassland

#### Rationale

The grassland of the site is old and has not been agriculturally improved, but it does not fit within the Lowland Meadows HPIE description.

# Condition Statement

Declining

# **Management Issues**

Mowing frequency appears to have been increased in recent years, resulting in a lesser extent of long grass sward and fewer flowering stems.

## **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This site comprises a band of former grazing-marsh bordering the tidal Roman River, together with two valley side pastures with acid grassland vegetation on their upper slopes. The site sits between and connects the Roman River SSSI to the west and the Upper Colne Marshes SSSI to the east.

The floodplain grassland retains a flora characteristic of grazing marshes, including Grass Vetchling (*Lathyrus nissolia*), Cuckooflower (*Cardamine pratensis*) and Hairy Buttercup (*Ranunculus sardous*), amongst Marsh Foxtail (*Alopecurus geniculatus*), Meadow Foxtail (*Alopecurus pratense*), Crested Dog's-tail (*Cynosurus cristatus*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue (*Festuca rubra*) and Meadow-grasses (*Poa* spp.). Sea Club-rush (*Bolboschoenus maritimus*) is found along parts of the associated ditches, which are generally fringed by Common Reed (*Phragmites australis*). Dittander (*Lepidium latifolium*), an Essex Red Data List species, is also of note amongst areas of rough grassland. The grassland includes some scattered and dense scrub as well as tussocky sections with anthills, which support resident Common Lizards.

To the north of the river are two large pastures which form part of the flood plain, but also rise to form areas of dry acid grassland on their upper slopes, characterised by Common Bent-grass (*Agrostis capillaris*), Red Fescue, Common Sorrel (*Rumex acetosa*), Lesser Stitchwort (*Stellaria graminea*) and Sheep's Sorrel (*Rumex acetosella*). The wet ditch between the pastures supports marsh vegetation including Nodding Bur-marigold (*Bidens cernua*), which is an Essex Red Data List species.

#### **Ownership and Access**

The site is at least partially owned by the Ministry of Defence. There is no formal right of access.

## Habitats of Principal Importance in England

Coastal and Floodplain Grazing Marsh, Lowland Dry Acid Grassland

#### **Selection Criteria**

HC10 – River Floodplain HC13 – Heathland and Acid Grassland

#### Rationale

The lower fields are all originally part of the floodplain, although they are now protected by flood embankments, and are managed by grazing. The upper slopes exhibit acid grassland vegetation, although they are not particularly diverse.

#### **Condition Statement**

Favourable

#### **Management Issues**

There are no specific management issues, although a conservation based grazing regime would improve their wildlife value.

**Review Schedule** Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This relict grazing-marsh retains many typical species, such as Grass Vetchling (*Lathyrus nissolia*), Dittander (*Lepidium latifolium*), Hairy Buttercup (*Ranunculus sardous*) and Divided Sedge (*Carex divisa*), whilst the larger drains support broad bands of Common Reed (*Phragmites australis*), with Brackish Water-crowfoot (*Ranunculus baudotii*) in areas of more open water. The section between the River Colne and the railway line is currently unmanaged and is being invaded by False Oat-grass (*Arrhenatherum elatius*) and scrub.

#### **Ownership and Access**

The site is believed to be under private ownership. The Wivenhoe Trail runs along the top of the seawall along the site's eastern boundary and allows views across the whole site. The northern edge is viewable from the public highway.

#### Habitats of Principal Importance in England

Coastal and Floodplain Grazing Marsh, Reedbeds

#### **Selection Criteria**

HC15 – Reedbeds HC21 – Coastal Grazing Marsh

#### Rationale

The broad fleets of the marsh support a significant extent of reed bed habitat and the whole site is demonstrably old grazing marsh, enclosed by seawalls.

## **Condition Statement**

Declining

#### **Management Issues**

Part of the site has been lost to the construction of university buildings and further expansion plans could jeopardise the remaining area. The marshes are not managed at present and so the grassland habitat has become rank. The area between the river and the railway line has been invaded by scrub that will threaten its condition in time.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (reduced)

These lagoons are of importance as a breeding ground for Little Ringed Plover and, in some years, Avocet (both listed under Schedule 1 of the Wildlife and Countryside Act, 1981 (as amended)), as well as Lapwing, Shelduck and Linnet. It also provides a high tide roost and feeding habitat for a variety of coastal birds, including a significant proportion of the estuary's population of Black-tailed Godwits through autumn and winter. Although artificially created by the construction of embanked lagoons to take dredging material from the adjacent river Colne, the ecology of this site is very much one of coastal grazing marsh, which was the habitat present before the lagoons were created. It contains habitats that augment the adjacent Upper Colne Marshes SSSI and is now managed by Colchester Borough Council as a Local Nature Reserve.

The northernmost lagoon supports dense stands of Common Nettle (Urtica dioica) with scattered scrub, particularly around its margins.

To the south, the next lagoon is dry for much of the year, but supports stands of Sea Club-rush (*Bolboschoenus maritima*), Annual Sea-blite (*Suaeda maritima*), glassworts (*Salicornia* spp.) and the Nationally Scarce Sea Barley (*Hordeum marinum*). The habitat of the central lagoon is dry coastal grassland that is equivalent to upper saltmarsh communities, dominated by Sea Couch (*Elytrigia atherica*). The southern lagoon holds a large area of permanent water that draws down to leave broad, muddy margins with fringing stands of Common Reed (*Phragmites australis*) and Sea Club-rush. On the eastern edge of the site there is open mosaic habitat that reveals the previous industrial use of the area.

Throughout the site there is an exceptional population of the Nationally Scarce Dittander (*Lepidium latifolium*) and significant quantities of another now scarce Essex plant, Wormwood (*Artemisia absinthum*). A large population of Great Green Bush Crickets is also present.

## **Ownership and Access**

The site is owned and managed by Colchester Borough Council as a Local Nature Reserve. Access is open and includes a viewing screen in the southeast corner of the lagoon.

## Habitats of Principal Importance in England

Coastal and Floodplain Grazing Marsh, Saline Lagoons

#### **Selection Criteria**

HC11 – Other Neutral Grasslands HC27 – Post-industrial Sites SC1 – Vascular Plants SC5 – Notable Bird Species] SC20 – Notable 'Flagship' Macro-invertebrates

## Rationale

Although the whole site has been modified for industrial purposes of sewage treatment and river dredging, and some areas consist of artificial substrates, parts have developed typical Essex coastal grassland communities, which do not fit well with HPIE descriptions. The Vascular Plant criterion is applied due to the presence of Nationally Scarce species and the Notable Bird Species criterion covers the presence of rare breeding species and autumn and winter feeding and roosting concentrations. Great Green Bush Cricket is considered to be a flagship invertebrate, with a significant population on this site.

## **Condition Statement**

Favourable

## **Management Issues**

Succession to scrub habitats could reduce the conservation value of parts of the site.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (boundary with adjacent LoWS adjusted)

This largely ancient wood, a fragment of a more extensive area lost to housing, consists of standards of Pedunculate Oak (Quercus robur) with Small-leaved Lime (*Tilia cordata*), Ash (*Fraxinus excelsior*) and Hazel (*Corylus avellana*) coppice. Along the south western edge and along the stream to the northwest, Sweet Chestnut (*Castanea sativa*) coppice replaces the lime. The canopy also includes Field Maple (*Acer campestre*), Wild Cherry (*Prunus avium*), streamside Alder (*Alnus glutinosa*) and clones of Aspen (*Populus tremula*) with Holly (*Ilex aquifolium*) in the understorey.

The ground flora is surprisingly rich in ancient woodland plants, including Moschatel (*Adoxa moschatellina*), Pendulous Sedge (*Carex pendula*), Remote Sedge (*C. remota*), Wood Sedge (*C. sylvatica*), abundant Bluebell (*Hyacinthoides non-scripta*), Wood Anemone (*Anemone nemorosa*), Wood Melick (*Melica uniflora*), Hart's-tongue Fern (*Asplenium scolopendrium*), Soft Shield-fern (*Polystichum setiferum*), Early Dog-violet (*Viola reichenbachiana*) and Primrose (*Primula vulgaris*), along with Lesser Celandine (*Ranunculus ficaria*) and Goldilocks Buttercup (*Ranunculus auricomus*).

#### **Ownership and Access**

The site is owned and managed by Colchester Borough Council and is crossed by permissive footpaths.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites.

## Rationale

Although the majority of the site is on the Ancient Woodland Inventory and has a good range of indicator species, on map evidence, the section to the north of the stream is secondary.

## **Condition Statement**

Favourable

## Management Issues

There is a small amount of Cherry Laurel (*Prunus laurocerasus*) near the western entrance to the site and this non-native species can have a negative impact on ground flora if it spreads.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

These former gravel pits now predominantly support woodland, with a distinction between lower, seasonally wet land and land closer to the original ground level. Within this are seasonal and permanent ponds, exposed sandy banks and more open grass and scrub mosaics. It is bisected by the former wharf access road.

On the higher ground, the woodland canopy is made up of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Silver Birch (*Betula pendula*) and Sycamore (*Acer pseudoplatanus*) with some Wild Cherry (*Prunus avium*). The understorey includes willow (*Salix spp.*), Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*), and Holly (*Ilex aquifolium*). The ground flora is generally low in diversity with Male Fern (*Dryopteris filix-mas*), Broad Buckler Fern (*Dryopteris dilatata*), Wood Avens (*Geum urbanum*), False-brome (*Brachypodium sylvaticum*), Herb-Robert (*Geranium robertianum*), Honeysuckle (*Lonicera periclymenum*), Common Ivy (*Hedera helix*), Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus agg.*). Small quantities of *Hieracium sabaudum*, a grassland and heath species, remain in more open areas.

The lower areas, largely with exposed mineral soils, are damp with extensive standing water over the winter months. Silver Birch, Sallow (*Salix cinerea*), and Aspen (*Populus tremula*) have colonised to form a canopy, but there is little understorey or ground layer. Mosses, including *Polytrichum* species, are widespread alongside *Peltigera* lichens with Soft-rush (*Juncus effusus*) and Bramble also present. The bog-moss *Sphagnum squarrosum*, which is scarce in Essex and especially in the northeast, occupies several damp hollows in a restricted area of the site.

The water bodies are varied in size and nature, with fringes of Common Reed (*Phragmites australis*), Lesser Bulrush (*Typha angustifolia*) and Sea Club-rush (*Bolboschoenus maritimus*) being typical species.

The few steep, sandy faces that are still exposed provide nesting habitat for solitary bees and wasps, including the Nationally Rare (RDB3) *Nomada fulvicornis*. Great Crested Newts are known to be present.

## **Ownership and Access**

The site is under private ownership, but there is a public footpath that crosses the western edge.

## Habitats of Principal Importance in England

Open Mosaic Habitats on Post-industrial Sites

**Selection Criteria** HC27 – Post-industrial Sites

## Rationale

As a former gravel extraction site, Rowhedge Pits satisfies the description of the open mosaic HPIE, supporting key features such as wetland habitats, mineral substrates and dead wood resource.

## **Condition Statement**

Declining

## Management Issues

Succession to secondary woodland is threatening the overall diversity of habitats and microclimates found within the site and a programme of cyclical clearance should be introduced, together with specific maintenance of habitat features of importance to invertebrates, *i.e.* cliffs and banks of exposed substrates. The site is also under threat, to some extent, from adjacent house building, the access road being widened at the time of this review. Non-native species such as Sycamore, Cherry Laurel (*Prunus laurocerasus*), *Cotoneaster* and Holm Oak (*Quercus ilex*) could have a negative influence on species diversity.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This river valley corridor constitutes an important urban wildlife area, allowing for a variety of informal countryside recreational pursuits close to a large urban population. It is comprised of a mosaic of scrub, woodland and a diverse series of grassland.

The grasslands have variable species diversity, but the flower-rich areas support Black Knapweed (*Centaurea nigra*), Lady's Bedstraw (*Galium verum*), Ox-eye Daisy (*Leucanthemum vulgare*), Meadow Vetchling (*Lathyrus pratensis*) and Lesser Stitchwort (*Stellaria graminea*). Damper areas within the grassland support Angelica (*Angelica sylvestris*), Cuckooflower (*Cardamine pratensis*), Reed Sweet-grass (*Glyceria maxima*), Meadowsweet (*Filipendula ulmaria*), Tufted Hair-grass (*Deschampsia cespitosa*), Common Hemp-nettle (*Galeopsis tetrahit*), Trifid Bur-marigold (*Bidens tripartita*), Common Marsh-bedstraw (*Galium palustre*), Water Chickweed (*Myosoton aquaticum*) and Sharp-flowered Rush (*Juncus acutiflorus*) as well as a number of beds of sedge (*Carex spp.*) and Common Reed (*Phragmites australis*). The ERDL species, Sneezewort (*Achillea ptarmica*) is found in the better quality, northern meadows.

A series of shallow ponds have a marginal flora of Reedmace (*Typha latifolia*), Reed Canary-grass (*Phalaris arundinacea*), Reed Sweet-grass (*Glyceria maxima*), rushes (*Juncus spp.*), Branched bur-reed (*Sparganium erectum*) and Greater Pond-sedge (*Carex riparia*). Most of the ponds are fished.

Scattered throughout are riverside Alder (*Alnus glutinosa*) and willows (*Salix* spp.) with patches of scattered or dense scrub. The northern stream sides are wooded, with large Pedunculate Oaks, Alder and Hazel (*Corylus* 

avellana) coppice and a ground flora that includes Dog's Mercury (*Mercurialis perennis*) and False-brome (*Brachypodium sylvaticum*).

Scrub and hedgerow habitats along the brook have recently been found to support a population of Dormouse, which may be associated with nearby ancient woodland sites.

#### **Ownership and Access**

Most of the site is owned and managed by Colchester Borough Council and has open public access, but the northern field is in private ownership.

#### Habitats of Principal Importance in England

Lowland Meadows

#### Selection Criteria

HC10 – River Floodplain HC11 – Other Neutral Grasslands HC14 – Lowland Fen Vegetation HC15 – Reedbeds SC7 – Dormouse

#### Rationale

The whole of the site would have been subject to riverine flooding at one point, although there are now flood banks in place on the western side of the river. Amongst the diverse grassland communities are areas that still flood, stands of sedge and reed, and also drier areas that do not conform to the MG5 NVC community. A Dormouse population is present.

#### **Condition Statement**

Generally favourable to the east of the river, but declining to the west of it.

#### Management Issues

Some of the former floodplain grassland on the west of the river is becoming rank, with False Oat-grass (*Arrhenatherum elatius*) and Common Couch (*Elytrigia repens*) dominant in places and Bramble scrub spreading. An increased frequency of cutting, with cuttings removed, will be needed to maintain diverse grassland communities.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site comprises the modified parkland associated with Wivenhoe House, now dominated by the University of Essex. The parkland includes some oak (*Quercus* spp.) trees in excess of 400 years old, with large specimens of Cork Oak (*Q. suber*), redwoods, pines and cedars. Some areas of woodland appear to be very old, with locally plentiful Bluebell (*Hyacinthoides non-scripta*). The intimate association that can develop between wildlife and the built environment of old parkland is demonstrated by the interesting fern fauna that has developed on the ha-ha (sunken wall) of Wivenhoe House, with a significant population of Hart's-tongue Fern (*Asplenium scolopendrium*).

Areas of short acidic grassland are dominated by Red Fescue (*Festuca rubra*), Common Bent-grass (*Agrostis capillaris*), and Sheep's Sorrel (*Rumex acetosella*) with Field Wood-rush (*Luzula campestris*), Creeping Soft-grass (*Holcus mollis*), Heath Bedstraw (*Galium saxatile*), Creeping Cinquefoil (*Potentilla reptans*), Hairy Sedge (*Carex hirta*) and timothy (*Phleum* sp.). More noteworthy species include Blinks (*Montia fontana*), Slender Parsley-piert (*Aphanes microcarpa*) and the ERDL species Early forget-me-not (*Myosotis ramossissima*) and Subterranean Clover (*Trifolium subterraneum*).

In less free-draining areas, the grassland is lusher and here there are additional species such as Sweet Vernal Grass (*Anthoxanthum* odoratum), Yorkshire-fog (*Holcus lanatus*), Common Knapweed (*Centaurea nigra*), Wild Carrot (*Daucus carota*), Hare's-foot Clover (*Trifolium arvense*), Prickly Sedge (*Carex muricata*), Bird's-foot Clover (*Lotus corniculatus*), Lesser Stitchwort (*Stellaria graminea*) and Cuckooflower (*Cardamine pratensis*).

The invertebrate fauna includes a good range of butterflies, including White-letter and Purple Hairstreaks, Ringlet, Speckled Wood and skippers. Nightingales regularly occur in an area of scrubby woodland close to the railway line. The park also supports a rookery, good breeding numbers of Jackdaws and significant numbers of over-wintering Goosander on the lakes.

## **Ownership and Access**

The site is privately owned, but much of it is freely accessible.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland, Lowland Dry Acid Grassland, Wood-pasture and Parkland

#### **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC4 – Wood-pasture and Parkland HC13 – Heathland and Acid Grassland

#### Rationale

There is no record of Ancient Woodland within this site area, but the woodland close to the river and some of the belts of woodland elsewhere in the park conform to the Lowland Mixed Deciduous Woodland HPIE description. The parkland dates back to the 18<sup>th</sup> century and includes a number of veteran trees that are likely to be much older. Soil conditions dictate that much of the grassland present is acidic in character.

## **Condition Statement**

Favourable

#### **Management Issues**

The continuity of veteran trees is a significant issue in parkland habitats, with a need to ensure that sufficient trees of different ages are present in order to maintain the availability of as wide a range of environmental conditions in the dead wood resource as possible. Appropriate grassland management will be required to maintain the diversity of interest in the communities present. Continued development of University buildings continues to threaten the extent of semi-natural habitat present.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (significant changes)

This three kilometre stretch of foreshore by West Mersea has in places an extremely good beach flora, a rare habitat in Essex. The beach is subject to heavy disturbance by visitors in places and the diversity in flora varies accordingly from relatively bare, disturbed areas to herb-rich stretches supporting a variety of species, amongst which the Nationally Scarce Ray's Knotgrass (*Polygonum oxyspermum*) and Sea Barley (*Hordeum marinum*) are most notable.

There are areas of vegetated shingle giving way to long sandy stretches resembling in places a sand dune community within higher portions stabilised by grasses. Marram Grass (*Ammophila arenaria*), Sea Couch (*Elytrigia atherica*), Sand Couch (*Elymus farctous*) and Sea Beet (*Beta vulgaris* subsp. *maritima*) are abundant within this stretch of foreshore, with other typical plants including Sea Sandwort (*Honckenya peploides*), Dune Fescue (*Vulpia membranacea*), Sea Mayweed (*Tripleurospermum maritimum*), Prickly Saltwort (*Salsola kali*), Sea Rocket (*Cakile maritima*), Grass-leaved Orache (*Atriplex laciniata*) and Sea Kale (*Crambe maritima*).

In addition, the site supports a number of Essex Red Data List species associated with this habitat type: Sea Holly (*Eryngium maritimum*), Sea Spurge (*Euphorbia paralias*), Frosted Orache (*Atriplex laciniata*), Sand Cat's-tail (*Phleum arenarium*) and Yellow-horned Poppy (*Glaucium flavum*). Sea Barley

#### **Ownership and Access**

The site is in Council ownership and there is public access throughout.

# Habitats of Principal Importance in England

Coastal Vegetated Shingle

## **Selection Criteria**

HC25 - Sand Dune and Shingle Beach Vegetation

## Rationale

The site satisfies selection criteria HC25, supporting areas of vegetated shingle.

## **Condition Statement**

Favourable, declining in places

#### Management Issues

This section of beach attracts a number of visitors through the year, particularly during summer months, and is suffering from localised heavy disturbance. Measures to protect the most diverse areas of foreshore should be explored.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (no change)

This ancient wood is what is left of a larger wood, known in the 19<sup>th</sup> Century as Hewes's Delight. It has a broadleaved canopy composed of Sweet Chestnut (*Castanea sativa*), Pedunculate Oak (*Quercus robur*) and some Alder (*Alnus glutinosa*), Ash (*Fraxinus excelsior*), Silver Birch (*Betula pendula*) and suckering Elm (*Ulmus* sp.) with Hazel (*Corylus avellana*) coppice.

The ground flora reflects the light soil conditions, with typical species including Bracken (*Pteridium aquilinum*), Wood Sage (*Teucrium scorodonia*), Honeysuckle (*Lonicera periclymenum*), Foxglove (*Digitalis purpurea*), Creeping Soft-grass (*Holcus mollis*), Bluebell (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*) Remote Sedge (*Carex remota*) and Enchanter's-nightshade (*Circaea lutetiana*). The small internal ditch/stream in the northern section supports Opposite-leaved golden-saxifrage (*Chrysosplenium oppositifolium*).

#### **Ownership and Access**

The site is under private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### Selection Criteria

HC1 – Ancient Woodland Sites

## Rationale

The site is included within the Ancient Woodland Inventory.

#### **Condition Statement**

Favourable

## Management Issues

Conifers remain dominant in the southeast part of the wood and, elsewhere, Sycamore (*Acer pseudoplatanus*) has invaded. The woodland community would be improved by the removal of these trees that are not native to this part of the country. The wood is being managed.

#### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This ancient woodland has had a long history of piecemeal assimilation into the gardens of adjacent houses and the boundary illustrated here should be regarded as provisional, since it is not always possible to tell where residential curtilages end.

The northern end of the wood is composed of Pedunculate Oak (*Quercus robur*) and Silver Birch (*Betula pendula*) with an open understorey featuring scattered Hazel (*Corylus avellana*) and Holly (*Ilex aquifolium*). The ground flora is also sparse, being dominated by Bramble (*Rubus fruticosus*) and Bracken (*Pteridium aquilinum*). Further south the canopy includes Ash (*Fraxinus excelsior*) and Rowan (*Sorbus aucuparia*), the understorey is thicker and the ground layer is more diverse, with Wood Sage (*Teucrium scorodonia*), Honeysuckle (*Lonicera periclymenum*) and some Bluebell (*Hyacinthoides non-scripta*).

#### **Ownership and Access**

The site is in multiple private ownerships and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### **Selection Criteria**

HC1 – Ancient Woodland Sites

#### Rationale

The site is included in the Ancient Woodland Register, although its extent is now much reduced.

# Condition Statement

Poor

## **Management Issues**

There have been further losses of woodland to garden since the review in 2008 and some other areas are being managed inappropriately. Part of the site has become a local tourist attraction, Gnome Magic.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008, 2015 (reduced)

The original canopy of this mainly ancient wood comprises Sweet Chestnut (*Castanea sativa*) as standards and overgrown coppice, with locally frequent Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*). Now, however, the canopy and understorey are dominated by Sycamore (*Acer pseudoplatanus*), with some planted Beech (*Fagus sylvatica*).

The ground flora includes abundant Bluebell (*Hyacinthoides non-scripta*), with some Primrose (*Primula vulgaris*) and Dog's Mercury (*Mercurialis perennis*). This site includes a small strip of recent secondary woodland along the north, western edge, which comprises a mature canopy of Pedunculate Oak and Sweet Chestnut and now forms an integral part of this small wood.

## **Ownership and Access**

The wood is under private ownership and there is no public access.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

## **Selection Criteria**

HC1 – Ancient Woodland Sites

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

## Rationale

The bulk of the site is recorded as Ancient Woodland, but the northwest strip is shown as part of a field in late 19<sup>th</sup> Century mapping, so both woodland criteria apply.

# Condition Statement

Declining

## **Management Issues**

The invasion of the wood by Sycamore is the main management concern, as this species will increase shade at ground level to the detriment of the woodland flora.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

The central part of this site is ancient wood, the remainder consisting of more modern secondary cover of different ages, with a mosaic of scrub, grassland and parkland style scattered trees at Lower Lodge Farm to the north.

The original canopy cover of the southern section comprises Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) but is now co-dominated by Silver Birch (*Betula pendula*) and Sycamore (*Acer pseudoplatanus*) following the great storm of 1987, which opened up the canopy to these invasive species. The ancient section includes a good deal of Sweet Chestnut (*Castanea sativa*), some of which has been recently coppiced.

The ground flora is diverse, with Wood Sedge (*Carex sylvatica*), Scaly Male Fern (*Dryopteris affinis*), Bluebell (*Hyacinthoides non-scripta*), Hairy Wood-rush (*Luzula pilosa*) and Hart's-tongue Fern (*Asplenium scolopendrium*).

Younger woodland blocks consist of Pedunculate Oak, Ash and Sycamore with Hawthorn and a ground flora dominated by Bramble, Nettles and Ivy. There is localised heavy trampling pressure, although it is recognised that this wood has an important role to play in the countryside experience of local residents. Within a clearing in the northern part of the site is an area of dry grassland With Sweet Vernal Grass (*Anthoxanthum odoratum*), Sheep's Sorrel (*Rumex acetosella*), Common Knapweed (*Centaurea nigra*) and Meadow Foxtail (*Alopecurus pratensis*).

Lower Lodge Farm consists of amenity-mown and rough grassland sloping down to the railway line, with the tidal River Colne beyond. There are abundant, maturing Pedunculate Oaks scattered throughout the grassland giving a parkland feel. The rough grassland is variable, but in places includes species such as Wild Carrot (*Daucus carota*), Common Knapweed, Lesser Stitchwort (*Stellaria graminea*), Bird's-foot-trefoil (*Lotus corniculatus*), Meadow Buttercup (*Ranunculus acris*) and Field Scabious (*Knautia arvensis*) amongst Red Fescue (*Festuca rubra*), Timothy (*Phleum pratense*) and Creeping Bent (*Agrostis stolonifera*). At the top of the slope there is a strip of apparently old woodland containing some large Pedunculate Oaks, Wild Cherry (*Prunus avium*) and Field Maple (*Acer campestre*). Great Green Bush Cricket is present and a population of Common Lizards has been translocated to the site.

### **Ownership and Access**

The whole site is owned and managed by Colchester Borough Council, with public access throughout.

### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

### **Selection Criteria**

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC11 – Other Neutral Grasslands HC31 – Accessible Natural Greenspace

### Rationale

The core part of Wivenhoe Woods is a block Of Ancient Woodland that is included in the Inventory and it is extended by blocks of established secondary woodland. Parts of Lower Lodge Farm support grassland of good diversity, but that don't conform to the Lowland Meadows HPIE. The remaining, sections of the site are not of sufficient quality to justify the use of habitat criteria, but they do combine to provide an extensive natural green space that is directly accessible to a significant proportion of Wivenhoe's population. This value is augmented by the proximity of the Upper Colne Marshes SSSI, which can be viewed from the site.

### **Condition Statement**

Favourable

### Management Issues

The ancient part of the woodland is under favourable coppice management, although localised heavy public use has affected the ground flora. Management of the grassland at Lower Lodge Farm is necessary to prevent the dominance of coarse species and the invasion of scrub and to maintain its suitability for the translocated reptile population.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (extended to the north)

This horse grazed pasture exhibits shallow undulating topography characteristic of old ridge and furrow grassland sites, prior to which the site was likely claimed from former saltmarsh.

The grassland is short grazed and relatively herb-poor, supporting species such as Meadow Barley (*Hordeum secalinum*), Dittander (*Lepidium latifolium*), a Nationally Scarce Essex Red Data List plant, and along a series of shallow damp drains to the west, Marsh Foxtail (*Alopecurus geniculatus*) and Hairy Buttercup (*Ranunculus sardous*).

Included in the Local Wildlife Site is the adjacent sea wall, which supports herbs such as Greater Bird's-foottrefoil (*Lotus pedunculatus*) and Common Century (*Centaurium erythraea*), and a small area of saltmarsh within the River Colne tidal range. Broom (*Cytisus scoparius*) and birch (*Betula* sp.) are becoming established along the seaward banks of the sea wall. The saltmarsh supports typical species such as glassworts (*Salicornia* agg.), Common Sea-lavender (*Limonium vulgare*), Annual Sea-blite (*Suaeda maritima*), Sea Wormwood (*Seriphidium maritimum*) and Sea Aster (*Aster tripolium*).

### **Ownership and Access**

The site is privately owned and there is no public access.

### Habitats of Principal Importance in England

Coastal Saltmarsh

Selection Criteria HC11 – Other Neutral Grasslands

### $HC23-Saltmarshes \ and \ Mudflats$

### Rationale

The grassland satisfies HC11 criteria of largely unimproved grassland that is not NVC MG5 community. The small saltmarsh area is included as HC23, matching the corresponding Habitat of Principal Importance in England.

### **Condition Statement**

Unfavourable, declining

### Management Issues

Overgrazing by horses and improvement by fertilisers would appear to be the greatest threats to the grassland habitat, and its condition will be largely determined by the year to year horse stocking densities; a small amount of grazing through the year is desirable. The birch should be cleared from the sea wall before it becomes further established.

### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This large site comprises areas of worked gravel pit in varying stages of succession, containing a mosaic of scrub, woodland, reedbed, grassland and freshwater habitats as well as recently disturbed sand and gravel substrate.

The area to the west of the conveyor has been left largely unmanaged since it was abandoned in the 1970s and now contains areas of tall Pedunculate Oak (*Quercus robur*) and birch (*Betula* sp.) woodland as well as dense Bramble (*Rubus fruticosus*), Gorse (*Ulex europaeus*) and willow (*Salix* sp.) scrub, this vegetation having naturally colonised the undulating sand/gravel slopes. Additional habitats of interest here include an area of wet willow woodland with reeds (*Phragmites australis*) and an open sandy area subject to regular disturbance, which supports early colonisers including Soft-rush (*Juncus effusus*), Common Cudweed (*Filago vulgaris*) and Small Cudweed (*Filago minima*). An area of common land to the north contains oak woodland with some large standards and Bracken (*Pteridium aquilinum*), Bluebell (*Hyacinthoides non-scripta*) and Spurge-laurel (*Daphne laureola*) amongst the ground flora.

Sea wall and borrow-dyke make up the eastern boundary of the site which abuts onto the River Colne Estuary SSSI, and this habitat supports typical species such as Sea Aster (*Aster tripolium*) and Narrow-leaved Bird's-foot-trefoil (*Lotus glaber*). Adjacent to this lies an extensive area of reedbed that is still in active use as a filter bed system associated with the active parts of the quarry. Here, willow scrub is becoming well established in places and Gorse and Broom (*Cytisus scoparius*) are found on higher ground. In central areas, rough grassland and shorter grassland on free-draining soils provides additional habitat for wildlife such as invertebrates and reptiles; all four species of Essex reptile have been previously recorded within Brickhouse Farm Pits. Purple Hairstreak butterfly is amongst the diverse invertebrate fauna.

### **Ownership and Access**

Most of the site is owned and managed by an aggregate company. Aside from Fingringhoe Common, public access is restricted to a bridleway running east from Brook Hall Road and then south to Wick Lane.

### Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land Reedbeds

### **Selection Criteria**

 $\begin{array}{l} HC27-Post-industrial\ Sites\\ HC15-Reedbeds \end{array}$ 

### Rationale

The site supports a mosaic of habitats associated with a post-industrial gravel extraction site, and satisfies criteria HC27 by including a diversity of ecological features that are likely to support "brownfield" wildlife. The large areas of reedbed are included under criteria HC15. There is no available data that could allow one of the invertebrate criteria to be applied, although it is likely, given the habitat and the location, that nationally significant species are present.

### **Condition Statement**

Unfavourable, declining

### **Management Issues**

The condition of the site is declining due to natural succession of its vegetation, in particular with increasing cover of oak and birch woodland in the absence of active management in some areas. Maintenance of open conditions with bare substrates is important within these open mosaic extraction sites. The site would benefit from a conservation management plan to inform management and maximise potential for invertebrates and other wildlife.

### **Review Schedule**

Site Selected: 2008 Reviewed: 2015 (no change)

This site is a complex mosaic of scrub, woodland and grassland habitats on land mostly affected by aggregate extraction, centred on a stream valley. The northernmost field is former arable land now supporting a flower-rich community of tall ruderals such as Creeping Thistle (*Cirsium arvense*), Common Ragwort (*Senecio jacobaea*), Rosebay Willowherb (*Chamerion angustifolium*) and Square-stalked Willowherb (*Epilobium tetrapterum*) with lower growing species such as Red Bartsia (*Odontites vernus*), Common Centaury (*Centaurium erythraea*), Autumn Hawkbit (*Scorzoneroides autumnalis*), Common Cudweed (*Filago vulgaris*) and *Cladonia* lichens.

To the southwest is an area of uneven, disturbed ground with exposed banks and damp hollows, within which the SPIE digger wasp *Cerceris quinquefasciata* (RDB3) and its brood parasite cuckoo-wasp *Hedychrum niemelai* (RDB3) have both been recorded. A number of other Nationally Rare and Scarce invertebrates have also been observed here. The vegetation includes acid grassland species such as Sheep's Sorrel (*Rumex acetosella*) with Fleabane (*Pulicaria dysenterica*), Agrimony (*Agrimonia eupatoria*), Perforate St John's-wort (*Hypericum perforatum*), Weld (*Reseda lutea*) and, in damper hollows, Jointed Rush (*Juncus articulatus*).

To the east is a small damp field corner that supports a lush vegetation of Yorkshire-fog (*Holcus lanatus*), Creeping Bent (*Agrostis stolonifera*), Great Willowherb (*Epilobium hirsutum*), Smooth Tare (*Vicia tetrasperma*), Creeping Buttercup (*Ranunculus repens*) and abundant Fleabane. Similar vegetation is found in fields on either side of the stream valley, which itself supports a belt of wet willow (*Salix* sp.) and Alder (*Alnus glutinosa*) scrub and woodland.

The field to the west of the stream valley slopes up towards the houses of Field Way and, away from the damper low ground, it is dominated by coarse grass species with willow and Bramble (*Rubus fruticosus*) scrub. In the lower, damper area of this field there are colonies of the ERDL species Southern Marsh Orchid (*Dactylorhiza praetermissa*) and the Nationally Scarce Divided Sedge (*Carex divisa*).

Flooded gravel pits on either side of the stream valley are used for fishing and fringed with mature willows.

At the southern end of the site is Gravel Pit Grove, an area of old woodland occupying a low-lying gravel working. Its canopy is made up of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Sweet Chestnut (*Castanea sativa*), with Silver Birch (*Betula pendula*), Wild Cherry (*Prunus avium*), Alder and Aspen (*Populus tremula*). The understorey is sparse, but includes Holly (*Ilex aquifolium*) and Hazel (*Corylus avellana*) with invading Sycamore (*Acer pseudoplatanus*). Ground flora include Bluebell (*Hyacinthoides non-scripta*), False-brome (*Brachypodium sylvaticum*), Wood Sage (*Teucrium scorodonia*) and Honeysuckle (*Lonicera periclymenum*) with localised Bracken (*Pteridium aquilinum*) and Bramble. A damp hollow towards the southern boundary holds Sallow (*Salix cinerea*) with Common Marsh-bedstraw (*Galium palustre*), Lesser Spearwort (*Ranunculus flammula*) and Marsh Thistle (*Cirsium palustre*). Of particular note is an extensive population of Common Polypody (*Polypodium vulgare*) on the southern boundary bank.

### **Ownership and Access**

The majority of the site is under mixed private ownership. Apart from an area of public open space associated with the disturbed ground in the northwest, the only official public access is via a public footpath that runs along the western edge of the site, from the allotments northward, before turning east and crossing the stream valley to join Keelars Lane.

# Habitats of Principal Importance in England

Wet Woodland, Open Mosaic Habitats on Previously Developed Land

### **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Other Priority Habitat Woodland Types on Non-ancient Sites HC11 – Other Neutral Grasslands HC27 – Post-industrial Sites HC28 – Small-component Mosaics SC1 – Vascular Plants SC18 – SPIE Invertebrates

### Rationale

Gravel Pit Grove is old secondary woodland that conforms to the Lowland mixed Deciduous Woodland HPIE description, while much of the Alder and willow scrub along the stream valley fits the description for the Wet Woodland HPIE. The more species rich grasslands within the site are of sufficient interest to warrant selection, but they do not represent the NVC MG5 community. Much of the land is post-industrial, but this criterion is specifically used to select the extent of nesting habitat that would support *Cerceris quinquefasciata*, which triggers the SC18 criterion. Populations of Southern Marsh Orchid, Divided Sedge and Common Polypody are significant enough to justify the SC1 criterion. Other parts of the site are of insufficient quality to justify their own habitat criterion, but contribute to its overall wildlife interest and are included here using the Small-component Mosaics criterion.

### **Condition Statement**

Variable

### Management Issues

Much of the grassland habitat, and the disturbed land in the northwest, is lacking the management necessary to maintain it in good condition, with more frequent cutting required to maintain a good diversity of plant species and an appropriate habitat structure. Removal of Bramble and other scrub would also be of benefit as would thinning of the woodland.

**Review Schedule** Site Selected: 2008 Reviewed: 2015 (considerable extension to the south)

This site is a mosaic of acid grassland, scrub and young woodland with evidence of ground disturbance in the northern part in recent years, leaving an uneven topography of banks, hills and hollows.

Open areas support an acidic grassland community featuring Red Fescue (*Festuca rubra*), bent (*Agrostis* sp.), Perforate St John's-wort (*Hypericum perforatum*) and Sheep's Sorrel (*Rumex acetosella*) with Common Centaury (*Centaurium erythraea*), Blue Fleabane (*Erigeron acris*), *Polytrichum* moss and patches of *Cladonia* lichen heath in less vegetated areas or where Rabbit grazing is more intensive. Damp spots support lusher grassland that includes Fleabane (*Pulicaria dysenterica*), Soft-rush (*Juncus effusus*), Marsh Thistle (*Cirsium palustre*) and Creeping Buttercup (*Ranunculus repens*).

The scrub habitat is made up of Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*), Sallow (*Salix cinerea*), rose (*Rosa* agg.) and Bramble with denser growth associated with old boundary hedgerows. The northeast part of the southern field has been managed more recently and contains scattered scrub within rough grassland, partly grazed short by Rabbits.

### **Ownership and Access**

The land is under private ownership and there is no public access.

### Habitats of Principal Importance in England

Lowland Dry Acid Grassland

Selection Criteria HC13 – Heathland and Acid Grassland

### Rationale

Open areas support an acid grassland community typical of the area, with the addition of lichen heath and bryophyte dominated patches where there has been some recent disturbance. These habitats meet the Lowland Dry Acid Grassland Habitat of Principal Importance description. The HC28 criterion is used to define the limits of the site, taking in the scrub and young woodland habitat, which augment the diversity of the site.

### **Condition Statement**

Declining

### **Management Issues**

Part of the site is currently used for leisure purposes, but other areas are becoming overly dominated by scrub, shifting the balance from an open, diverse mosaic of habitats to a dense, uniform community. Scrub clearance and improved grassland management would restore favourable condition.

### **Review Schedule**

Site Selected: 2015 Reviewed: -

This site has established over time on frequently disturbed ground associated with now demolished industrial buildings. With the cessation of disturbance since the buildings burnt down, Bramble (*Rubus fruticosus* agg.), willow (*Salix* sp.), birch (*Betula* sp.) rose (*Rosa* agg.) and Butterfly-bush (*Buddleja davidii*) scrub is becoming established over a flowery, diverse ruderal and grassland mosaic. A wet ditch runs along its northern edge. More noteworthy plants species include Blue Fleabane (*Erigeron acris*), Wild Carrot (*Daucus carota*) and Common Knapweed (*Centaurea nigra*). The Nationally Scarce Dittander (*Lepidium latifolium*) has been recorded here, as have Bee Orchids (*Ophrys apifera*).

The site also includes habitat features created for invertebrates along the base of a retaining wall that runs the length of the wider site, although the extent of their significance to local invertebrate populations is not known.

A recent invertebrate survey (Green Environmental Consultants/Colin Plant Associates, 2015) revealed the presence of two SPIE invertebrates: a grassland fly *Dorycera graminum*; and the Horehound Longhorn moth (*Nemophora fasciella*). In addition, the national Red Data Book species *Cistogaster globosa*, a parasitic fly, and *Ceratina cyanea*, the Blue Carpenter Bee, were recorded together with 23 Nationally Scarce invertebrates and 45 that are Nationally Local. The SPIE wasp *Cerceris quadricincta* has been recorded on the adjacent railway line.

### **Ownership and Access**

The land is under private ownership. There is no public access, but the site can be viewed from a public footpath to the north.

# Habitats of Principal Importance in England

Open Mosaic Habitats on Previously Developed Land

### **Selection Criteria**

HC27 – Post-industrial Sites SC18 – SPIE Invertebrates SC19 – Important Invertebrate Assemblages

### Rationale

The site is clearly post-industrial and this habitat criterion has been used to delineate the site's area, but the more significant criteria are the invertebrate ones, justified by the results of the survey carried out this year to inform a planning application.

### **Condition Statement**

Favourable, but declining

### **Management Issues**

The site is subject to a planning application that is currently under consideration. It is proposed to retain part of the site as wildlife habitat. It is the nature of this type of habitat to deteriorate over time, as scrub takes over and simplifies its structure, reduces plant species diversity and shades the ground. A limited amount of active management is needed to maintain favourable conditions.

**Review Schedule** Site Selected: 2015 Reviewed:

This road verge supports patches of moderately diverse grassland with a community that reflects a lack of agricultural improvement. Typical plant species include Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*) and Smooth Tare (*Vicia tetrasperma*).

The reasons for its selection are a large and significant population of the Nationally Scarce Lesser Calamint (*Clinopodium calamintha*) in its northern half and a population of Glow Worms in its southern half, on either side of Ball Lane.

### **Ownership and Access**

Ownership is unknown. Access is possible, with care, from the adjacent highway.

### Habitats of Principal Importance in England

None

### Selection Criteria

SC1 – Vascular Plants SC20 – Notable 'Flagship' Macro-invertebrates

### Rationale

The Lesser Calamint population on this verge is one of the most extensive in the Borough. Glow-worms are culturally significant and this site forms part of the more significant of the two known populations in the Borough.

# **Condition Statement**

Favourable

### **Management Issues**

As with all road verges, this site is vulnerable to inappropriate cutting and to disturbance associated with highway work. At present the cutting regime appears to suit Lesser Calamint.

# **Review Schedule**

Site Selected: 2015 Reviewed:

This site is part of Ferry Marsh, an area of former coastal grazing marsh, the remainder of which is within the Upper Colne Marshes SSSI and has been designated as a Local Nature Reserve. It consists of a small area of rough grassland and scrub, bisected by a Common Reed (*Phragmites australis*) fringed ditch. The Essex Red Data List Dittander (*Lepidium latifolium*) is present along with Wormwood (*Artemisia absinthium*).

It is dominated by Sea Couch-grass (*Elytrigia atherica*) with scattered Blackthorn (*Prunus spinosa*), willow (*Salix* sp.) and Bramble (*Rubus fruticosus* agg.) scrub.

### **Ownership and Access**

The land is under private ownership. There is a public footpath along the seawall to the south of the site and a permissive route runs around the western and northern boundaries.

#### Habitats of Principal Importance in England

None

### Selection Criteria

HC28 – Small-component Mosaics

### Rationale

The site is of marginal conservation significance, but the combination of grassland, reed and scrub is of some value, particularly in view of its location adjacent to a SSSI.

# **Condition Statement**

Unfavourable

### **Management Issues**

The site does not appear to be managed and the grassland structure is poor as a result, Sea Couch being dominant to the exclusion of most other species.

# **Review Schedule**

Site Selected: 2015 Reviewed:

This small secondary woodland compartment is situated in Great Horkesley to the east of what was previously, as the name suggests, semi-natural Alder carr. The woodland contains a mixed canopy of Sweet Chestnut (*Castanea sativa*), Pedunculate Oak (*Quercus robur*), Wild Cherry (*Prunus avium*) and Sycamore (*Acer pseudoplatanus*) with some planted Beech (*Fagus sylvatica*). The understorey includes Hazel (*Corylus avellana*) coppice, Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*).

The relatively sparse ground flora reflects the freely draining soils, with Bramble (*Rubus fruticosus* agg), Bracken (*Pteridium aquilinum*), Foxglove (*Digitalis purpurea*) and Bluebell (*Hyacinthoides non-scripta*). Red Campion (*Silene dioica*), Ground-ivy (*Glechoma hederacea*) and Male-fern (*Dryopteris filix-mas*) are also present.

### **Ownership and Access**

The site is in private ownership. There is no public access.

### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

### **Selection Criteria**

HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

Although the site is not ancient, it has a relatively varied canopy and ground layer and satisfies the definition of the Lowland Mixed Deciduous Woodland Habitat of Principal Importance in England.

# Condition Statement

Unmanaged

# **Management Issues**

No action is immediately necessary, although some coppicing or thinning may be advisable in future years.

# **Review Schedule**

Site Selected: 2015 Reviewed: -

Gosbeck's Park comprises a large area of species-rich seeded grassland that represents an extensive resource for invertebrates as well as providing an open green space that is easily accessible to Colchester residents.

The grass component comprises mainly tall, coarse grasses such as Cock's-foot (*Dactylis glomerata*) and False Oat-grass (*Arrhenatherum elatius*) with areas of meadow grasses (*Poa* sp.). In contrast, the herb layer retains a great abundance of flowering plants resulting from the original seed mix, which have become well established and continue to flourish. Lady's Bedstraw (*Galium verum*) occurs in locally dominant patches and Yarrow (*Achillea millefolium*) and Common Knapweed (*Centaurea nigra*) are abundant throughout. In addition, other characteristic herbs include Wild Carrot (*Daucus carota*), Yellow-rattle (*Rhinanthus minor*), Oxeye Daisy (*Leucanthemum vulgare*), Field Scabious (*Knautia arvensis*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Dwarf Mallow (*Malva neglecta*). The area around the Roman Temple is more intensively managed than the adjacent tall grassland, but the short turf here supports locally abundant Common Bird's-foot-trefoil.

### **Ownership and Access**

The site is owned and managed by Colchester Borough Council and a network of wide, regularly mown rides within the grassland provides access to a large number of visitors.

# Habitats of Principal Importance in England

None

Selection Criteria HC31 – Accessible Natural Greenspace

### Rationale

The site supports diverse grassland of recent origin that provides a large area of accessible natural greenspace adjacent to a large residential area, and so satisfies criterion HC31. At present none of the habitat criteria can be applied to this relatively new habitat and there is a lack of species data, but there is clear and significant value to wildlife.

### **Condition Statement**

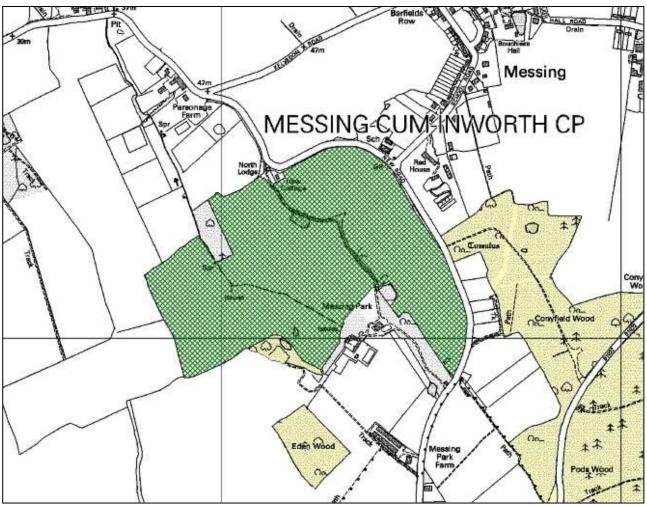
Favourable

### **Management Issues**

The current management regime appears to be maintaining the site's interest and sympathetic grassland management should be continued. This should include provision for invertebrates, mowing in rotation so that there is always a large area of grass left for overwintering invertebrates. Localised nutrient enrichment by dog fouling is a concern, demonstrated by patches of Creeping Thistle (*Cirsium arvense*), Mugwort (*Artemisia vulgaris*) and Wall Barley (*Hordeum murinum*), and measures to discourage this should be further explored.

### **Review Schedule**

Site Selected: 2015 Reviewed: -

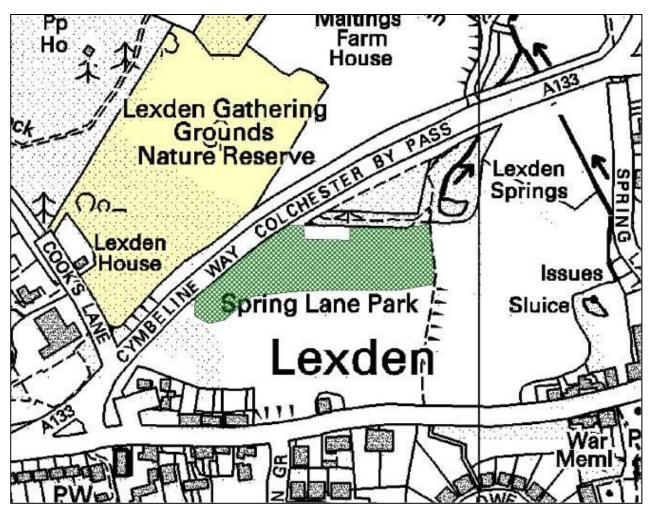


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This area of parkland is likely to meet the HPIE

Potential Interest: Dead wood invertebrates associated with isolated trees; grassland flora.

Action Required: Further survey work, especially for invertebrates.



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An area of generally short-mown acid grassland, which includes an abundance of Blinks (*Montia fontana*) – a plant that generally favours damp, unimproved acid soils. Harebell (*Campanula rotundifolia*) may also be present.

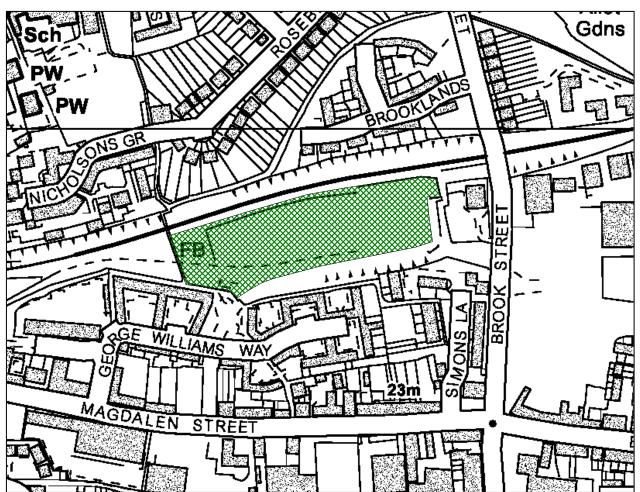
Potential Interest: Unimproved acid grassland

Action Required: Less intensive management, to allow flora to develop better, followed by survey work, including invertebrates.

Old maps show this area to be the last surviving remnant of Black Heath, a large heathland waste that gave its name to this area of urban Colchester. Despite having been planted with conifers and with plentiful Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*), the site still supports a few plants of Purple Moorgrass (*Molinea caerulea*), which is a rare species in northeast Essex, as well as the hawkweed *Hieracium sabaudum*. Common Calamint (*Clinopodium ascendens*) is also present, but may have been introduced with garden rubbish, as the habitat is not what would be expected.

### Potential Interest: Heathland

Action Required: Restoration of the heath by removal of tree cover, Bramble and Bracken. This ground disturbance may stimulate the seedbank of heathland plants in the soil. Ongoing management would then be required to maintain the site largely free from scrub in order to encourage the development of acid grassland.



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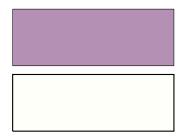
This is an area of "brownfield" land comprising sparsely vegetated waste ground, which may be of importance for invertebrates and reptiles, although it is being overtaken by scrub.

Potential Interest: Brownfield ecology; invertebrate populations

Action Required: Surveys for invertebrates, flora and reptiles.

# APPENDIX 3 – REGISTER OF TENDRING LOCAL WILDLIFE SITES ASSESSED DURING 2015 SURVEY

# KEY TO MAPS



Highlighted LoWS

Adjacent LoWS

The core of this site is made up of two blocks of old woodland reduced in size by the construction of Ardleigh Reservoir and then extended by a combination of planting and natural colonisation. The result is a linear strip of woodland along the southern shore of the reservoir's western arm, on the bank of the stream valley that existed before the reservoir was constructed.

The woodland canopy comprises Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Silver Birch (*Betula pendula*) with localised Beech (*Fagus sylvatica*) and Sweet Chestnut (*Castanea sativa*). The eastern block of woodland also contains Wild Cherry (*Prunus avium*) and there are a variety of conifers planted at the easternmost end. The understorey consists of Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Hazel coppice (*Corylus avellana*) and Elder (*Sambucus nigra*), with coppiced Alder (*Alnus glutinosa*) and willow (*Salix* spp.) along the reservoir edge.

The ground flora is typified by Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus* agg.), Foxglove (*Digitalis purpurea*), Broad Buckler Fern (*Dryopteris dilatata*), Remote Sedge (*Carex remota*), Climbing Corydalis (*Ceratocapnos claviculata*), Lesser Celandine (*Ranunculus ficaria*) and Bluebell (*Hyacinthoides non-scripta*). Although heavily shaded, the reservoir edge supports some emergent species, with Water Mint (*Mentha* aquatica) most prominent.

### **Ownership and Access**

The majority of the site is believed to form part of the land associated with the reservoir, but some appears to be in private ownership. There is no public access, although the site can be viewed from a public footpath that runs through the field to the south.

### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Wet Woodland

### Selection criteria

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

There is no evidence to suggest that the wood is ancient, but it conforms to the Lowland Mixed Deciduous Woodland HPIE description.

### **Condition Statement**

Neglected

### **Management Issues**

There is no evidence of active management and some of the Hazel coppice, in particular, is over-mature. There is some incursion by Sycamore (*Acer pseudoplatanus*), which may spread if uncontrolled and small quantities of the invasive, non-native species Japanese Knotweed (*Fallopia japonica*) and Rhododendron (*Rhododendron ponticum*) are present.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Positioned on the edge of reservoir, this mosaic contains grassland, scrub and a small Alder (*Alnus glutinosa*) and willow (*Salix*) wood. The scrub is mainly young Pedunculate Oak (*Quercus robur*), willow, Blackthorn (*Prunus spinose*), Hawthorn (*Crataegus monogyna*), Broom (*Cytisus scoparius*), and Bramble (*Rubus fruticosus agg.*).

Remaining areas of open grassland are varied, with some becoming rough and tussocky, but others continuing to support communities that reflect the free-draining soil. Typical species include Red Fescue (*Festuca rubra*), Rough Meadow Grass (*Poa trivialis*), bents (*Agrostis spp.*), Common Vetch (*Vicia sativa*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Musk Mallow (*Malva moschata*), Common Knapweed (*Centaurea nigra*), Ox-eye Daisy (*Leucanthemum vulgare*) and Perforate St John's-wort (*Hypericum perforatum*). There are also patches of lichen heath, dominated by *Cladonia* lichens, and acid grassland with species such as Sheep's Sorrel (*Rumex acetosella*), and Field Wood-rush (*Luzula campestris*).

There is also a small colony of the ERDL species, Pyramidal Orchid (Anacamptis pyramidalis).

### **Ownership and Access**

The habitat is presumed to be part of the Reservoir land holding. There is no public right of way.

# Habitats of Principal Importance in England

None

### Selection criteria

HC28 - Small-component Mosaics

### Rationale

None of the component habitats – scrub, acid grassland and wet woodland – is of sufficient quality to qualify alone, but in combination this is a valuable habitat. Although an ERDL species, the pyramidal Orchid population is not sufficiently significant to satisfy the SC1 criteria.

### **Condition Statement**

Declining overall, but favourable in parts

### **Management Issues**

The main issue is the spread of scrub and young woodland, shading out the more interesting grassland. There has been some dumping of material close to the car park area.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This small field on the district boundary forms the northern tip of an important wetland/grassland site along the Salary Brook within Colchester Borough (as Site Co146). Towards the south of the meadow is marshy grassland with Tufted Hair-grass (*Deschampsia cespitosa*), Sharp-flowered Rush (*Juncus acutiflorus*), Cuckooflower (*Cardamine pratensis*), Marsh Thistle (*Cirsium palustre*), Soft-rush (*Juncus effusus*) and Lesser Celandine (*Ranunculus ficaria*). The northern part supports drier grassland typified by Red Fescue (*Festuca rubra*), Meadow Foxtail (*Alopecurus pratensis*) and Field Wood-rush (*Luzula campestris*).

### **Ownership and Access**

The site is in private ownership. There is no public access.

### Habitats of Principal Importance in England

None

### Selection criteria

HC11 – Other Neutral Grasslands

### Rationale

The site supports grassland that appears to be largely unimproved, but it does not conform to the MG5 NVC community

# **Condition Statement**

Favourable

### **Management Issues**

The current management regime is unknown, but appears to be maintaining the site's interest.

# Review Schedule

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This large, predominantly ancient woodland has a varied composition including planted conifers in some parts and more recent broad leaf planting. The western half of the wood is more interesting, comprising areas of Sweet Chestnut (*Castanea sativa*), Small-leaved Lime (*Tilia cordata*) and Hornbeam (*Carpinus betulus*) coppice with Pedunculate Oak (*Quercus robur*) standards and an understorey of Hazel (*Corylus avellana*), Field Maple (*Acer campestre*) and, in drier areas, Holly (*Ilex aquifolium*). Other tree species include Beech (*Fagus sylvatica*), Wild Cherry (*Prunus avium*), Silver Birch (*Betula pendula*), Rowan (*Sorbus aucuparia*) and elm (*Ulmus sp.*). Sycamore (*Acer* pseudoplatanus) is invading in some areas.

The ground flora is rich and varied including: Bluebell (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*), Climbing Corydalis (*Ceratocapnos claviculata*), Wood Anemone (*Anemone nemorosa*), Yellow Archangel (*Lamiastrum galeobdolon*), Wood Sorrel (*Oxalis acetosella*), Moschatel (*Adoxa moschatellina*) and Three-nerved Sandwort (*Moehringia trinervis*) with Wood Sage (*Teucrium scorodonia*) and Bracken (*Pteridium aquilinum*) particularly in the northeast.

### **Ownership and Access**

The wood is under private ownership. A public footpath crosses the wood in its northeast corner and runs along its eastern boundary.

### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

### Selection criteria

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

### Rationale

The majority of the woodland is ancient, although partly re-planted with conifers, but the northeast arm is more recent.

### **Condition Statement**

Favourable, but partly coniferised

### **Management Issues**

The wood is under active management, but would be improved by the removal of the remaining conifers

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

This site consists of probably ancient streamside woodland with younger woodland blocks of varying ages on the valley sides. In the central part of the stream valley, where there was once a mill, is a complex of marsh and wet woodland habitats.

The stream banks and adjoining woodlands are dominated by Pedunculate Oak (*Quercus robur*) standards with Wild Cherry (*Prunus avium*), Field Maple (*Acer campestre*), Holly (*Ilex aquifolium*) and occasional Hornbeam (*Carpinus betula*). The ground flora is very rich, including: Bluebell (*Hyacinthoides non-scripta*), Yellow Archangel(*Lamiastrum galeobdolon*), Dog's Mercury (*Mercurialis perennis*), Wood Sorrel (*Oxalis acetosella*), Moschatel (*Adoxa moschatellina*), Creeping-jenny (*Lysimachia nummularia*), Enchanter's-nightshade (*Circaea lutetiana*), Wavy Hair-grass (*Deschampsia flexuosa*), Primrose (*Primula vulgaris*), Tutsan (*Hypericum androsaemum*), Wood Sedge (*Carex sylvatica*), Remote Sedge (*Carex remota*) and Wood Anemone (*Anemone nemorosa*). A diverse range of ferns is also present including Hart's-tongue (*Asplenium scolopendrium*) and the Essex Red Data List species Scaly Male Fern (*Dryopteris affinis*) and Lady Fern (*Athyrium filix-femina*).

The upper slopes mainly hold coppiced Sweet Chestnut (*Castanea sativa*) with occasional Ash (*Fraxinus excelsior*) and Pedunculate Oak standards and an understorey of Hazel (*Corylus avellana*), Field Maple, Hawthorn (*Crataegus monogyna*). The ground flora includes Bluebell, but is not as diverse as the stream sides. Some spring lines, dropping down to the stream, are marked by Alder (*Alnus glutinosa*)

The more recent woodland blocks to the east and south – including The Broomhangings – consist of Pedunculate Oak, Silver Birch (*Betula pendula*), Elder (*Sambucus nigra*) and Hawthorn with Bramble. The eastern block includes some small scale gravel workings and the ground flora includes Wood Sage (*Teucrium scorodonia*) and Heath Speedwell (*Veronica officinalis*).

In the central part of the stream valley, Alder and Willow (*Salix spp.*) woodland dominates in parts with more open areas of Common Nettle (*Urtica dioica*), Water Mint (*Mentha aquatica*) Great Willowherb (*Epilobium hirsutum*), Common Hemp-nettle (*Galeopsis tetrahit*), Water Chickweed (*Myosoton aquaticum*) and Wild Angelica (*Angelica sylvestris*).

### **Ownership and Access**

The site is believed to be in private ownership, but it is crossed by public footpaths.

### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

### Selection criteria

HC1 – Ancient Woodland HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC3 – Wet Woodland HC30 - Wildlife Corridors

### Rationale

The presence of indicator species suggests that the woodland along the stream banks is ancient, but the majority of the woodland is likely to be more recent. The willow and Alder woodland of the stream corridor matches the description of the Wet Woodland Priority Habitat, although it is not particularly old. The whole site forms a significant block of linear, semi-natural habitat forming a strong natural corridor on the eastern side of Colchester.

### **Condition Statement**

Favourable

### Management Issues

The woodland is under active coppice management, but there has been some invasion by Sycamore (*Acer pseudoplatanus*), particularly in the northern-most block.

### **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (extended)

This site includes the roadside verge and the adjacent wood bank and ditch, and it has been designated for its population of Common Polypody (*Polypodium vulgare*), an Essex Red Data List fern. It forms part of a much larger Essex County Council Special Roadside Verge, most of which has lost its botanical interest. Other species present include Common Knapweed (*Centaurea nigra*), Common Bent (*Agrostis tenuis*), a hawkweed (*Hieracium sabaudum*), Dog's Violet (*Viola* spp.) and Wood Sage (*Teucrium scorodonia*).

## **Ownership and Access**

The ownership of the verge is unknown, but the wood bank is under private ownership. Public access is limited to the carriageway.

Habitats of Principal Importance in England None

Selection criteria SC1 – Vascular Plants

#### Rationale

Common Polypody is a rare and declining species in Essex, especially growing in natural situations such as this, as opposed to walls.

## **Condition Statement**

Favourable

# Management Issues

The colony is thriving at present, but it is vulnerable to changes in verge management.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

These narrow verges are located between arable fields and display an interesting flora that reflects the acidic soil-type and the heathland history of this area – the southern verges were once part of Whitmore Heath. The grassland consists of Common Bent-grass (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), and cat's-tail (*Phleum* sp.) with (*Hieracium sabaudum*), Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Wood Sage (*Teucrium scorodonia*), Lesser Stitchwort (*Stellaria graminea*) and Barren Strawberry (*Fragaria vesca*). The most significant species is the ERDL species Betony (*Stachys officinalis*), present in patches throughout the verges.

## **Ownership and Access**

The verges are in private ownership. Public access is restricted to the carriageway.

## Habitats of Principal Importance in England

None

Selection criteria HC11 – Other Neutral Grassland SC1 – Vascular Plants

## Rationale

The species present, include some that are notable in a county context, suggest a long continuity as grassland and, although they reflect acidic soils, the community present does not represent any of the NVC communities

associated with the Lowland Dry Acid Grassland Priority Habitat. The population of Betony, a species exhibiting drastic decline in the county, is significant enough to justify the Vascular Plants criterion.

#### **Condition Statement**

Variable

## **Management Issues**

Some sections of the verge have become dominated by Cock's-foot (*Dactylis glomerata*), False Oat-grass (*Arrhenatherum elatius*), Common Nettle (*Urtica dioica*) and Creeping Thistle (*Cirsium arvense*). The verges are sensitive to changes in management and to any highway maintenance work, especially due to their narrowness.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (extended)

This disused sand and gravel pit now comprises an extensive mosaic of different habitats, including numerous ponds, acid grassland, exposed soil and cliff, scrub and an area of ancient woodland that has escaped quarrying.

Cockaynes Wood contains Sweet Chestnut (*Castanea sativa*), Pedunculate Oak (*Quercus robur*), Aspen (*Populus tremula*), Alder (*Alnus glutinosa*) and Silver Birch (*Betula pendula*) coppice with a dense understorey of Hazel (*Corylus avellana*) coppice and Holly (*Ilex aquifolium*). The sparse ground flora is dominated by Bracken (*Pteridium aquilinum*) together with Bluebell (*Hyacinthoides non-scripta*) and Climbing Corydalis (*Ceratocapnos claviculata*). The southern margin of Cockaynes Wood supports a heathland community that includes Ling (*Calluna vulgaris*), Purple Moor-grass (*Molinia caerulea*), sedges (*Carex spp.*), Gorse (*Ulex europaeus*) and the scarce Common Cow-wheat (*Melampyrum pratense*).

Along the western boundary is a strip of probably ancient streamside woodland with ponds and a wider band of secondary woodland on the valley side. The topography at the top of the valley is very uneven, with damp hollows and seasonal ponds. The canopy is formed by Pedunculate Oak and Silver Birch, with Ash (*Fraxinus excelsior*) and Sweet Chestnut, and an understorey of Hawthorn (*Crataegus monogyna*), Holly and coppiced Hazel. The ground flora includes Bluebell, Honeysuckle (*Lonicera periclymenum*), Bramble (*Rubus fruticosus agg.*) and Small Balsam (*Impatiens parviflora*), an introduced species that is spreading rapidly. Along the stream banks, where there are willows (*Salix spp.*) and Alder, the flora is more interesting and includes Opposite-leaved Golden Saxifrage (*Chrysosplenium oppositifolium*), Remote Sedge (*Carex remota*) and Scaly Male Fern (*Dryopteris affinis*). In more open areas there is swamp vegetation including Common Reed (*Phragmites australis*), Great Willowherb (*Epilobium hirsutum*) and Marsh Thistle (*Cirsium palustre*).

The open grassland flora is typified by Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Crested Dog's-tail (*Cynosurus cristatus*), bents (*Agrostis* spp.) and Soft-brome (*Bromus hordeaceus*), while areas of exposed sands and gravels support patches of lichen heath, dominated by *Cladonia* lichens, Sheep's Sorrel (*Rumex acetosella*), Trailing St Johns-wort (*Hypericum humifusum*), *Vulpia* fescues, Thyme-leaved Speedwell (*Veronica serpyllifolia*), Lesser Hawkbit (*Leontodon saxatilis*) and willowherbs (*Epilobium spp.*), including the newly established alien, Panicled Willowherb (*Epilobium brachycarpum*).

Ponds, some of which are seasonally dry and overgrown, provide good habitat for a range of species including Soft-rush, Jointed Rush (*Juncus articulates*), Gipsywort (*Lycopus europaeus*), Celery-leaved Buttercup (*Ranunculus sceleratus*), Water Mint (*Mentha aquatica*), Bulrush (*Typha latifolia*), Lesser Bulrush (*Typha angustifolia*), Common Reed, Yellow Iris (*Iris pseudacorus*) and Water-plantain (*Alisma plantago-aquatica*).

Significant areas of scattered and dense scrub are interspersed through the other habitats, mainly willow, birch (*Betula* spp.) and Butterfly-bush (*Buddleja davidii*).

The open areas also support an important assemblage of breeding birds, whilst the invertebrate populations include the Nationally Rare (RDB3) UK BAP digger wasp *Cerceris quinquefasciata*, along with two other RDB3 species: the mining bee *Lasioglossum pauperatum* and the ruby-tailed wasp *Hedychrum niemelai*.

#### **Ownership and Access**

Most of the site is leased and managed by the Cockaynes Wood Trust and Essex Wildlife Trust. There are public footpaths across the site and additional permissive paths.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland Open Mosaic habitats on Previously Developed Land Lowland Dry Acid Grassland

#### Selection criteria

HC1 – Ancient Woodland Sites HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites HC13 – Heathland and Acid Grassland HC27 – Post-industrial Sites SC18 – SPIE Invertebrates

#### Rationale

Cockaynes Wood and the streamside woodland are ancient, but the remainder of the woodland present is more recent in origin. Much of the site consists of acid grassland communities on free-draining soils and a lowland heath community is found on the southern margin of Cockaynes Wood. The site is also post-industrial with notable invertebrate species known to be present, including a population of *Cerceris quinquefasciata* 

#### **Condition Statement**

Favourable

#### Management Issues

The site is largely under conservation management, but does include the most mature of the fishing lakes at the eastern end of the former quarry. The spread of scrub is a continual pressure and some of the open pools have been colonised by New Zealand Pigmyweed (*Crassula helmsii*).

### **Review Schedule**

Site Selected: 1991 (part) Reviewed: 2008; 2015 (no change)

Palegate Wood is ancient woodland dominated by Sweet Chestnut (*Castanea sativa*) and Hazel (*Corylus avellana*) coppice with occasional Pedunculate Oak (*Quercus robur*) and Beech (*Fagus sylvatica*) standards. The presence of Silver Birch (*Betula pendula*) and planted Beech and Wild Cherry (*Prunus avium*) suggest that the wood has experienced storm damage in the past (possibly in 1987). The understorey also includes Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*) with Honeysuckle (*Lonicera periclymenum*), Foxglove (*Digitalis purpurea*), Wood Sage (*Teucrium scorodonia*), Greater Stitchwort (*Stellaria holostea*) and Bluebell (*Hyacinthoides non-scripta*) in the generally sparse ground flora.

#### **Ownership and Access**

The wood is in private ownership, but can be viewed from the adjacent public highway.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### Selection criteria

HC1 – Ancient Woodland Sites

#### Rationale

Maps indicate that the wood is ancient, despite the lack of indicator species.

## **Condition Statement**

Favourable, but low quality

## Management Issues

There is no obvious sign of any recent management and Sycamore (*Acer pseudoplatanus*) is present in small quantity.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Park Wood is a small fragment of neglected ancient wood, with standards of Pedunculate Oak (*Quercus robur*) and Sweet Chestnut (*Castanea sativa*) coppice, partly grubbed for an orchard extension leaving only a narrow band of woodland.

#### **Ownership and Access**

The site is believed to be in private ownership.

## Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

Selection criteria HC1 – Ancient Woodland Sites

## **Rationale** The site is included in the Ancient Woodland Inventory.

#### **Condition Statement** Neglected

#### Management Issues

A lack of management will lead to a decline tin the quality of this woodland habitat.

## Review Schedule Site Selected: 1991 Reviewed: 2008; 2015 (no change)

Money Wood is a fragment of ancient woodland consisting of Sweet Chestnut (*Castanea sativa*) coppice with abundant Ash (*Fraxinus excelsior*) and only occasional Pedunculate Oak (*Quercus robur*). Beech (*Fagus sylvatica*), Silver Birch (*Betula pendula*) and Hornbeam (*Carpinus betulus*) are also present with an understorey of Hazel (*Corylus avellana*), Elder (*Sambucus nigra*) and Holly (*Ilex aquifolium*). There are Field Maple (*Acer campestre*) and Hawthorn (*Crataegus monogyna*) on the boundaries. The ground flora is characterised by Bluebell (*Hyacinthoides non-scripta*), Wood Sage (*Teucrium scorodonia*), Foxglove (*Digitalis purpurea*) and Bracken (*Pteridium aquilinum*), but with extensive areas of Common Nettle (*Urtica dioica*).

#### **Ownership and Access**

The wood is in private ownership and there is no public access.

#### Habitats of Principal Importance in England

Lowland Mixed Deciduous Woodland

#### Selection criteria

HC1 – Ancient Woodland Sites

#### Rationale

The wood features in the Ancient Woodland Inventory

## **Condition Statement**

Favourable, but low quality

#### Management Issues

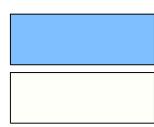
There is some small-scale management taking place. The presence of Sycamore (*Acer pseudoplatanus*) in the canopy is of concern.

# **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015 (no change)

## APPENDIX 4 – REGISTER OF BRAINTREE LOCAL WILDLIFE SITES ASSESSED DURING 2015 SURVEY

# KEY TO MAPS



Highlighted LoWS

Adjacent LoWS

This river valley site comprises a mosaic of open Cricket-bat Willow (*Salix alba* var. *caerulea*) plantations, with some flower-rich grassland and associated hedgerows. The adjacent sections of the River Blackwater are also included.

Parts of the site have been primarily identified as a key foraging area for the nationally rare bumblebee *Bombus ruderatus*. This bee has dramatically declined in Britain, and is now the subject of a national Biodiversity Action Plan in order to help stabilise and increase populations. Its key forage plants are thought to be Comfrey (*Symphytum* spp.), Marsh Woundwort (*Stachys palustris*) and, later in the year, Bindweeds (*Calystegia* spp.), all of which are widespread here. Some areas of herb-rich meadowland are included as additional foraging habitat for this and other scarce invertebrates. This includes the banks of a reservoir which supports herbs including Wild Carrot (*Daucus carota*), Common Knapweed (*Centaurea nigra*) and Common Fleabane (*Pulicaria dysenterica*). The fauna includes several other scarce Essex insects, listed on the Essex Red Data List. These include the bumblebee *Bombus rupestris* and the bees *Sphecodes niger* and *Lasioglossum pauxillum*.

The marshy willow plantations also support an interesting and increasingly scarce flora, including Blue Waterspeedwell (*Veronica anagallis-aquatica*), Pink Water-speedwell (*Veronica catenata*), Marsh Marigold (*Caltha palustris*) and Meadowsweet (*Filipendula ulmaria*). Greater Pond-sedge (*Carex riparia*) is locally dominant alongside tall ruderal vegetation such as Hemp Agrimony (*Eupatorium cannabinum*). The river supports a good population of the Nationally Scarce ERDL species River Water-dropwort (*Oenanthe fluviatilis*). The fauna of the site includes Otters within the river corridor and several breeding populations of Red and Amber-listed birds of conservation concern.

#### **Ownership and Access**

The site is in private ownership. There is no public access with the exception of a public footpath crossing the river via Old Mill Lane.

#### Habitats of Principal Importance in England

Lowland Fens

### Selection criteria

HC14 – Lowland Fen Vegetation HC20 – Complex Riverine Habitats HC29 – Habitat Extension Mosaics SC1 – Vascular Plants SC19 – Important Invertebrate Assemblages

#### Rationale

Parts of the site have been selected as they support important foraging habitat for *Bombus ruderatus* and other scarce invertebrates, the extent defined by the use of the mosaic criterion. The River Blackwater and marshy willow plantation satisfy the criteria for Lowland Fen Vegetation and Complex Riverine Habitats. The presence of a good population of the ERDL species River Water-dropwort satisfies the SC1 criteria.

#### **Condition Statement**

Favourable

#### Management Issues

The abundance of the food plants of *Bombus ruderatus* indicates that the current management regime is maintaining the site's interest. Himalayan Balsam (*Impatiens glandulifera*) is becoming established downstream of Old Mill Lane bridge, and should be removed although this will require an organised catchment-based approach.

## **Review Schedule**

Site Selected: 1991 Reviewed: 2008; 2015