

CONSTRAINTS AND OPPORTUNITIES REPORT

Rayleigh Road, Hutton

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1. INTRODUCTION

1.1 Terms of Instruction

1.1.1 This report has been commissioned by Elizabeth Finn Care Trust. It provides an ecological assessment of the proposed development of land at Rayleigh Road, Hutton, Essex.

1.2 Report Limitations

1.2.1 This is an ecological report and as such no reliance should be given to comments relating to buildings, engineering, soils or other unrelated matters.

1.3 Documents Provided

- 1.3.1 As background information the following documentation was provided:
 - Sketch Site Location Plan

1.4 Qualifications

- 1.4.1 The authors of this report are detailed below:
 - James Hildreth BSc(Hons) PhD CEnv MCIEEM Primary Surveyor / Primary Author
 - Samantha Hodgson BSc (Hons) Secondary Surveyor/Secondary Author
 - John Lockhart FRICS CEnv Project Director
 - Simon Muddiman Graphics
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1.5 The Site

- 1.5.1 The site is located at Rayleigh Road, Hutton and grid reference TQ 6354 5908. The assessment covered the whole of the site.
- 1.5.2 At the time of the assessment the site mostly consisted of improved grassland and broadleaved woodland.
- 1.5.3 The site was surrounded by arable land to the north and east and residential buildings with associated gardens to the south and west.
- 1.5.4 Site location plan is found below.

Site Location Plan



Approximate site location

2. METHODOLOGY

2.1 Desk Study

- 2.1.1 The purpose of the desk study was to collect baseline data held by statutory and non-statutory consultees and to obtain any views they may have about the proposals. A secondary purpose of the desk study was to collect records of species that may not be present at the time of survey and identify any protected species or habitats which may potentially be affected by the proposals.
- 2.1.2 Information was requested for the site as well as a 2km radius around the site in line with the IEEM Guidelines for Preliminary Ecological Appraisal (2012). This information was gathered from the following organisations (with the full information presented in Appendix II):
 - Essex Wildlife Trust

2.2 Preliminary Appraisal

- 2.2.1 The aim of the field survey was to provide information to establish the ecological value of the site and to determine any further assessments.
- 2.2.2 During the preliminary appraisal the dominant plant species present were recorded and the habitats classified according to their vegetation types.
- 2.2.3 This assessment has followed the current baseline ecological survey guidance as set out in the Institute of Ecology and Environmental Management's Guidelines for Preliminary Ecological Appraisal (2013).

2.3 Habitat Suitability Index (HSI)

- 2.3.1 The HSI is used to calculate how suitable a habitat is for great crested newts.
- 2.3.2 The HSI looked at ten different criteria (S1-S10) to assess the pond's suitability, these were: location, pond area, pond drying, water quality, shading, fowl, fish, pond count, terrestrial habitat and macrophytes.
- 2.3.3 Each criterion is given a score depending on its level of suitability. This is between 0.01 and 1.The ten scores are then combined to create the total HSI score for the habitat. The calculation is HSI= (SI1xSI2xSI3xSI4xSI5xSI6xSI7xSI8xSI9xSI10) 1/10.
- 2.3.4 The HSI score is between 0 and 1. The closer to 1 the more suitable the habitat is.
 - <0.5 = poor suitability
 - 0.5-0.59 = below average
 - 0.6-0.69 = average
 - 0.7-0.79 = above average
 - >0.8 = excellent

3. **RESULTS**

3.1 Desk Study

3.1.1 The full information collected during the desk study is presented in **Appendix I** and summarised below.

Essex Wildlife Trust

Designated Sites

3.1.2 The records search identified 1 statutory protected sites and 18 non-statutory sites within 2km. These sites are summarised in **Table 1**.

Site Name	Designation	Proximity to Project	Description
Hutton Country Park	LNR	430m North	Hutton Country Park comprises two main areas. To the south of the railway line is a series of grassland and scrub habitats, including thick hedgerows. Most of the fields in the southern section are essentially similar. Grasses such as Bent-grasses (<i>Agrostis</i> spp.), Sweet Vernal-grass (<i>Anthoxanthum odoratum</i>) and Meadow Foxtail (<i>Alopecurus pratensis</i>) are commonly found throughout the meadows. Hart's-tongue (<i>Asplenium scolopendrium</i>), an uncommon fern species in Essex is found close to the stream. The habitat to the north of the railway line is predominantly dry grassland similar to the large meadows to the south. However these northern meadows are cattle grazed as opposed to mown.
All Saints Churchyard, Hutton	LWS	724m South	The sward of this churchyard has a diverse range of grasses including Creeping Bent (Agrostis stolonifera), Yellow Oat-grass (Trisetum flavescens), False Oat-grass (Arrhenatherum elatius), Red Fescue (Festuca rubra), Yorkshire-fog (Holcus lanatus) and Perennial Rye-grass (Lolium perenne). Barren Strawberry (Potentilla sterilis), typical of relatively infertile dry soils, is frequent in the grassland.
Cock Wood/ Collin's Shaw	LWS	882m North-east	Cock Wood comprises abundant Hornbeam (<i>Carpinus betulus</i>) coppice and scattered Pedunculate Oak (<i>Quercus robur</i>) standards with very little shrub layer beneath this densely shading canopy. Collin's Shaw differs in being a small copse of Pedunculate Oak standards with some Hornbeam standards and coppice, possibly of ancient origin and surrounding a small hollow.
Clapgate Wood	LWS	1390m North-east	This small ancient wood lacks any ditch or bank feature along the south- western edge. This is typical of where grubbing out of woodland has occurred, indicating that this is just a remnant of a once much larger wood. The western part comprises Hornbeam (<i>Carpinus betulus</i>) coppice with very little understorey. Primrose (Primula vulgaris) and Moschatel (Adoxa moschatellina) are found close to the stream channel running through the wood.
Long Ridings	LWS	1450m North-west	The canopy tree species of this long, thin strip of woodland are Hornbeam (<i>Carpinus betulus</i>), Ash (<i>Fraxinus excelsior</i>) and Pedunculate Oak (<i>Quercus robur</i>). Hawthorn (<i>Crataegus monogyna</i>) and Elder (<i>Sambucus nigra</i>) form a well-developed shrub layer. Species indicative of ancient woodland are recorded including Bluebell (<i>Hyacinthoides non-scripta</i>) and Pignut (<i>Conopodium majus</i>).
Mountnessing	LWS	1660m	In the northern section of this ancient wood, the upper slopes and the far

Hall Woods		North-east	eastern part of the wood are characterised by a canopy dominated by
			Hornbeam (<i>Carpinus betulus</i>) coppice with Ash (<i>Fraxinus excelsior</i>) and
			Pedunculate Oak (Quercus robur). Bluebell (Hyacinthoides non-scripta) is
			abundant in the ground flora, which also includes Ramsons (Allium ursinum).
			The lower slopes near the river have tall Ash and Alder (Alnus glutinosa)
			coppice and a well-developed shrub layer.
Hall Wood,	LWS	1690m	This large remnant of ancient wood is dominated by Hornbeam (Carpinus
Ingrave		South-west	betulus) coppice with Pedunculate Oak (Quercus robur) and Ash (Fraxinus
			excelsior). Other tree species include Field Maple (Acer campestre), Silver
			Birch (Betula pendula) and Rowan (Sorbus aucuparia). Wild Service Tree
			(Sorbus torminalis), a strong indicator of ancient woodland, occurs on the
			southern edge of the wood. However, numerous other ancient woodland
			indicators accompany the abundant Bluebells (Hyacinthoides non-scripta)
			found throughout the wood. These include Wood Anemone (Anemone
			nemorosa), Moschatel (Adoxa moschatellina), Remote Sedge (Carex remota)
			and Yellow Archangel (Lamiastrum galeobdolon),
Primstock	LWS	1730m	Hornbeam (Carpinus betulus) coppice and Pedunculate Oak (Quercus robur)
		South-east	are found throughout much of this woodland. The shrub layer includes
			Hawthorn (Crataegus monogyna), Elder (Sambucus nigra) and Honeysuckle
			(Lonicera periclymenum).
James' Wood	LWS	1740m	James's wood has a canopy composition comprising mainly Hornbeam
		South-east	(Carpinus betulus) coppice and Pedunculate Oak (Quercus robur) standards.
			However, the central area is dominated by Pedunculate Oak, whilst the north-
			east part of the wood has Silver Birch (Betula pendula) standards over dense
	114/0	4700	Bramble (Rubus fruticosus agg.) scrub.
Arnold's Wood	LWS	1790m	The Arnold's Wood Complex comprises mainly of sections of fragmented
Complex		North-west	ancient woodland, with some recent secondary woodland within the network of
			railway lines. Hornbeam (<i>Carpinus betulus</i>) and Ash (<i>Fraxinus excelsior</i>) coppice along with Pedunculate Oak (<i>Quercus robur</i>) standards provide the
			general character of the various woodland blocks. Ground flora includes
			Bluebell (Hyacinthoides non-scripta), Wood Anemone (Anemone nemorosa)
			and Goldilocks Buttercup (Ranunculus auricomus),
Round Wood	LWS	1790m	This small, possibly ancient wood comprises a canopy dominated by
	200	East	Pedunculate Oak (Quercus robur) standards with Hornbeam (Carpinus
		Luci	betulus) and Sweet Chestnut (Castanea sativa) coppice and a sparse sub-
			canopy of Hazel (Corylus avellana) and Field Maple (Acer campestre)
			beneath. The densely shaded ground flora is typified by Bramble (Rubus
			fruticosus) and abundant Bluebell (Hyacinthoides non-scripta)
Bluntswall	LWS	1980m	Bluntswall is an ancient wood dominated by Hornbeam (Carpinus betulus)
Wood		South-east	coppice with occasional Pedunculate Oak (Quercus robur) standards, Yew
			(Taxus baccata) and Holly (Ilex aquifolium). The wood also contains with
			coppice stools of Hazel (Corylus avellana), Midland Hawthorn (Crataegus
			laevigata), Sweet Chestnut (Castanea sativa) and Ash (Fraxinus excelsior).
Blind Lane		2000m	This site is part of a larger woodland/lane complex lying within Brentwood
		South-east	District. The wooded green lane has abundant Hornbeam (Carpinus betulus)
			coppice, prominent earth banks and Wild Service Tree (Sorbus torminalis), all
			indicating the lane's antiquity.
St Giles	LWS	2000m	The sward of this churchyard has a diverse range of grass species, including

Mountnessing			flavescens), False Oat-grass (Arrhenatherum elatius), Red Fescue (Festuca rubra), Yorkshire-fog (Holcus lanatus), Cock's-foot (Dactylis glomerata) and Meadow-grasses (Poa spp.). Black Spleenwort (<i>Asplenium adiantum-nigrum</i>) grows in partial shade on the brickwork base of a chambered tomb. This plant species is an Essex Red Data List species that has seen a decline in its distribution throughout Essex.
Sutton Shaw	LWS	2000m South	Although Hornbeam (<i>Carpinus betulus</i>) and Ash (<i>Fraxinus excelsior</i>) coppice is present in the woodland, these trees do not form a continuous high canopy. Instead, there are areas with a lower, more mixed canopy including shrub species such as Hawthorn (<i>Crataegus monogyna</i>) and Elder (<i>Sambucus</i> <i>nigra</i>). Wild Service-tree (<i>Sorbus torminalis</i>), a strong indicator of ancient woodland, has also been recorded. The varied ground flora is dominated by Bluebell (<i>Hyacinthoides non-scripta</i>). There is a pond within the woodland with aquatic and emergent flora including Bulrush (<i>Typha latifolia</i>), Soft-rush (<i>Juncus effusus</i>), Water starwort (<i>Callitriche</i> sp.), and Fine-leaved Water- dropwort (<i>Oenanthe aquatica</i>).
Bladens Wood	LWS	2060m South-east	Bladens Wood is dominated by Hornbeam (<i>Carpinus betulus</i>) coppice with scattered Pedunculate Oak (<i>Quercus robur</i>) and Silver Birch (<i>Betula pendula</i>) standards. Other species of interest recorded include Wood Anemone (Anemone nemorosa), Moschatel (Adoxa moschatellina), Three-nerved Sandwort (Moehringia trinervia) and Wood Speedwell (Veronica montana).
Little Bladens Wood	LWS	2230m South-east	This site comprises a large but partially grubbed out wood and a detached section to the south. The main wood is almost pure Hornbeam (Carpinus betulus) coppice with very little shrub layer or ground flora beneath.
Hare Hall Shaw	LWS	2400m South-west	The main body of the southern section appears to comprise ancient woodland within which old mineral excavation has created a large central hollow. Hornbeam (Carpinus betulus) dominates the fringe of old woodland surrounding the hollow, which has two ponds fringed by scrub. Ash (Fraxinus excelsior) and Pedunculate Oak (Quercus robur). Midland Hawthorn (Crataegus laevigata), a species typically found in ancient woodland, is present in an otherwise generally sparse shrub layer. The ground flora comprises Moschatel (Adoxa moschatellina), Wood Anemone (Anemone nemorosa), Pignut (Conopodium majus), Bluebell (Hyacinthoides non-scripta), Goldilocks Buttercup (Ranunculus auricomus), and Early Dog-violet (Viola reichenbachiana).
Key: LNR: Local Natur LWS: Local Wildl			· · · · · · · · · · · · · · · · · · ·

Table 1: Summary of Ecological Designations

Protected Species

3.1.3 **Table 2** summarises the protected species which were found within 2km of the study site. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species/Group	No. of records	Date of latest Record	Proximity to Project	Legislation / Conservation Status
Mammals				
Water vole	3	1998	1730m	NERC S.41, UK BAP, WCA 5
Arvicola terrestris			North	
Otter	7	2011	1280m	NERC S.41, UK BAP, WCA 5,
Lutra lutra			North	CHSR
Badger	2	2012	1290m	PBA
Meles meles			North-west	
Common pipistrelle	7	2011	840m	WCA 5, CHSR
Pipistrellus pipistrellus			South-west	
Soprano pipistrelle	1	2008	840m	WCA 5 S9, UK BAP, NERC S.41,
Pipistrellus pygmaeus			South-west	CHSR
Brown long-eared bat	1	2008	840m	WCA 5 S9, UK BAP, NERC S.41,
Plecotus auritus			South-west	CHSR

CRoW: Countryside and Rights of Way Act, 2000: Protection of certain birds and animals.

WCA 1i: Wildlife and Countryside Act (1981) (as amended); Birds protected by special penalties at all times, species specific.

WCA 5 S9: Wildlife and Countryside Act (1981) (as amended); Protected animals (other than birds).

UK BAP: United Kingdom Biodiversity Action Plan

NERC S.41: Natural Environment and Rural Communities Act 2006, Section 41: Habitats and Species of Principal Importance in England

PBA: Protection of Badgers Act (1992)

CHSR: Conservation of Habitat and Species Regulations 2010

 Table 2: Summary of Protected Species (Continued)

3.2 Preliminary Ecological Appraisal

3.2.1 The field survey was conducted on 27th January 2015 by James Hildreth and Samantha Hodgson in reasonable conditions (60% cloud cover, 4°C, 1-2 Beaufort scale).

3.3 Field Survey Limitations

3.3.1 There were no limitations in carrying out the survey.

3.4 Habitat Description

- 3.4.1 Habitats identified during the survey are detailed below in alphabetical order:
 - Bare ground
 - Buildings
 - Broadleaved woodland
 - Ditch
 - Fence
 - Hedge

- Improved grassland
- Pond
- Scattered tree
- 3.4.2 The main habitat on site is improved grassland. This is horse grazed grassland, covering the majority of the site. The dominant species found within the habitat were perennial ryegrass *Lolium perenne*, Yorkshire fog *Holcus lanatus* and creeping bent *Agrostis stolonifera*. Other species found included broad leaved dock *Rumex obtusifolius*, ribwort plantain *Plantago lancelota* and creeping buttercup *Ranunculus repens*.
- 3.4.3 The broadleaved woodland on site was found in three different areas. The first section was along the north-western boundary line. This was a small area of woodland made up of oak *Quercus robur*; including one fallen mature tree with bramble *Rubus fruticosus* and common nettle *Urtica dioica* understorey.
- 3.4.4 The next section was along the western boundary, adjacent to the residential gardens. This was an area of poplar *Populus sp.* woodland with bramble, common nettle and ivy *Hedera helix*.
- 3.4.5 The final area of broadleaved woodland was located in the east of the site. The dominant tree species included oak, ash *Fraxinus excelsior*, sycamore *Acer pseudoplatanus* and downy birch *Betula pubescens*. The understorey was made up of ivy, common nettle, cow parsley *Anthriscus sylvestris*, bramble, yellow iris *Iris pseudacorus*, moss species, lords-and-ladies *Arum maculatum* and lesser celandine *Ranunculus ficaria*. There were two large mature oaks on the western boundary of the site that are considered to have bat potential.
- 3.4.6 There were two main boundary hedgerows on site on the eastern and western boundaries. Both hedgerows showed signs of infrequent management and included large trees. The dominant species in the eastern hedgerow were Scot's pine *Pinus sylvestris* and hawthorn *Crataegus monogyna*. Other species included common nettle, hedge bedstraw *Galium mollugo*, broad leaved dock, ivy, dog rose *Rosa canina*, privet *Prunella sp.* and yarrow *Achillea millefolium*.
- 3.4.7 The tree species within the western boundary included oak, sycamore, horse chestnut *Aesculus hippocastanum*, lime *Tilia x europaea*, hawthorn and Lawson's cypress *Chamaecyparis lawsoniana*. The understorey species included bramble, ivy, dandelion *Taraxacum officinale*, creeping buttercup, cow parsley, common nettle and dead nettle *Lamium purpureum*.
- 3.4.8 There were several scattered trees on site including poplar, hawthorn and sycamore.
- 3.4.9 There was a small area of wet ditch on the edge of the western area of broad leaved woodland. There were no aquatic species present. The only floral presence was bramble and nettle from the understorey of the adjacent woodland.
- 3.4.10 There were two wooden stable buildings on site. Both buildings were well built and do not appear to be a beneficial habitat for bats or birds.
- 3.4.11 There is one pond on site on the western edge and another directly off site along the eastern boundary. The pond on site is approximately 10x10m, with 20% vegetative cover of floating sweet-grass *Glyceria fluitans*. A Habitat Suitability Index

(HSI) was completed for both ponds to determine their suitability for great crested newts using the methodology stated previously (2.3). The on-site pond had a score of 0.62 suggesting average suitability and the off-site pond had a score of 0.65 also suggesting average suitability.

3.5 Evidence of Protected Species and Other Faunal Interest

3.5.1 There were several fauna species recorded incidentally as part of the survey. These included wood pigeon *Columba palumbus*, blackbird *Turdus merula*, pied wagtail *Motacilla alba*, magpie *Pica pica*, long tailed tit *Aegithalos caudatus*, collared dove *Streptopelia decaocto*, rabbit *Oryctolagus cuniculus* and a red admiral butterfly *Vanessa atalanta*.

4. CONSTRAINTS AND OPPORTUNITES

4.1 Ecological Designations

4.1.1 The nearest designated nature conservation site is 430m away from the study site. Due to the distance between the study site and these designated sites and main roads in-between the sites creating barriers, it is anticipated that there will be no negative impact on any of these sites.

4.2 Habitats

- 4.2.1 It is recommended that as far as possible, the boundary features including the hedgerows and associated scattered trees, should be retained as they offer potential foraging, breeding and sheltering opportunities for a range of species. The hedgerows should be strengthened and improved by infilling any gaps with a range of native hedgerow species where required.
- 4.2.2 The broadleaved woodland on the western boundary contains two mature oaks that have potential for roosting for bats and nesting for birds that should be retained.
- 4.2.3 The pond on site should be retained as it offers potential breeding habitat for a range of amphibian species. It should be managed appropriately to encourage amphibians.

4.3 Species

Bats

- 4.3.1 There are two mature oak trees along the western boundary of the site near the pond that have bat potential. As a result it is recommended that they are retained where possible.
- 4.3.2 If these trees need to be removed then emergence bat surveys will be required prior to removal to assess the presence of bats.
- 4.3.3 The hedgerows on site have potential to provide good foraging and commuting habitat for bats. It is recommended that these are retained and enhanced where possible to maintain commuting routes for bats through the site.

Birds

- 4.3.4 It is recommended that the hedgerows on site are retained as they offer potential foraging, breeding and sheltering opportunities for a range of bird species.
- 4.3.5 The broadleaved woodland on site also offer foraging, breeding and sheltering potential and therefore as much of this habitat as possible should be retained.

Amphibians

- 4.3.6 There is potential for amphibians to be present in the pond on site and the surrounding terrestrial habitat. It is recommended that this pond is retained and enhanced to encourage the presence of amphibians within the habitat.
- 4.3.7 There is also potential for amphibians within the pond adjacent to site along the western boundary.
- 4.3.8 There are several refuga piles on site, several of which are in close association with the ponds. These areas provide good sheltering and hibernation habitats for amphibians. It is recommended that these are either retained or carefully disassembled by hand and replaced with other hibernacula (log piles).

Reptiles

- 4.3.9 There is potential for reptiles to use the site as it offers suitable habitats for shelter, hibernation, foraging and basking for common species such as grass snake and slow worm
- 4.3.10 There are several refugia piles on site, several of which are in close association with the ponds. These areas specifically provide good refuge locations for reptiles. It is recommended that these are retained.

4.4 General

4.4.1 In order to increase the biodiversity value of the site as part of any development, landscape planting should incorporate native species, including those species known to provide foraging opportunities for breeding birds and nectar sources for invertebrates.

5. REFERENCES AND BIBLIOGRAPHY

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Natural England (2004) Bat Mitigation Guidelines

APPENDIX 1: DESK STUDY RESULTS

(Ref 14-2297)



Basildon Local Wildlife Site Descriptions for Hutton area – 2015 Ba1, Blind Lane

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Ba1. Blind Lane (0.3 ha) TQ 647931

This site is part of a larger woodland/lane complex lying within Brentwood District. The wooded green lane has abundant Hornbeam (*Carpinus betulus*) coppice, prominent earth banks and Wild Service Tree (*Sorbus torminalis*), all indicating the lane's antiquity.

A varied woodland ground flora includes Pendulous Sedge (*Carex pendula*), Bluebell (*Hyacinthoides non-scripta*), Herb Bennet (*Geum urbanum*), Lesser Celandine (*Ranunculus ficaria*) and Herb Robert (*Geranium robertianum*). The northern half of the site contains a greater diversity of interesting woodland species including Moschatel (*Adoxa moschatellina*), Wood Millet (*Milium effusum*) and Wood Spurge (*Euphorbia amygdaloides*). The non-native Spanish Bluebell (*Hyacinthoides hispanicus*), which can threaten the survival of the native species by hybridisation, also occurs at the southern end of the lane.

UK BAP Priority Habitats: Hedgerows

Selection Criteria: HC8 – Hedgerows and Green Lanes

Rationale: The lane supports a variety of ancient woodland indicators and runs alongside a Brentwood Local Wildlife Site

Site Selected: 1992

Revision Schedule: Full Local Wildlife Site review in 2004; Reviewed annually during SLA 2007-2009 without change.

Ba3. Bluntswall Wood



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Ba3. Bluntswall Wood (9.4 ha) TQ 652937

Bluntswall is an ancient wood dominated by Hornbeam (*Carpinus betulus*) coppice with occasional Pedunculate Oak (*Quercus robur*) standards, Yew (*Taxus baccata*) and Holly (*Ilex aquifolium*). The wood also contains with coppice stools of Hazel (*Corylus avellana*), Midland Hawthorn (*Crataegus laevigata*), Sweet Chestnut (*Castanea sativa*) and Ash (*Fraxinus excelsior*). On the interior corner of the south/west edge of the wood is an area with significant amounts of Sycamore (*Acer pseudoplatanus*) with Horse Chestnut (*Aesculus hippocastanum*) and Bracken (*Pteridium aquilinum*). The western edge of the southern part of the wood is dominated by Bramble.

Elsewhere the site's ground flora is contains abundant Wood Anemone (*Anemone nemorosa*) and Bluebell (*Hyacinthoides non-scripta*) and a range of other typical woodland species such as Three-nerved Sandwort (*Moehringia trinervis*), Wood Meadow-grass (*Poa nemorosa*), Wood Millet (*Milium effusum*) and Lesser Celandine (*Ranunculus ficaria*). Other ancient woodland indicator species present in small quantities include Moschatel (*Adoxa moschatellina*), Pignut (*Conopodium majus*) and Wood Spurge (*Euphorbia amygdaloides*).

The southern edge of the western part of the wood supports an acid grassland community including Trailing St John's-wort (*Hypericum humifusum*), parsley piert (*Aphanes* sp.), Red Fescue (*Festuca rubra*) and the Essex Red Data List species, Changing Forget-me-not (*Myosotis discolor*).

UK BAP Priority Habitats: Lowland Mixed Deciduous Woodland

Selection Criterion: HC1 – Ancient Woodland Sites

Rationale: The site features in the Ancient Woodland Inventory and supports key indicator species, justifying the HC1 criterion.

Site Selected: 1992

Revision Schedule: Full Local Wildlife Site review in 2004; Reviewed annually during SLA 2007-2009 with a minor extension in 2008 because of more accurate mapping.



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Ba5. Round Wood (1.3 ha) TQ 653953

This small, possibly ancient wood comprises a canopy dominated by Pedunculate Oak (*Quercus* robur) standards with Hornbeam (*Carpinus betulus*) and Sweet Chestnut (*Castanea sativa*) coppice and a sparse sub-canopy of Hazel (*Corylus avellana*) and Field Maple (*Acer campestre*) beneath. The densely shaded ground flora is typified by Bramble (*Rubus fruticosus*) and abundant Bluebell (*Hyacinthoides non-scripta*) with Wood Sage (*Teucrium scorodonia*), Creeping Soft-grass (*Holcus mollis*) and Broad Buckler Fern (*Dryopteris dilatata*). A pond near the southern edge of the wood contains the Essex Red Data List Cyperus Sedge (*Carex pseudocyperus*) with Floating Sweet-grass (*Glyceria fluitans*), Bittersweet (*Solanum dulcamara*) and Yellow Iris (*Iris pseudacorus*).

UK BAP Priority Habitats: Lowland Mixed Deciduous Woodland

Selection Criterion: HC1 – Ancient Woodland Sites

Rationale: The site features in the Ancient Woodland Inventory and supports key indicator species, justifying the HC1 criterion.

Site Selected: 1992

Revision Schedule: Full Local Wildlife Site review in 2004; Reviewed annually during SLA 2007-2009 without change.

Brentwood Local Wildlife Site Descriptions for Hutton area – 2015



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Bre101 Hare Hall Shaw (1.8 ha) TQ 617934

The main body of the southern section appears to comprise ancient woodland within which old mineral excavation has created a large central hollow. Hornbeam (*Carpinus betulus*) dominates the fringe of old woodland surrounding the hollow, which has two ponds fringed by scrub. Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*) standards and also found in the high canopy of this section. Midland Hawthorn (*Crataegus laevigata*), a species typically found in ancient woodland, is present in an otherwise generally sparse shrub layer. The ground flora comprises Moschatel (*Adoxa moschatellina*), Wood Anemone (*Anemone nemorosa*), Pignut (*Conopodium majus*), Bluebell (*Hyacinthoides non-scripta*), Wood Millet (*Milium effusum*), Goldilocks Buttercup (*Ranunculus auricomus*), and Early Dog-violet (*Viola reichenbachiana*) amongst Lesser Celandine (*Ficaria verna*).

The northern section of the site also has Ash and Hornbeam coppice, with Field Maple (*Acer campestre*), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*) present in the lower layers. The ground flora is similar to the southern section, with the addition of Primrose (*Primula vulgaris*) and Three-nerved Sandwort (*Moehringia trinervia*).

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria HC1 – Ancient Woodland Sites

Rationale

This wood is included within the Essex Ancient Woodland Inventory, with this status confirmed by its structure and composition.

Review Schedule Site Selected: 1992 Reviewed: October 2012



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Bre107 Long Ridings (2.7 ha) TQ 621953

The canopy tree species of this long, thin strip of woodland are Hornbeam (*Carpinus betulus*), Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*). Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) form a well-developed shrub layer. Whilst Ivy (*Hedera helix*) and Cow Parsley (*Anthriscus sylvestris*) are prominent in the ground flora, species indicative of ancient woodland are recorded including Bluebell (*Hyacinthoides non-scripta*), Pignut (*Conopodium majus*), Early Dog-violet (*Viola reichenbachiana*) and Wood Millet (*Milium effusum*).

BAP Habitats

Lowland Mixed Deciduous Woodland Selection Criteria HC1 – Ancient Woodland Sites

Rationale

This woodland site provides a significant corridor of ancient woodland habitat in an urban environment. Despite localised disturbance accentuated by its urban location, the wood retains many of the characteristic plants of ancient woodland.

Review Schedule

Site Selected: 1992 Reviewed: October 2012



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Bre108 Arnold's Wood Complex (10.3 ha) TQ 621961

The Arnold's Wood Complex comprises mainly of sections of fragmented ancient woodland, with some recent secondary woodland within the network of railway lines. Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*) coppice along with Pedunculate Oak (*Quercus robur*) standards provide the general character of the various woodland blocks. Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*) and Blackthorn (*Prunus spinosa*), are typical in the shrub layer, though this can be sparse in places, but more frequent in Arnold's Shaw. Several ancient woodland indicators are found in the ground flora including Bluebell (*Hyacinthoides non-scripta*), Wood Anemone (*Anemone nemorosa*), Goldilocks Buttercup (*Ranunculus auricomus*), Primrose (*Primula vulgaris*) and Remote Sedge (*Carex remota*).

The eastern end of the thin section of woodland, sandwiched between the two railway branch lines, comprises Silver Birch (*Betula pendula*), Hawthorn and Blackthorn. Bramble (*Rubus fruticosus* agg) patches are frequent in this area, whilst the ground flora includes species such as Common Dog-violet (*Viola riviniana*), Enchanter's-nightshade (*Circaea lutetiana*) and Wood Avens (*Geum urbanum*). Brickley Shaw comprises mainly Hornbeam coppice, except for the northern end where Elder and Bramble scrub dominate. The wood has very little shrub cover, though Bluebell is abundant in the ground flora along with small patches of Wood Anemone, Moschatel (*Adoxa moschatellina*) and Wood Meadow-grass (*Poa nemoralis*).

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC1 – Ancient Woodland Sites HC30 – Wildlife Corridors

Rationale

Prior to the construction of the various railway lines, this Site is thought to have comprised three separate ancient woods (Arnold's Wood, Arnold's Shaw and Brickley Shaw), as indicated by their structure and floral composition. Since then, recent woodland has spread within the railway land to help link these three woods ecologically.

Review Schedule

Site Selected: 1992 Reviewed: October 2012 (sites amalgamated)



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Bre116 Hall Wood, Ingrave (17.7 ha) TQ 630934

This large remnant of ancient wood is dominated by Hornbeam (*Carpinus betulus*) coppice with Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*). Other tree species include Field Maple (*Acer campestre*), Silver Birch (*Betula pendula*) and Rowan (*Sorbus aucuparia*). Wild Service Tree (*Sorbus torminalis*), a strong indicator of ancient woodland, occurs on the southern edge of the wood. However, numerous other ancient woodland indicators accompany the abundant Bluebells (*Hyacinthoides non-scripta*) found throughout the wood. These include Wood Anemone (*Anemone nemorosa*), Moschatel (*Adoxa moschatellina*), Remote Sedge (*Carex remota*), Yellow Archangel (*Lamiastrum galeobdolon*), Wood Millet (*Milium effusum*) and Three-nerved Sandwort (*Moehringia trinervia*).

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC1 - Ancient Woodland Sites

Rationale

The structure and composition of this wood supports documentary evidence that this is an ancient woodland site.

Review Schedule

Site Selected: 1992 Reviewed: October 2012 (addition)



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Bre117 Sutton Shaw (1.0 ha) TQ 631930

Although Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*) coppice is present in the woodland, these trees do not form a continuous high canopy. Instead, there are areas with a lower, more mixed canopy including shrub species such as Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*). Wild Service-tree (*Sorbus torminalis*), a strong indicator of ancient woodland, has also been recorded. The varied ground flora is dominated by Bluebell (*Hyacinthoides non-scripta*), but Wood Anemone (*Anemone nemorosa*) is also found in significant numbers. Other species typical of ancient woodland are present including Moschatel (*Adoxa moschatellina*), Wood Millet (*Milium effusum*) and Three-nerved Sandwort (*Moehringia trinervia*). There is also a pond within the woodland exhibiting a wide diversity of aquatic and emergent flora including Bulrush (*Typha latifolia*), Soft-rush (*Juncus effusus*), Water starwort (*Callitriche* sp.), Marsh Bedstraw (*Galium palustre*) and Fine-leaved Water-dropwort (*Oenanthe aquatica*), this last species becoming scarcer in ponds in the Essex countryside.

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC1 - Ancient Woodland Sites

Rationale

Although not listed in the Ancient Woodland Inventory for Essex, this wood, with its varied structure and rich floral composition, is considered to be of ancient origin.

Review Schedule Site Selected: 1992 Reviewed: October 2012



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Bre120 All Saints Churchyard, Hutton (0.7 ha) TQ 635943

The sward of this churchyard has a diverse range of grasses including Creeping Bent (*Agrostis stolonifera*), Yellow Oat-grass (*Trisetum flavescens*), False Oat-grass (*Arrhenatherum elatius*), Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Cock's-foot (*Dactylis glomerata*) and Perennial Rye-grass (*Lolium perenne*). The small low growing herb Barren Strawberry (*Potentilla sterilis*), typical of relatively infertile dry soils, is frequent in the grassland, whilst Mouse-ear-hawkweed (*Pilosella officinarum*) characterises the more acidic and drier sandy soil conditions found in other areas of the site. A wide variety of other herbs have been recorded, including Common Knapweed (*Centaurea nigra* agg.), Common Bird's-foot-trefoil (*Lotus corniculatus*), Musk Mallow (*Malva moschata*), Oxeye Daisy (*Leucanthemum vulgare*), Meadow Buttercup (*Ranunculus acris*) and Lesser Stitchwort (*Stellaria graminea*).

BAP Habitats

The sward appears to have some affinities with the Lowland Meadows BAP Priority Habitat, although more detailed floristic analysis would be needed to confirm this.

Selection Criteria

HC11 - Other Neutral Grasslands

Rationale

This is a small piece of ancient grassland that has been protected from agricultural practices and has largely retained a species-rich sward.

Review Schedule Site Selected: October 2012 Reviewed: -



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Bre122 Hutton Country Park (36.1 ha) TQ 636958

Hutton Country Park comprises two main areas. To the south of the railway line is a series of grassland and scrub habitats, including thick hedgerows. Most of the fields in the southern section are essentially similar in their floral composition. Grasses such as Bent-grasses (*Agrostis* spp.), Sweet Vernal-grass (*Anthoxanthum odoratum*),Meadow Foxtail (*Alopecurus pratensis*), Timothy (*Phleum pratense* agg.), Yorkshire-fog (*Holcus lanatus*), Perennial Rye-grass (*Lolium perenne*) and Crested Dog's-tail (*Cynosurus cristatus*) are commonly found throughout the meadows. Few herbs attain any great abundance, but a large number of species occur at low density, including Creeping Thistle (*Cirsium arvense*), Meadow Vetchling (*Lathyrus pratensis*), clovers (*Trifolium* spp.), Yarrow (*Achillea millefolium*), Ragworts (*Senecio* spp.), Common Knapweed (*Centaurea nigra* agg.) and vetches (*Vicia* spp.). Most of these meadows are managed by a summer mowing regime. The exceptions are a central, secluded meadow where tall growing False Oat-grass (*Arrhenatherum elatius*) dominates the sward and a part mown damp grassland area dominated by Tufted Hair-grass (*Deschampsia cespitosa*). Small ponds, a stream and associated wetland and scrub habitat provide increased diversity to this part of the site. Hart's-tongue (*Asplenium scolopendrium*), an uncommon fern species in Essex is found close to the stream. Bulrush (*Typha latifolia*) and Reed Canary-grass (*Phalaris arundinacea*) form tall localised stands, whilst rushes (*Juncus* spp.) are also present.

The habitat to the north of the railway line is predominantly dry grassland similar in floral composition to the large meadows to the south. However these northern meadows are cattle grazed as opposed to mown. Most of these meadows exhibit a flora typical of dry grassland. The exception is a field dominated by rushes and also colonised by species such as Marsh Thistle (*Cirsium palustre*), Greater Bird's-foot-trefoil (*Lotus pedunculatus*),

Wild Angelica (*Angelica sylvestris*), Water Mint (*Mentha aquatica*), Hairy Sedge (*Carex hirta*) and Gypsywort (*Lycopus europaeus*), all of which are typical of marshy grassland. **BAP Habitats**

Hedgerows

Selection Criteria

HC5 – Woody Scrub HC11 – Other Neutral Grasslands HC31 – Accessible Natural Greenspace

Rationale

The Country Park provides the eastern part of the borough with a substantial area of old grassland, scrub, hedgerows, marshy and wetland habitat forming a Local Nature Reserve that encourages public engagement with the natural world.

<u>Review Schedule</u> Site Selected: October 2012 Reviewed: -



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Bre126 Cock Wood/Collin's Shaw (3.5 ha) TQ 641957

Cock Wood comprises abundant Hornbeam (*Carpinus betulus*) coppice and scattered Pedunculate Oak (*Quercus robur*) standards with very little shrub layer beneath this densely shading canopy. Bluebell (*Hyacinthoides non-scripta*) dominates the ground flora, whilst other ancient woodland indicator species recorded include Pignut (*Conopodium majus*) and Moschatel (*Adoxa moschatellina*). Collin's Shaw differs in being a small copse of Pedunculate Oak standards with some Hornbeam standards and coppice, possibly of ancient origin and surrounding a small hollow. This is surrounded by a canopy of more recent and even aged woodland that may have been partially planted. Bluebell is also abundant in the 'shaw' area with some colonisation of the adjacent recent woodland. The ground flora of this part of the site also includes Wood Anemone (*Anemone nemorosa*), Moschatel (*Adoxa moschatellina*) and Three-nerved Sandwort (*Moehringia trinervia*).

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

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

Rationale

Cock Wood appears on the Ancient Woodland Inventory for Essex, whilst Collin's Shaw is a combination of ancient and recent woodland. This woodland site is located adjacent to Bre122 Hutton Country Park providing

contrasting habitat for visitors.

Review Schedule Site Selected: 1992 Reviewed: October 2012 (addition)



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Bre128 Bladens Wood (2.1 ha) TQ 641929

Bladens Wood is dominated by Hornbeam (*Carpinus betulus*) coppice with scattered Pedunculate Oak (*Quercus robur*) and Silver Birch (*Betula pendula*) standards. Whilst still with Hornbeam coppice in the canopy, the far western corner of the wood also has some coppiced Hazel (*Corylus avellana*), dense Hawthorn (*Crataegus monogyna*) and Bramble (*Rubus fruticosus* agg) scrub. Bluebell (*Hyacinthoides non-scripta*) is abundant in the ground flora throughout most of the wood. Other species of interest recorded include Wood Anemone (*Anemone nemorosa*), Moschatel (*Adoxa moschatellina*), Three-nerved Sandwort (*Moehringia trinervia*) and Wood Speedwell (*Veronica montana*).

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC1 - Ancient Woodland Sites

Rationale

This wood is not included in the Ancient Woodland Inventory list for Essex. However, its diverse structure and species composition including ancient woodland indicators in the ground flora, suggests that this wood is likely of ancient origin.

Review Schedule Site Selected: 1992 Reviewed: October 2012


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Bre130 Primstock (0.7 ha) TQ 642934

Hornbeam (*Carpinus betulus*) coppice and Pedunculate Oak (*Quercus robur*) are found throughout much of this woodland. The shrub layer includes Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*) and Honeysuckle (*Lonicera periclymenum*). The extreme north of the wood differs in having some tall Ash (*Fraxinus excelsior*) with Blackthorn (*Prunus spinosa*) scrub, whilst dense Hawthorn is found in the middle part of the wood. Bluebell (*Hyacinthoides non-scripta*) is found in patches throughout the site, whilst other species of interest recorded include Wood Millet (*Milium effusum*), Three-nerved Sandwort (*Moehringia trinervia*) and Wood Meadow-grass (*Poa nemoralis*).

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC2 - Lowland Mixed Deciduous Woodland on Non-ancient Sites

Rationale

This woodland strip may be ancient, although it may have acquired its ground flora from the ancient parish boundary hedge hat forms its western margin. The site certainly confirms to the UK BAP Priority Habitat listed above and so is selected under criterion HC2.

Review Schedule Site Selected: October 2012 Reviewed: -



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Bre136 Little Bladen's Wood (6.1 ha) TQ 645930

This site comprises a large but partially grubbed out wood and a detached section to the south. The main wood is almost pure Hornbeam (*Carpinus betulus*) coppice with very little shrub layer or ground flora beneath. The north-east area differs in having tall Pedunculate Oak (*Quercus robur*) standards dominating with scattered Hawthorn (*Crataegus monogyna*) beneath, with some Hazel (*Corylus avellana*) and Honeysuckle (*Lonicera periclymenum*). The south-east part of the wood is dominated by Ash (*Fraxinus excelsior*) and Pedunculate Oak over an extensive shrub canopy of hawthorn, Elder (*Sambucus nigra*) and Common Nettle (*Urtica dioica*) dominating the ground flora. Bluebell (*Hyacinthoides non-scripta*) and Wood Meadow-grass (*Poa nemoralis*) are found in the ground flora. The woodland limb and the small detached block extending south by Blind Lane are also dominated by Hornbeam coppice.

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC1 - Ancient Woodland Sites

Rationale

This Site is not listed within the Essex Ancient Woodland Inventory, despite its size, but the structure and floral composition suggests that this is largely, if not completely, ancient woodland.



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Bre139 Clapgate Wood (1.7 ha) TQ 647958

This small ancient wood lacks any ditch or bank feature along the south-western edge. This is typical of where grubbing out of woodland has occurred, indicating that this is just a remnant of a once much larger wood. The western part comprises Hornbeam (*Carpinus betulus*) coppice with very little understorey. The ground flora is dominated by Bluebells (*Hyacinthoides non-scripta*). In contrast, the northern part of the wood has Ash (*Fraxinus excelsior*) forming a high canopy but Silver Birch (*Betula pendula*) and Field Maple (*Acer campestre*) form a sub-canopy. Bluebell, Cleavers (*Galium aparine*) and Common Chickweed (*Stellaria media*) are characteristic species of the ground flora in this area. Species of interest including Yellow Archangel (*Lamiastrum galeobdolon*), Primrose (*Primula vulgaris*) and Moschatel (*Adoxa moschatellina*) are found close to the stream channel running through the wood.

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

HC1 - Ancient Woodland Site

Rationale

The structure and composition of this woodland exhibit features typical of ancient woodland found throughout the Essex countryside.



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Bre141 James's Wood (4.0 ha) TQ 648938

James's wood has a canopy composition comprising mainly Hornbeam (*Carpinus betulus*) coppice and Pedunculate Oak (*Quercus robur*) standards. However, the central area is dominated by Pedunculate Oak, whilst the north-east part of the wood has Silver Birch (*Betula pendula*) standards over dense Bramble (*Rubus fruticosus* agg.) scrub. Other shrub species recorded include Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*). Bluebell (*Hyacinthoides non-scripta*) is mainly abundant in the ground flora beneath the Hornbeam coppice, whilst bramble is frequent throughout the wood. Patches of Wood Millet (*Milium effusum*) are also found in the ground flora.

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria

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

Rationale

The main body of James's Wood has a structure and composition that suggests an ancient status, whilst the western extension increases the overall extent of BAP habitat.



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Bre142 Mountnessing Hall Woods (2.2 ha) TQ 648961

In the northern section of this ancient wood, the upper slopes and the far eastern part of the wood are characterised by a canopy dominated by Hornbeam (*Carpinus betulus*) coppice with Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*). Bluebell (*Hyacinthoides non-scripta*) is abundant in the ground flora, which also includes Ramsons (*Allium ursinum*). The lower slopes near the river have tall Ash and Alder (*Alnus glutinosa*) coppice and a well developed shrub layer. Other species present typically found in ancient woodland include Wood Speedwell (*Veronica montana*) and Three-nerved Sandwort (*Moehringia trinervia*).

In contrast, the woodland section to the south of the river only retains a Hornbeam coppice structure in the marginal areas of the wood. The central part of the wood is dominated by Ash coppice and Silver Birch. Elder (*Sambucus nigra*) and Hawthorn (*Crataegus monogyna*) are found in the shrub layer. Bluebells are still a frequent component to the ground flora, but where openings in the canopy allow high light penetration to ground level extensive patches of Common Nettle (*Urtica dioica*) flourish.

BAP Habitats

Lowland Mixed Deciduous Woodland

Selection Criteria HC1 – Ancient Woodland Site

Rationale

The structure and composition of this wood supports documentary evidence that this is an ancient woodland site.



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Bre143 St Giles Churchyard, Mountnessing (0.8 ha) TQ 648966

The sward of this churchyard has a diverse range of grass species, including Sweet Vernal-grass (*Anthoxanthum odoratum*), Yellow Oat-grass (*Trisetum flavescens*), False Oat-grass (*Arrhenatherum elatius*), Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*), Cock's-foot (*Dactylis glomerata*) and Meadow-grasses (*Poa spp.*). A wide variety of herbs have also also recorded, including Field Wood-rush (*Luzula campestris*), Common Knapweed (*Centaurea nigra* agg.), Common Bird's-foot-trefoil (*Lotus corniculatus*), Meadow Buttercup (*Ranunculus acris*), Lesser Stitchwort (*Stellaria graminea*), Primrose (*Primula vulgaris*), Lady's Bedstraw (*Galium verum*), Burnet-saxifrage (*Pimpinella saxifrage*) and Sheep's Sorrel (*Rumex acetosella*). Black Spleenwort (*Asplenium adiantum-nigrum*) grows in partial shade on the brickwork base of a chambered tomb. This latter plant species is an Essex Red Data List species that has seen a decline in its distribution throughout Essex.

BAP Habitats

Lowland Meadows

Selection Criteria

HC9 – Lowland Meadows

Rationale

The ancient creation of this churchyard has helped to preserve a small piece of old, unimproved grassland, which still retains a rich and interesting flora.

Review Schedule Site Selected: October 2012 Reviewed: - LEGALLY PROTECTED AND SPIE Species of Principal Importance in England (formerly BAP SPECIES) RECORDS Duplicate records may appear on the legally protected species list

SPIE protected species appear only on the legally protected species list, and are not repeated again on the SPIE species list A negative record is one where a site has been surveyed and no signs were seen on that occasion

Quantity 0 = Present Quantity -7 = Negative record

LEGALLY PROTECTED SPECIES

GALLY PROTECT	ED SPECIES																													
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on	Vernacular	Site	Xcoord	Ycoord Gridr	ref Precision	n KMsquare	Tetrad ViceC	ounty Quanti	y Sex Date	 DateY 	ar Method	Stage Stat	tus Comme	ent_taxongro_1Bern	BirdsDir	Migratorys OS	PAR Ha	bsDir EC	CITIES Global	redl Redlist_	pr Redlist_	19 Redlist_2	20 Reddatat	oii RareScai	rc NatRare	Sc BAPUKPri Blist_Eng WACA ConsHabS	adgerAct EssexBA	AP DataSour_ Re	ecorder Dete	rmine PS_or_SPIE
ola amphibius	Northern Water Vol	le WID	562800	196600 TQ628966				0	0	1	998 unknown i	not record: Latr	rines/bı	terrestrial r N/A	N/A	N/A N/	A N//	A N/A		st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Scl N/A		AP EECOS P! P!		PS+SPIE
la amphibius	Northern Water Vol	le WID	564700	196400 TQ647964	100m			0	0	1	998 unknown i	not recorde Latr	rines/bı	terrestrial r N/A	N/A	N/A N/	A N//	A N/A	A RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-20 England_N WACA-Scl N/A	I/A EssexBA	AP EECOS P! P!	6	PS+SPIE
la amphibius	Northern Water Vol	le	565200	194200 TQ652942	100m			0	0	1	998 unknown i	not record: Latr	rines/bi	terrestrial r N/A	N/A	N/A N/	A N//	A N/A	A RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Scl N/A	I/A EssexBA	AP EECOS P! P!	6	PS+SPIE
lutra	Otter	Mountnessing, A12	562550	196850 TQ625968	100m	TQ6296	TQ69I	18	1 not recorded 24-	-Feb-10 2	010 Unknown I	Dead Not	record Small of	otter terrestrial r Bern-A2	N/A	N/A N/	Α II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Scl HabReg-S	I/A EssexBA	AP Designater -	-	PS+SPIE
utra	Otter	River Wid, Hutton W2	563450	196350 TQ634963	100m	TQ6396	TQ69I	18 Presen	t not recorded 08	-Apr-11 2)11 Standard §I	Not record Not	record Otter tr	ack terrestrial r Bern-A2	N/A	N/A N/	A II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Sci HabReg-S	I/A EssexBA	AP Designater -	-	PS+SPIE
	Otter	River Wid, Hutton W2	563450	196350 TQ634963	100m	TQ6396	TQ69I	18 Presen	t not recorded 10	-Apr-10 2	010 Standard \$1	Not record Not	record one spi	rain terrestrial r Bern-A2	N/A	N/A N/	Α II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Scl HabReg-S	I/A EssexBA	AP Designater -	-	PS+SPIE
	Otter	River Wid, Hutton W2	563450	196350 TQ634963	100m		TQ69I	18 Presen	t not recorded 27	-Oct-09 2	009 Standard \$1	Not record Not	record RIVER	SE/ terrestrial r Bern-A2	N/A	N/A N/	Α II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Scl HabReg-S	I/A EssexBA	AP Designater -	-	PS+SPIE
	Otter	River Wid, Hutton W2	563450	196350 TQ634963	100m		TQ69I		t not recorded 10		010 Standard §1	Not record Not	record one spi	rain terrestrial r Bern-A3	N/A	N/A N/	A II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-27 England_N WACA-Scl HabReg-S	I/A EssexBA	AP EWT db fr G	H Darr	en Tai PS+SPIE
utra	Otter	Mountnessing, A12	562550	196850 TQ625968	100m	TQ6296	TQ69I	18	1 not recorded 24-	-Feb-10 2	010 Unknown I	Dead Not	record Small of	otter terrestrial r Bern-A3	N/A	N/A N/	Α II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-27 England_N WACA-Scl HabReg-S	I/A EssexBA	AP EWT db fr Jo	hn Marti Darr	en Tai PS+SPIE
lutra	Otter	River Wid, Hutton W2	563450	196350 TQ634963	100m		TQ69I	18 Presen	t not recorded 27	-Oct-09 2	009 Standard \$1	Not record Not	record RIVER	SE/ terrestrial r Bern-A3	N/A	N/A N/	Α II;	IV EC	CITES- RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-36 England_N WACA-Scl HabReg-S	I/A EssexBA	AP EWT db fr Da	arren Tai Darr	en Tai PS+SPIE
s meles	Badger	Brentwood, Long Ridings Wood	562425	195695 TQ624295	69 10m		TQ69H	18 Presen	t not recorded 05	-Apr-12 2	12 Field recor	Sett Not	record Three h	nole terrestrial r Bern-A3	N/A	N/A N/	A N//	A N/A	A RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A N/A N/A	Protection N/A	Designater -	-	PS
meles	Badger	Brentwood, Long Ridings Wood	562425	195695 TQ624295	69 10m		TQ69H	18 Presen	t not recorded 05	-Apr-12 2	12 Field recor	Sett Not	record Three h	nole terrestrial r Bern-A3	N/A	N/A N/	A N//	A N/A	A RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A N/A N/A		EWT db fr Ad	drian Knc Adria	an Knc PS
trellus pipistrellus	Common Pipistrelle	e Willowbrook Primary School, B	562550	195050 TQ625950	100m	TQ6295	TQ69H	18	1 not recorded 16	-Jun-11 2)11 Aural bat c I	Not record Not	record One ba	t waterrestrial r Bern-A3	N/A	CMS_EUF N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Sci HabReg-S		AP Designater -	-	PS
rellus pipistrellus	Common Pipistrelle	e Willowbrook Primary School, B	562550	195050 TQ625950	100m	TQ6295	TQ69H	18	1 not recorded 09	-Jun-11 2	011 Aural bat c I	Not record Not	record One ba	t waterrestrial r Bern-A3	N/A	CMS_EUR N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Scl HabReg-S		AP Designater -	-	PS
rellus pipistrellus	Common Pipistrelle	e Willowbrook Primary School, B	562550	195050 TQ625950	100m	TQ6295	TQ69H	18	1 not recorded 08	-Jun-11 2)11 Aural bat c I	Not record Not	record One ba	t waterrestrial r Bern-A3	N/A	CMS_EUF N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Scl HabReg-S	I/A EssexBA	AP Designater -	-	PS
rellus pipistrellus	Common Pipistrelle	e Brentwood, Tennyson Road	562850	194650 TQ628946	100m	TQ6294	TQ69H	18	1 not recorded 31-	Aug-08 2	008 Sighting	Not record Flyin	ng ovei flying o	ver terrestrial r Bern-A3	N/A	CMS_EUR N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Scl HabReg-S	I/A EssexBA	AP Designater -	-	PS
strellus pipistrellus	Common Pipistrelle	e Willowbrook Primary School, B	562550	195050 TQ625950	100m	TQ6295	TQ69H	18	1 not recorded 16	-Jun-11 2	011 Aural bat c I	Not record Not	record One ba	t waterrestrial r Bern-A3	N/A	CMS_EUR N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Scl HabReg-S		AP EWT db fr Vi	cky Row Vick	/ Row PS
trellus pipistrellus	Common Pipistrelle	e Willowbrook Primary School, B	562550	195050 TQ625950	100m	TQ6295	TQ69H	18	1 not recorded 09	-Jun-11 2	11 Aural bat cl	Not record Not	record One ba	t waterrestrial r Bern-A3	N/A	CMS_EUF N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Scl HabReg-S	I/A EssexBA	AP EWT db fr Vi	cky Row Vick	/ Row PS
rellus pipistrellus	Common Pipistrelle	e Willowbrook Primary School, B	562550	195050 TQ625950	100m	TQ6295	TQ69H	18	1 not recorded 08	-Jun-11 2	11 Aural bat cl	Not record Not	record One ba	t waterrestrial r Bern-A3	N/A	CMS_EUF N/	A IV	N/A	A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A WACA-Scl HabReg-S	I/A EssexBA	AP EWT db fr Vi	cky Row Vick	/ Row PS
trellus pygmaeus	Soprano Pipistrelle	Brentwood, Tennyson Road	562850	194650 TQ628946	100m	TQ6294	TQ69H	18	1 not recorded 31-	Aug-08 2	008 Sighting	Not record Flyin	ng ovei flying o	ver terrestrial r Bern-A2	N/A	CMS_EUF N/	A IV	N/A	A RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_NN/A HabReg-S	I/A EssexBA	AP Designater -	-	PS+SPIE
cotus auritus	Brown Long-eared	Ba Brentwood, Tennyson Road	562850	194650 TQ628946	100m	TQ6294	TQ69H	18	1 not recorded 29-	Aug-08 2	08 Sighting	luvenile Gro	unded cat cau	ght terrestrial r Bern-A2	N/A	CMS EUF N/	A IV	N/A	A RedLis	st_G N/A	N/A	N/A	N/A	N/A	N/A	UKBAP-2C England_N WACA-Scl HabReg-S	I/A N/A	Designater -	-	PS+SPIE

SPIE Species of Principal Importance in England RECORDS *These do not include legally protected SPIE species which are listed above OR SPIE species of birds (see county recorder contact list)

			Ordnance Sur	vey Grid	Ref																										
Taxon	Vernacular	Site	Xcoord	Ycoord	Gridr	ef Precisio	on KMsquai	re Tetrad												Globalredl Redlist	pr Redlist	19 Redlist_2	20 Reddatabii RareSc	arc NatRan	eSc BAPUKPri Blist_Eng WACA	ConsHa	bS Badger/	Act EssexB	AP DataSour_ Recorder	Determine PS_or_SPIE	
Cuculus canorus	Common Cuckoo	Ingrave, Hall Wood	563250							1 not recorded 08-May-12	2012 Auditory R Adult	Not record	bird	N/A	N/A	N/A	N/A	N/A	N/A	RedList_G N/A	N/A	N/A	Bird-Red N/A	N/A	UKBAP-2C England_N/A	N/A	N/A	N/A	Designater -	- SPIE	
Cuculus canorus	Common Cuckoo	Ingrave, Hall Wood	563250	193250	TQ632932	100m	TQ6393	TQ69G	18	1 not recorded 08-May-12	2012 Auditory R Adult	Not record	bird	N/A	N/A	N/A	N/A	N/A	N/A	RedList_G N/A	N/A	N/A	Bird-Red N/A	N/A	UKBAP-2C England_N/A	N/A	N/A	N/A	EWT db fr Duncan H	Visitor SPIE	
Designated Specie	s (not Protected or S	SPIE)																													

Doorginator	oposioo (not i rotootou o											
			Ordnance Survey Grid Ref									
Taxon	Vernacular	Site	Xcoord Ycoord Gridref	Precision KMsc	uare Tetrad ViceCounty Quantity Sex	Date	DateYear Method Stage Status	Comment taxongro_1Bern	BirdsDir Migratorys OSPAR	HabsDir	ECCITIES Globalredl Redlist_pr Redlist_19 Redlist_20 Reddatabii RareSca	arc NatRareSc BAPUKPri Blist_Eng WACA
Populus nig	ra subsp. Black Poplar	Garden no:277, Shenfield	562250 196600	100m	0 0		2005 unknown not record not reco	orde Field recor flowering p				

WACA ConsHabS BadgerAct EssexBAP DataSour. Recorder Determine PS or SPIE EECOS B/ Ken Adam Designated (not PS or SPIE)

APPENDIX 2: CONSTRAINTS AND OPPORTUNITIES PLAN

(Ref: M14-2281 v1)



	Site boundary
• • • • •	Bare ground
	Broadleaved semi natural woodland
ΙΙ	Improved grassland
	Pond
•	Scattered trees
+++++	Fence
	Hedgerow
	Buildings