COLCHESTER BOROUGH COUNCIL

LOCAL WILDLIFE SITE REVIEW 2008

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Prepared by Essex Ecology Services Ltd. EECOS Abbotts Hall Farm, Great Wigborough, Colchester, Essex, CO5 7RZ 01621 862986, eecos@essexwt.org.uk

> Company Registered No. 2853947 VAT Registered No. 623 4432 65

IMPORTANT NOTES

Nomenclature

The term "Site of Importance for Nature Conservation" (SINC) used in previous reports is here replaced by the currently generally accepted term of "Local Wildlife Site".

Rationale

It is hoped that this identification of Local Wildlife Sites is not seen as a hindrance to the livelihood of those landowners affected, or an attempt to blindly influence the management of such sites. It is an attempt to describe the wildlife resource we have in the county as a whole, which has been preserved thus far as a result of the management by landowners and together we hope to be able to help landowners retain and enhance this biodiversity for the future.

Public Access

Identification as a Local Wildlife Site within this report does not confer any right of public access to the site, above and beyond any Public Rights of Way that may exist. The vast majority of the Sites are in private ownership and this should be respected at all times.

Land Ownership

It has always been the intention of the Essex Wildlife Trust to contact all landowners of Local Wildlife Sites, advising them of this identification and promoting nature conservation management of the site. To that end, the Essex Wildlife Trust has appointed a Local Wildlife Sites Officer. While this lengthy undertaking is in progress it is requested that the Essex Wildlife Trust is contacted prior to any formal approach regarding any Site identified within this report.

Boundaries

Whilst every attempt has been made to ensure accurate mapping of the site boundaries, the accompanying maps should be considered as being illustrative only. This is especially true for any SSSIs (Sites of Special Scientific Interest), which are included within LoWS site boundary maps to help interpret the context of Sites in the wider countryside. Definite SSSI boundaries are maintained by Natural England. The Essex Wildlife Trust should be consulted over the precise boundary of all Local Wildlife Sites, should any dispute occur or precise determination be required.

Planning

The information within this report should not be used as a bypass to the normal planning consultation process. It is inevitable that, with the passage of time, some Local Wildlife Sites will be lost or damaged to the extent that they are no longer considered as such. Similarly, new Sites may be identified and periodically added to the list for the borough. For these reasons, the Essex Wildlife Trust still wishes to be consulted on all planning proposals, regardless of whether or not they apparently affect a Site detailed within this report. This report will allow a greater understanding of the wildlife resources of the district/borough and will make the consultation process much faster and more cost-effective.

INDEX

1. INTRODUCTION

1.1	General Introduction	1
1.2	Background	1
1.3	Objectives of Review	1
1.4	Review Process and Methodology	1
1.5	Limitations of Survey	3
2. R	ESULTS	
2.1	Identification of Local Wildlife Sites	5
2.2	Deletions	6
2.3	Additions	7
2.4	Amended and Unchanged Sites	9
2.5	Other Sites	13
2.6	Summary	13
3. CONCLUSIONS		
3.1	Local Wildlife Site Network	14
3.2	UK BAP Priority Habitats	16
3.3	3.3 Recommendations for Review	

Appendix 1 Draft Local Wildlife Sites Selection Criteria Appendix 2 Summary Table of Local Wildlife Sites Appendix 3 Register of Colchester Borough Local Wildlife Sites Appendix 4 Register of Potential Local Wildlife Sites

COLCHESTER BOROUGH LOCAL WILDLIFE SITES REVIEW

1. INTRODUCTION

1.1 <u>General Introduction</u>

This report has been produced by Essex Ecology Services Ltd. (EECOS), the ecological consultancy of the Essex Wildlife Trust, on behalf of Colchester Borough Council. It comprises the results of a review of existing and potential Local Wildlife Sites (LoWS) intended to contribute to the Local Development Framework evidence base.

1.2 Background

A previous survey report, produced in 1991, incorporated a basic land use survey with an exercise to identify the most important wildlife habitats present within the district. These important wildlife habitats were identified as "Sites of Importance for Nature Conservation" [SINC], with the results summarised in "Nature conservation – A Reference Guide" produced by the Essex Wildlife Trust in individual district volumes. In the intervening years these sites have been referred to as County Wildlife Sites and, in some places, Wildlife Sites, but in Essex the term Local Wildlife Sites has now been adopted and is used throughout this report to refer to sites of this designation, irrespective of the terminology that was used at the time.

1.3 <u>Objectives of the Review</u>

The principal objective of this review is to update the LoWS network within Colchester Borough in the light of changes in available knowledge and by application of draft site selection criteria for Essex. This updated information can contribute to a robust evidence base as required of each Local Authority as part of their Local Development Framework.

1.4 <u>Review Process and Methodology</u>

The basis for this review has been a completely new field-by-field land use and habitat survey, in conjunction with a desk study and consultation exercise to identify potential new Sites and to validate or delete existing Sites. All of these sites were then assessed against the current LoWS Selection Criteria to determine whether or not they qualified for LoWS status. Species and habitats now afforded attention via county or national Biodiversity Action Plans were specifically considered and their representation within the LoWS network ensured. The LoWS Selection Criteria have been developed through reviews in other Essex districts and modified in line with national guidelines and following a wide consultation exercise. The criteria are still being modified and there are likely to be further changes before their official

publication. The version used during this review is the most up to date draft currently available, dated March 2007, an abridged version of which is included here in Appendix 1, as well as being available via <u>www.essexbiodiversity.org.uk</u>, where updated versions will periodically appear.

For some groups, such as invertebrates, the state of our knowledge concerning their distribution and ecological requirements is still quite limited, so that whilst criteria are now in place to select sites on the grounds of their invertebrate interest, the actual ability to do so is still at an early stage, particularly for the less well-studied groups. However, development of the various biodiversity initiatives across the county and the production of a draft Essex Red Data List have helped in focussing on the needs of these populations and identifying their key population localities. These data should continue to feed into subsequent LoWS reviews, improving the effectiveness of their nature conservation role.

1.4.1 Field Survey Work

In order to facilitate site access as part of the field survey work, EECOS surveyors were issued with warrants of entry onto land under Sections 324(1) and 325(1) of the Town and Country Planning Act 1990. These warrants effectively gave rights of access at reasonable times of the day and week and by using reasonable routes and methods to land not otherwise accessible via the public rights of way network.

Notwithstanding this, there are clearly a number of scenarios when it would have been neither appropriate nor even legal to try and exercise such rights of access. Such situations include private residential gardens, sites subject to mines and quarries regulations, open landfill sites, railway land and the like, and all surveyors used their discretion in applying the general principle of gaining access to areas of open countryside for the purposes of this survey. Where possible, surveyors still attempted to make contact with the relevant landowners and EECOS wishes to thank all those people who have actively assisted this survey by verbally granting permission to enter onto their land.

The whole borough was mapped at a scale of 1: 10 000, with each parcel of land accorded a land use code in line with the Phase 1 Habitat Survey technique developed by the Nature Conservancy Council at its successive organisations. Any areas of land adjudged to be of significant wildlife value were assessed in more detail, as conditions permitted, with a short description and plant species list compiled. Other nature history notes, such as bird life and

insects, were also noted, if appropriate. The threshold of what constitutes a "significant" wildlife value is to an extent a matter of experience and judgement, but key habitat qualities include possible ancient status for woodland, flower-rich grasslands, potential to support reptiles and amphibians, the micro-topography and weedy flora characteristic of post-industrial "brownfield" sites and the ecological relationship between adjacent sites. All surveyors engaged on the project have had previous experience of Local Wildlife Site identification in other districts and so had a working knowledge of the site selection criteria and what might intrinsically qualify for inclusion.

1.4.2 Desk Study

Alongside the field survey work, a consultation process has sought comments from relevant local experts on the existing suite of Sites and also the draft suite of Local Wildlife Sites as this was developed. These comments have been incorporated as far as possible within the final list of sites, while maintaining the rigour of the published Site Selection Criteria. Appendix 1 is an extract of the current Selection Criteria used to identify sites within this report. Some suggested sites, for which insufficient information is currently available, have been identified as Potential Local Wildlife Sites pending further survey work or improvements to the habitat conditions.

EECOS gratefully acknowledges the input from the following persons and organisations, who were consulted as part of this review process (in alphabetical order):

Daphne Davis - Essex Wildlife Trust Local Group Dougal Urquhart – Essex County Council country park ranger service Essex Amphibian and Reptile Group Jerry Bowdrey – Colchester Borough Council, Natural History Museum John Thorogood – Essex Wildlife Trust Local Group Peter Harvey - Essex Field Club Ruth Tucker – Essex Wildlife Trust Local Group Ted Benton – Colchester Natural History Society, Essex Field Club Terri Tarpey – Colchester Natural History Society

1.5 <u>Limitations of the Survey</u>

For many of the sites there is still a lack of data available regarding invertebrate populations and other species information. Every reasonable effort has been made to obtain the additional information necessary to fully assess existing and proposed sites, but this information will be continually updated which may affect the status of some sites. In general terms, new information about sites is becoming available all the time. This would make a rolling programme of Site monitoring and review more useful than the "once every five or ten years" approach that has been the norm up to now.

The scope of the review limited the process to, in most cases, a single visit to each site. While efforts were made to visit each site at the most appropriate season, inevitably some features of some sites were not visible at the time of the visit. It is hoped that the additional consultation with local naturalists has filled many such gaps in the knowledge base.

2. <u>RESULTS</u>

2.1 Identification of Local Wildlife Sites

The suite of LoWS been amended from those identified in the report in 1991 for the following reasons:

- Some sites have been de-selected on account of their decreased nature conservation value or failure to satisfactorily meet the revised and now more stringent selection criteria;
- A few new, modified or previously overlooked sites have been identified and added to the register. In most instances, such changes involve alterations to the boundaries of existing sites, but a few, completely new areas have also been identified;
- SSSIs have been removed from the system;
- Some sites have been amalgamated where they lie next to each other or are otherwise sufficiently connected.

Probably the greatest single change is that areas designated as Sites of Special Scientific Interest SSSI, included in the previous survey, are now no longer included in the LoWS network, in line with national guidance. With regards to Colchester Borough this removes: (old SINC identification numbers are given for ease of reference).

- C1. Blackwater Estuary
- C3. Upper Colne Marshes
- C4. Colne Estuary
- FW4. Abberton Reservoir
- G44. Cattawade Marshes
- H1. Tiptree Heath
- M11. Roman River
- W73. Bullock Wood

Another deviation from past policy is in the inclusion of sites containing inter-tidal habitats. In the past, LoWS status has been restricted to terrestrial and freshwater habitats, but more recently it has been felt that this excluded important wildlife sites that fall outside of the SSSI boundaries. Both mudflats and saltmarsh are national Biodiversity Action Plan priority habitats. Site numbering has also been changed. Previously, sites were roughly grouped into habitat categories of Woodland, Grassland, Mosaic, Freshwater, Coastal or Heathland, with an appropriate letter code and sequential number. Given that this process was repeated across the 14 boroughs/districts in Essex, this means that the county had 14 "W1" Local Wildlife Sites i.e. the first woodland site in each local/unitary authority area. In order to make the county-wide system less complicated, a new system has been introduced whereby each site has a borough/district and number code, with all Colchester Sites now being prefixed "Co" and with no indication of the habitat(s) present on the site.

The revised list of Colchester Local Wildlife Sites is included in Appendix 2 with the revised Local Wildlife Site Register in Appendix 3. Within the Register, each Site has a suitably scaled location map (N.B. the scale varies between maps), code number, name, area in hectares and central grid reference. The maps show the LoWS in question in green, with any adjacent Colchester LoWS shown in pale yellow, along with any potential LoWS (green hatching) and SSSIs (salmon pink). The citation for each site then describes the characteristic vegetation, identifies key species and habitat qualities and occasionally gives notes on management issues. Finally, the relevant selection criteria codes are listed (see Appendix 1 for the interpretation of these codes), along with an indication of any UK and Essex BAP habitats that are present and also details of when the site was first designated and then reviewed (if applicable).

2.2 <u>Deletions</u>

A few sites have been withdrawn from the Local Wildlife Sites register (old SINC identification numbers are given for ease of reference):

C1. Blackwater Estuary	Deleted – SSSIs now not included as LoWS
C3. Upper Colne Marshes	Deleted – SSSIs now not included as LoWS
C4. Colne Estuary	Deleted – SSSIs now not included as LoWS
C5. Tidal River Colne	Deleted – does not meet new criteria
FW4. Abberton Reservoir SSSI	Deleted – SSSIs now not included as LoWS
FW7. Judas Gap Reedbed	Deleted – declined condition
G5. Well Lane SRV	Deleted – does not meet criteria standards
G6. Wormingford to Bures SRV	Deleted – does not meet criteria standards
G9. Gallows Green	Deleted – deterioration in quality
G11. Claypit Heath SRV	Deleted – does not meet criteria standards

G13. Copfordhall Churchyard	Deleted – does not meet criteria standards
G24. Bounstead Bridge East	Deleted – does not meet criteria standards
G25. Fenn House Marsh	Deleted – deterioration in quality
G41. Dedham Bridge Banks	Deleted – does not meet criteria standards
G43. Dedham Special Roadside Verge	Deleted – deterioration in quality
G44. Cattawade Marshes SSSI	Deleted – SSSIs now not included as LoWS
H1. Tiptree Heath SSSI	Deleted - SSSIs now not included as LoWS
M1. Swanscomb Lakes	Deleted – does not meet criteria standards
M11. Roman River SSSI	Deleted – SSSIs now not included as LoWS
W17. The Rampart	Deleted – does not meet criteria standards
W18. Easthorpe Hall Wood	Deleted – does not meet criteria standards
W73. Bullock Wood SSSI	Deleted – SSSIs now not included as LoWS

2.3 Additions

A number of new sites have been added to the Local Wildlife Sites register. These are:

- Co7 Tiptree Water Works
- Co9 Alder Car, White Colne
- Co11 Hickmore Fen
- Co13 Eden Wood
- Co16 St Luke's Church, Tiptree
- Co20 Domsey Brook Pasture
- Co23 Chappel Meadow
- Co24 Mount Bures Churchyard
- Co27 Stonefield Strip
- Co28 Sargeant's Orchard
- Co29 Long/Round Grove
- Co31 Marks Tey Brick Pit
- Co41 Lodge Hills
- Co42 Rectory Wood
- Co45 Fordham Bridge Meadow
- Co49 Copford Hall Wood North
- Co51 Keeper's Cottage Wood
- Co52 Old Vicarage Grove, Wormingford
- C061 Wood near Fordham Place
- Co62 Stanway Pits

Co67 Warren Lane Pit Co72 West Bergholt Hall Church Co78 Gryme's Dyke Co84 Abbotts Hall Marshes Co86 Olivers Woods Co95 Roman River Willow/Aldercar Co97 Irvine Road Orchard Co98 Mill Grove Co102 Bounstead Bridge East Co108 Layer Brook Pasture Co113 Colchester Cemetery Co115 Langham Road Grassland Co120 Ball Grove Co130 Strood Marsh Co131 Langenhoe Lodge Churchyard Co132 Magdalen Wood Co138 St Andrew's Churchyard, Greenstead Co153 St Mary's Church, Langham Co155 Gun Hill Grassland Co156 Gun Hill Place Co157 The Coombs Co159 Brickhouse Farm Pits Co160 Reeveshall Reedbed Co161 Wivenhoe Cross Pit Co162 Dalethorpe Park Co164 Manwood Grove Co166 Fen Farm Saltmarsh Co167 Dedham Old River Marshes

The relatively large number of new sites is a reflection of two main factors: firstly, the more wide-ranging and inclusive criteria and selection process and secondly the fact that Colchester Borough was one of the first boroughs to be surveyed in the late 1980s as part of the original SINC review process and, as such, the original list of Colchester SINCs was compiled using particularly old data. Of these, the first point has allowed the inclusion of several areas of post-industrial "brownfield" land, areas of saltmarsh, reedbed and sites where the invertebrate

interest is a key factor e.g. parkland; whilst the second point has now allowed for the inclusion of many small fragments of ancient woodland that were missed during the original SINC project.

2.4 Amended and Unchanged Sites

The majority of former sites have been revised, affected by both major and minor additions and deletions of land. These are (old SINC identification numbers are given for ease of reference):

C2. West Mersea Foreshore	Boundary revisions
FW1. Chappel Ponds	Enlarged
FW3. Birch Lake	Amalgamated with other sites
FW5. River Colne	Partly deleted – does not meet new criteria
G3. Cambridge Brook Marsh	Boundary revisions
G4. Tiptree Parish Field	Amalgamated with other sites
G7. Blind Lane Plantation	Greatly reduce
G10. Fordham Churchyard	Enlarged
G12. Wormingford Churchyard	Enlarged
G15. Hardy's Green SRV	Enlarged and renamed
G16. Fordham Heath SRV	Absorbed into Fordham Heath site
G17. Birch Church and Valley	Amalgamated with other sites
G18. West Bergholt Heath	Enlarged
G20. Great Horkesley Churchyard	Enlarged
G23. Central Colne	Enlarged, renamed
G26. Mile End	Amalgamated with other sites
G28. Pete Tye Common	Some deletions and additions
G29. Manwood Chase	Significant additions
G32. Donyland Snipe Field	Amalgamated with new site; renamed
G33. Langenhoe Marshes	Minor amendments
G34. Roman River Valley, Fingringhoe	Additions to north of river
G35. University Marshes	Significant deteriorated area deleted
G36. Salary Brook	Some deletions
G37. Langham Special Roadside Verge	Very small addition
G39. Bridges Farm	Additions and deletions
G42. Cudmore Grove Country Park	Enlarged

G45. Beckingham Hall SRV M2. Tiptree Lakes M3. Grassreasons M5. Fordham Heath M6. Iron Latch M7. Roman River Reserve M8. Lexden Spring M10. Hilly Fields M12. Colchester Roman Walls M13. High Woods Grasslands M14. Bourne/Distillery Ponds M16. Langham Lakes M17. Black Brook M18. Hythe Marshes M19. Rowhedge Pits M20. Essex University W1. Florie's Hedge W4. Hill Wood W6. Inworth Wood W9. Conyfield Wood W10. Pods Wood W14. Fan Wood W16. Green Lane, Tiptree W19. Cadgers Wood W20. Layer Wood W23. Seller's Lane W24. Seller Wood W26. Potash Wood W27. Gravelpit Wood W28. Aldercar, Copford W30. Aldercar, Wormingford W32. Hillhouse Wood W33. Aldercar, West Bergholt W34. Calves Pasture

Significant additions and deletions Enlarged Part deleted; amalgamated with other site Minor amendments Amalgamated with other site Amalgamated with other sites Minor revision: renamed Significantly enlarged Enlarged Enlarged and amalgamated with other sites Some deletions; renamed Enlarged Some deletions Significant amendments; renamed Minor boundary revisions Enlarged; renamed Enlarged Some parts deleted Enlarged Minor addition; amalgamated with other site Enlarged and amalgamated with other site Minor addition Amalgamated with other sites Amalgamated with other sites Amalgamated with another site Amalgamated with other sites Amalgamated with other sites Amalgamated with other sites Renamed Addition and deletion Minor addition Minor additions Unchanged; amalgamated with a new site Reservoirs deleted

W35. Eight Ash Green Wood
W36. Spring/Grove Wood
W38. Great/Little Billet Woods
W39. Ram Plantation Complex
W40. Cooks Wood
W41. Butcher's Wood/Oliver's Thicks
W43. Slough Grove West
W44. Slough Grove East
W45. Chest Wood
W46. Lexden Gathering Grounds
W47. Pitchbury Wood
W48. Heather Fields
W49. Needles Eye Wood South
W50. Needles Eye Wood Extension
W52. Sodom Wood
W54. Lexden Dyke
W57. Harrow Corner
W58. Friday Wood North
W60. Boxtedhall Great Wood
W61. Berechurch
W62. High Wood
W63. Man Wood
W64. Cophedge Wood West
W65. East Wood
W66. Friars Grove
W67. Ash Wood
W68. Cophedge Wood East
W69. Haye Grove
W70. Donyland Wood
W71. Birch Brook Wood
W72. Kiln Wood
W74. Welsh Wood
W75. Birch Wood, Langham
W76. Home Wood

Enlarged; amalgamated with other sites Separated, with minor deletion Enlarged Minor boundary revisions Enlarged Significant addition and deletion Amalgamated with the following site Amalgamated with previous site amalgamated with other sites Significant additions and deletions Minor addition Amalgamated with other sites Amalgamated with other sites Amalgamated with other sites Minor boundary revisions Enlarged Enlarged Minor boundary revision Split into two revised sites Only small section remains Amalgamated with other sites Amalgamated with other sites Amalgamated with other site Enlarged Amalgamated with other sites Enlarged Amalgamated with other site Enlarged Only small section remains Minor boundary revisions Enlarged Enlarged Boundary revisions Minor deletion

W77. Wivenhoe Wood	Enlarged
W78. Thousand Acres	Enlarged

The following Sites remain essentially unchanged:

FW2. Wormingford Mere	Unchanged	
FW6. Hythe Lagoons	Unchanged	
G1. Wakes Colne Meadow	Unchanged	
G2. Little Tey Churchyard	Unchanged	
G8. Smythe's Green	Unchanged	
G14. Seven Star Green	Unchanged	
G19. Spring Lane Meadow	Unchanged, renamed	
G21. Malting Green	Unchanged	
G22. Bounstead Bridge West	Unchanged	
G27. Bull Meadow LNR	Unchanged	
G30. Cowdray Marsh	Unchanged	
G31. Middlewick Ranges	Unchanged	
G38. Barrage Marsh	Unchanged	
G40. Dedham Churchyard	Unchanged	
M4. Layer Breton Heath	Unchanged	
M9. Kingsford Wood	Unchanged; renamed	
M15. The Moors	Unchanged	
W2. Buckler's Farm Wood	Unchanged	
W3. New Wood	Unchanged	
W5. Perry's Wood	Unchanged	
W7. Woolfney Wood	Unchanged	
W8. Acorn Wood	Unchanged	
W11. Hoe Wood	Unchanged	
W12. Birch Wood, Tiptree	Unchanged	
W13. Ransomes Grove	Unchanged	
W15. Church House Wood	Unchanged	
W21. Aldhamhall Wood	Unchanged	
W22. Long Wood	Unchanged	
W25. Fiddlers Wood	Unchanged	
W29. Copfordhall Woods	Unchanged	

W31. Gol Grove/Hanging Wood	Unchanged
W37. Stitching Wood	Unchanged
W42. Creak's Grove	Unchanged
W51. Spring Wood	Unchanged
W53. Westhouse Wood	Unchanged
W55. Copthall Grove	Unchanged
W56. Bounstead Strip	Unchanged
W59. Little Wood	Unchanged

2.5 Other Sites

In addition to those sites selected as Local Wildlife Sites, a number of Potential Local Wildlife Sites have been identified. They are sites for which further survey work may be required or a change in management needed (either more or less management). Obviously, virtually any piece of semi-natural vegetation has the potential to be improved for wildlife, which might make this list unmanageable, so the list of potential sites, given in Appendix 4, is restricted to those "near misses" that just failed to make it onto the full LoWS Register.

2.6 Summary

The 1991 SINC report identified 155 SINCs totalling 3062.2 hectares of terrestrial and freshwater habitat. This included some 1598.5 hectares of SSSI land on eight sites, giving a total of 1463.7 hectares of non-SSSI land on 147 SINCs.

This present study, which ignores SSSI land, has culminated with the selection of 168 sites totalling 1957.0 hectares of Local Wildlife Site land, a net increase of 493.3 hectares, and an additional 21 sites.

3. DISCUSSION

3.1 Local Wildlife Site Network

The number of Local Wildlife Sites within the District has been revised following changes in policy relating to SSSIs and the application of more rigorous site selection criteria. Many of the sites that were removed from the network are now considered to be of insufficient quality when measured against the new criteria, either because of a decline in the habitat present over the intervening years or because the Local Wildlife Site selection criteria are now more stringent. Many of the sites that have been removed (other than SSSIs) were or are Essex County Council Special Roadside Verges, which were adopted in their entirety during the original SINC review of 1991. However, this road verge network has been developed as a response to the threat of inappropriate road verge management on interesting plant communities rather than a strict nature conservation accolade based purely on the conservation value of the species concerned. Many species that occur on these Special roadside Verges also occur on other verges elsewhere that are not threatened by inappropriate verge management and so they do not benefit from special Road Verge protection. Additionally, many of these verges have declined in their quality over the years, calling into question the validity of the Special Roadside Verge scheme.

Whilst development is seen as the big threat to the countryside, loss of LoWS land between 1991 and 2008 to development has been very slight. It has taken the form of extension of gardens into adjacent woodland and some development work, although inappropriate management of a large section of the University Marshes site may be indirectly driven by development pressures or desires. With the adoption of brownfield land as a site selection criterion there is obviously far greater potential for conflict between LoWS designation and development pressure. Indeed, it may well be the case that planning consent for development already exists for pieces of land here identified as being of LoWS quality. It is realised that the existence of planning consent is likely to override LoWS status but it is hoped that the identification of such land as a LoWS in this report will at least allow for informed dialogue about final landscaping of such sites and also about how biodiversity mitigation measures might be designed into the development in order to soften its impact.

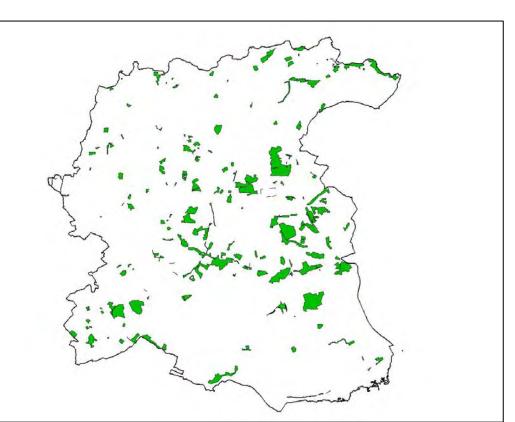
Probably the greatest loss of non-SSSI LoWS land is as the result of the more stringent selection criteria and a better understanding of the Colchester countryside. This has seen the de-selection of significant areas of the Black Brook site near Boxted and Langham where, in

1991, several blocks of land were included as "supportive" habitat that really do not merit LoWS status. Ancient woodland status was an automatic selection criterion in 1991, using the English Nature Ancient Woodland Inventory (AWI) as a guide. This saw the selection of several species-poor and uninspiring woods as SINCs on the grounds that they were ancient. More detailed map research is now capable of illustrating errors in the AWI and several woods have been dropped from the LoWS register because they are not ancient and do not possess any of the characters required by the new selection criteria to be retained as LoWS.

Of the 48 new sites, two (Co84 Abbotts Hall Marshes and Co166 Fen Farm Saltmarsh) result from the policy change that allows intertidal habitat to be included within the network. These two sites demonstrate the purpose of this change in policy well, one being newly created habitat that does not yet qualify for SSSI status, although it is likely to at some stage in the future, and the other being under threat by virtue of its recreational pressures.

Geographically there is a strong concentration of sites along the three main river valleys: Roman River, Colne and Stour, although there is a good scattering of sites across the whole borough. Only Mersea Island, the open countryside between West Bergholt, Wakes Colne and Wormingford, land around Great Tey and the land to the south of Dedham remain rather under-represented within the LoWS network (see Map below).

Distribution of LoWS in the Borough. The large, apparent "void" in the central southern zone is largely occupied by Abberton Reservoir SSSI.



It is curious to note how many sites are associated with the suburban fringes of Colchester town, with fewer sites in the farmed countryside. This is largely a function of the town's location between two river valleys (Colne and Roman Rivers), geology (with the sands and gravels on the plateau between these two valleys supporting many important heathland and sand pit brownfield sites, and the long history of army activity to the south of the town, which has helped preserve many large, essentially undeveloped and unimproved tracts of land.

The Roman River valley in particular is felt to be particularly important, not least because it offers better than average opportunities for countryside access, recreation and hence education. At the time of the 1991 review, Colchester Borough Council employed a Roman River Countryside Officer, although that is not now the case. The Roman River valley would make an ideal focus for a new project aimed at harmonising land management, recreation and biodiversity.

3.2 <u>UK BAP Priority Habitats</u>

The range of UK BAP Priority Habitats is the basis of many of the habitat selection criteria used during this review and there is a responsibility within the Local Development Framework for Local Authorities to monitor these habitats. There are, therefore, clear overlaps between the LoWS system and the Biodiversity Habitat Action Planning process.

Both UK BAP and Essex BAP habitats and species have been changed in the past year. Nationally, some habitats have been added – Ponds, for example – and others have had their name and/or scope changed – Ancient or Species-rich Hedgerows have changed to Hedgerows, for example. In total 695 species have also been added to the UK Priority List, encompassing birds, freshwater fish, reptiles, amphibians, higher and lower plants, fungi, marine species, invertebrates and mammals. The Essex BAP has also been extended by the addition of habitats and species, most of which correspond to national BAP habitats and species. The identification on the Register sheets of the relevant BAP habitats found within each LoWS should allow land managers, planners and countryside agencies to easily see how the management of any site could be contributing to these larger BAP projects. The scope of the UK BAP Priority Habitat covering field boundaries has been expanded to include the majority of intact, semi-natural field boundaries under the new title 'Hedgerows'. The definition requires a hedgerow to consist of more than 80% cover of woody species native to the county. There appears to be no requirement for species diversity or for age, but it is intended that all hedgerows with a rich basal flora will also be included. It has been estimated that 84% of hedgerows in the UK will qualify and the same kind of percentage could be expected for Colchester Borough. In the past, there has been a presumption that any UK BAP Priority Habitat would qualify a site for consideration as a LoWS, and in most cases it is possible to include all examples of the habitat. With hedgerows it would serve no purpose to include every qualifying hedgerow, as this would lead to a proliferation of LoWS that would dilute their importance at a district and county level. Therefore, there is a need to focus on a representative selection of hedgerows or hedgerow systems to ensure the inclusion of the habitat within the network. Currently, only one Colchester site has been identified as a primarily hedgerow site: Co1 Florie's Hedgerows. This Site comprises the ghost outline of Florie's Wood plus a number of connected hedgerows in which Small-leaved Lime is a significant component. That said, hedgerows do feature in many of the grassland sites and for any individual field LoWS it should be assumed that its bounding hedgerows are included within the site.

A new Priority Habitat of 'Ponds' has also been included within the recent national review, with qualifying features covering a broad spectrum of features including marginal or aquatic plant communities and the presence of rare or otherwise significant species. This will lead to a large number of ponds qualifying for consideration as LoWS with a similar problem to that described for Hedgerows above. A similar, representative selection of ponds will need to be added to the LoWS network, preferably linked to existing sites or other valuable habitats. Again, many ponds have been, by default, included within the LoWS network, but one site, Co17 Chappel Ponds and Millennium Green has been designated with its ponds as the key feature.

There are perhaps a few UK BAP habitats for which Colchester has a particular importance as far as county significance is concerned:

1. Coastal grazing marshes and mudflats – most such habitat is designated SSSI, but several areas have been identified as LoWS here in support of this SSSI network.

- 2. "Brownfield" habitats the sands and gravels around Colchester have been quarried for centuries but only the more modern, large-scale quarrying has had a significant impact on the countryside. As well as undoubtedly destroying large areas of countryside, it is now recognised that worked-out pits with their complex topography and consequently varied edaphic conditions can support nationally important assemblages of invertebrates. The large pits around Stanway and Tiptree bear this out well. Some insect groups, such as the solitary bees and wasps, have been well-studied around Colchester since the time of the Harwood family up to a century ago and the borough is still a very significant part of Essex and the UK as a whole for these insects, with old mineral extraction sites forming key habitats for their survival.
- River floodplain grassland also very fragmented and much reduced in extent, Colchester still supports some significant tracts of this habitat, represented within the LoWS network by:
 - the National Trust land on the River Stour around Dedham,
 - the Roman River valley; and
 - the urbanised River Colne in Colchester.
- Reedbed this habitat needs quite precise habitat conditions to develop and Colchester has some very significant stands in the Reeveshall Reedbed on Mersea Island and within the Colne Estuary SSSI at Langenhoe.

One of the existing UK BAP Priority Habitats is present in the district, but has not been sufficiently well studied to be included in this review. Saline Lagoon habitat is largely identified by the characteristic species of invertebrate that occupy these bodies of water and so specific surveys need to be carried out in order to confirm their status. In Colchester, this habitat is most likely to be found in borrow dykes, although there may be other coastal lagoons offering similar conditions, such as the old duck decoy in Co84 Abbotts Hall Marshes and the shallow pool at the eastern end of Co160 Reeveshall Reedbed. Existing information might be available for some of these habitat features. The majority of this habitat should already be within the SSSIs or existing LoWS.

3.3 <u>Recommendations for Review</u>

The Local Wildlife Site network should not be static system, as has tended to be the case in Essex in the past. Until this review, the sites and the information held about them had not been updated since 1991, since when there have been considerable changes in the agricultural environment, coastal defence policies and the quantity and quality of information regarding

the species and habitats present for our county. Local Wildlife Site policy, particularly in respect to site selection criteria, is also likely to evolve in response to national guidance. This process is likely to continue as rapidly in the future with further agricultural changes looming and other, less certain impacts as a result of climate change.

Ideally, each Local Wildlife Site should be visited every year, to monitor its condition, identify threats and to increase our knowledge of the communities present. In addition, further potential Local Wildlife Sites are likely to arise, through habitat creation or because of new information or improved access and these sites will need to be assessed against the site selection criteria. As the criteria change there will also be a need to review the status of the existing sites. In reality, it may be more practicable to have a more structured programme of monitoring, with all sites reviewed on a four-year cycle, or woodlands reviewed less often than grassland sites, as a reflection of their slower rate of change unless actively managed.

There are also related areas of action that perhaps should be explored within Colchester Borough; the potential for establishing green corridors to link up existing sites of conservation significance, policies influencing the siting of future development and the detailed implications of the local and national Biodiversity Action Plan reviews, for example.

APPENDIX 1

DRAFT LOCAL WILDLIFE SITES SELECTION CRITERIA

The following is an extract from the Draft Criteria that have been used to identify the Local Wildlife Sites highlighted in this report. The original chapter, section and sub-section numbers from the full criteria document has been retained in order to facilitate cross-reference to that document, which can be viewed at <u>www.essexbiodiversity.org.uk</u> and following the appropriate links.

4. WILDLIFE STATEMENTS

PREAMBLE

The following Wildlife Site Statements provide the framework for the production of a protocol for Local Wildlife Site review, evaluation and selection, and more specifically a basis to generate both Habitat Selection Criteria (HCr) and Species Selection Criteria (SCr). The Wildlife Site Statements themselves are in bold, with explanatory or supporting information in normal font.

4.1 WILDLIFE SITE STATEMENT 1

4.1.1 The Local Wildlife Site network of Essex will not include land identified as a Site of Special Scientific Interest (SSSI) on biological grounds at the time of the relevant Local Wildlife Site review. Geological SSSIs will be included within the network where they are found to possess suitable wildlife features. It must be realised, however, that the Local Wildlife Site network is critical to the support of such SSSIs (and vice versa) and that the identification of a site as a Local Wildlife Site rather than as an SSSI does not mean that the site is necessarily of inferior quality to a similar site that has been given SSSI status.

4.2 WILDLIFE SITE STATEMENT 2

4.2.1 If part or all of an SSSI is de-notified, then it should be immediately assessed as a candidate Local Wildlife Site and, if appropriate, added to the relevant register of sites.

4.3 WILDLIFE SITE STATEMENT 3

4.3.1 Local Nature Reserves will be subjected to the standard species/habitat selection criteria rather than receive automatic selection.

4.3.2 Under the original selection criteria developed in the early 1990s, the network of sites included all Sites of Special Scientific Interest (SSSI) and Local Nature Reserves (LNR). Consistent with recent national guidance, this position in relation to SSSIs is no longer adopted in the 2007 criteria. However, LNRs and geological SSSIs will be considered where they merit selection on nature conservation interest.

4.4 WILDLIFE SITE STATEMENT 4

4.4.1 All sites that meet the standards set by a Habitat Selection Criterion will be identified as Local Wildlife Sites.

4.4.2 This statement is consistent with Defra's Guidance on Local Sites, which states that:"Local Site systems should select all areas of substantive nature conservation value..."

Therefore, the system in Essex will seek to select all sites with significant (as defined by the criteria) semi-natural habitats.

4.5 WILDLIFE SITE STATEMENT 5

- 4.5.1 Local Wildlife Site reviews shall attempt to identify all significant populations of notable species that do not have significant populations protected by SSSIs. Notable is defined for the purposes of this document to encompass ALL species:
 - listed in the Essex or UK Biodiversity Action Plan;
 - with an appropriate IUCN designation;
 - a non-IUCN designation of 'rare' or 'scarce';
 - any bird identified on the UK 'red' or 'amber' list; or
 - identified within the Essex Red Data List (ERDL).
- 4.5.2 Priority should be given to those species thought to be especially threatened or in decline, in Essex or nationally. Habitats which support significant populations of these species should be considered for selection as Local Wildlife Sites. Furthermore, the presence of notable species within a site selected through other criteria shall be used to support the designation of that site.
- 4.5.3 The system should support populations of every notable species, although this does not mean that every population of a notable species is required to be adopted as a Local Wildlife Site
- 4.5.4 This is a key distinction from the policy of identifying all habitats of 'substantive nature conservation value', although there is some justification in so doing. The population dynamics of some fauna, especially invertebrates, are markedly different to that of

plants and vegetation types, with ephemeral populations arising from attempted range expansion and subsequent contraction blurring the picture of a species' core range. There is felt to be some justification in restricting the site selection process to sites where populations are believed to be stable, rather than every site where a notable species has been recorded. The antiquity of some survey data further strengthens this point, in that only recent, reliable survey information should be used to identify sites on species grounds alone.

- 4.5.5 The Essex Red Data List (ERDL) has been coordinated by Peter Harvey of the Essex Field Club for Natural England (viewable at www.essexfieldclub.org.uk). It comprises a listing of those especially rare, threatened or drastically declining species known to have been found in the county. Included within this list are all nationally rare species, nationally scarce species and, where sufficient data is available, other species of lesser national significance that are rare or threatened in Essex (see Appendix 1 for a more detailed account of the various national and county conservation designations).
- 4.5.6 In spite of the information provided in national and local BAPs or Red databook/lists, determining and prioritising which notable species are thought to be especially threatened or in decline, and currently not adequately protected in Essex, may, for some species, represent a complex task. In these circumstances, a suitably qualified authority should be consulted.
- 4.5.7 The criteria which stem from this statement have been developed to encompass the following situations:
 - the presence of populations of one or more nationally rare species;
 - the presence of populations of one or more UK BAP species;
 - the presence of populations of one or more nationally scarce species;
 - the presence of an Essex rarity (listed in either the ERDL or Essex BAP); and
 - the presence of an unusually diverse assemblage of species, from within one species group, be they rare, scarce or relatively commonplace species.

Furthermore the criteria need to:

 conserve populations of rare and scarce species both at the core of their known distribution and also in smaller or more vulnerable satellite populations on the periphery of their known range.

4.6 WILDLIFE SITE STATEMENT 6

- 4.6.1 A Local Wildlife Site identified on species grounds should contain the habitat requirements at the correct scale for the species concerned, with the limited exception of those species that range widely over the general countryside or coast as part of their normal foraging behaviour.
- 4.6.2 The Site should contain the habitat requirements at the correct scale in relation to the species on which the site is being selected. This is a key point in protecting many species' populations. There is often little merit in identifying a site where a rare invertebrate has been recorded if that site does not extend to include, where they are known, significant proportions of all the ecological requirements of that species. For example, many invertebrates need a sufficiently large and continuous pollen or nectar supply to complete their life cycle. This may lead to the designation of an area of peripheral vegetation that might not otherwise qualify for Local Wildlife Site selection in its own right, if it can be demonstrated that it supplies additional habitat benefits for the species concerned.
- 4.6.3 Such a Statement is harder to apply to other groups, such as mammals and some birds. It may be desirable to protect the nesting location of a particularly scarce bird (e.g. Little Tern Sterna albifrons, Marsh Warbler Acrocephalus palustris, or Goshawk Accipiter gentilis) but it may be impractical to identify and protect all the land (or sea) on which those birds forage for food. Similar problems might be encountered with Otters Lutra lutra, although not necessarily so with Water Voles Arvicola terrestris, Dormice Muscardinus avellanarius, Harvest Mice Micromys minutus or Water Shrews Neomys fodiens.
- 4.6.4 In addition to those that stem from the Essex Review Panel targets, the following Wildlife Site Statements (7-9) have been developed to inform the selection of Local Wildlife Sites.

4.7 WILDLIFE SITE STATEMENT 7

4.7.1 Habitats can be identified as Local Wildlife Sites if their identification as such contributes to the fulfilment of national, regional or county Biodiversity Action Plan targets. This does not mean to say that all such habitats must be identified e.g. the identification of ALL ancient or species-rich hedgerows is not deemed appropriate.

4.8 WILDLIFE SITE STATEMENT 8

- 4.8.1 Other sites, not covered by criteria stemming from the previous Statements, can be identified as Local Wildlife Sites on the basis of there unique ecological characteristics. These habitat selection criteria shall give due consideration to the values and principles embodied in the 'Ratcliffe Criteria', especially rarity, naturalness, typicalness, fragility, size, diversity and position in an ecological unit.
- 4.8.2 The last point is particularly important. For example, sites of low intrinsic nature conservation value, but which perform an important function in terms of their position within the wider ecological landscape will be considered for selection.
- 4.8.3 Potential value might also be considered, especially for degraded UK or Essex BAP habitats.

4.9 WILDLIFE SITE STATEMENT 9

- 4.9.1 Domestic gardens will not ordinarily be considered for selection. The only exception to this might be where the garden provides the very best or only site of a notable species.
- 4.9.2 To these nine fundamental points, three final Statements (10-12) can be added which are designed to strengthen and 'legitimise' the system for identifying Local Wildlife Sites consistent with national guidance.

4.10 WILDLIFE SITE STATEMENT 10

- 4.10.1 The following 'non-biological' criteria, mentioned in the Defra guidance, will also be considered where a site just fails to meet selection criteria which relate to Wildlife Site Statements 1-8:
 - historical and cultural associations;
 - value for appreciation of nature; and/or
 - value for learning.

4.10.2 The inclusion of 'non-biological' criteria marks a departure from the previous documents used to identify Local Wildlife Sites in Essex, which focussed exclusively upon a sites ecological interest. It was felt that this was a significant omission, and the addition of WSS 10 brings the selection criteria in line with the Defra guidance of 2006.

4.11 WILDLIFE SITE STATEMENT 11

4.11.1 Before notification, each candidate Local Wildlife Site must be ratified by a Local Wildlife Sites Selection Panel.

- 4.11.2 This should be locally based at the borough, district or unitary level, and include representatives of the following organisations: local natural history societies, Essex Wildlife Trust local groups, local authority officers, statutory nature conservation agencies, non-statutory nature conservation organisations and natural history museums.
- 4.11.3 Local ratification is crucial, and this process will be strengthened, upon completion of a LoWS review, by seeking final endorsement of the ratified sites from the Essex Wildlife Sites Project Advisory Group in order to maintain a comparability of standards across the county. In situations where the local selection panel is unable to reach a decision consistent with the selection criteria or it proves difficult to convene a Local Selection Panel, the final arbiter shall be the EWSP Advisory Group, which comprises representatives from: Essex Wildlife Trust, Natural England, Environment Agency, Essex County Council, Essex Biodiversity Project, Essex Field Club and the Essex Planning Officers' Association.

4.12 WILDLIFE SITE STATEMENT 12

- 4.12.1 Local Authorities should include a policy within their Local Development Framework (LDF), or other relevant policy document, to allow, where necessary, for the addition or deletion of Local Wildlife Sites from their register within the lifetime of the LDF or policy document.
- 4.12.2 Local Authorities should endeavour to review the LoWS in their area on a regular basis. Consistent with Defra guidance, the Local Wildlife Sites Project recommend that the period between reviews should be no greater than 5 years.

6. HABITAT SELECTION CRITERIA

6.1 PREAMBLE

The criteria in this section, and section 7, are phrased such that sites which satisfy a Wildlife Site Statement shall be 'considered' for selection, subject to ratification by a Local Wildlife Sites selection panel, and/or, where appropriate, the Essex Wildlife Sites Project Advisory Group. The selection criteria themselves are in bold, with explanatory or supporting information in normal font. Where a criterion relates directly to one or more Wildlife Site Statements, that Statement shall be identified in parentheses at the end of the criterion (e.g. WSS6 = Wildlife Site Statement 6).

6.2 WOODLAND

6.2.1 There is a general acceptance that ancient woodlands are of significant importance within the Essex countryside, in most cases being semi-natural vegetation derived from the natural climax vegetation that would have covered most of the land prior to human intervention. Ancient woodland sites would be withheld from selection only if they have deteriorated to such an extent by extreme coniferisation, human disturbance, or are of such a small size that they are thought unlikely to support viable populations of the woodland flora and fauna that make ancient woods important. If de-selection is petitioned, the onus of responsibility will lie with the plaintiff to demonstrate through professional ecological survey that no such flora or fauna occurs at the site nor has occurred in the recent past.

6.2.2 HCr1

All sites identified in the Essex Ancient Woodland Inventory compiled by Natural England (HCr1a), plus any other site considered to be ancient by reason of its indicative ground flora, documentary evidence or physical and/or geomorphological qualities (HCr1b) shall be considered for selection (WSS 7).

6.2.3 Plant species deemed to be indicative of ancient woodland sites in Essex are listed in Appendix 3 (of the full criteria document). For non-ancient woodland, including parkland, recent secondary woods, scrub and also hedgerows and green lanes, separate criteria apply.

6.2.4 **HCr2**

EECOS, December 2008

An area of non-ancient woodland (other than wet woodland) shall be considered for selection if it fulfils at least one of the following statements:

- a) it lies immediately adjacent to ancient woodland and has a diversity of age and/or species structure consistent with naturally occurring woodland or provides an important buffering or connective function. (WSS 7, 8: size, diversity, position in ecological unit);
- b) the wood has a diverse age and species structure (including a limited extent of coniferous plantation) and preferably includes the presence of grassy rides, ponds or other open areas. The minimum size threshold should consider the relative abundance of woodland in the surrounding countryside (WSS 8);
- c) the wood forms part of a mosaic of good quality wildlife habitat in association with at least two other habitats from the following list: scrub, open water, heath, acid grassland, neutral grassland, calcareous grassland, marsh and swamp. The minimum size threshold will consider the relative abundance of semi-natural habitat in the surrounding countryside (WSS 8); and/or
- d) the wood is identifiable as a 'priority' or 'characteristic' National Vegetation Classification (NVC) community type for the Natural Area in which the site is located. Greater emphasis shall be given to 'priority' woodland types (WSS 7, 8).

 Table 1 Essex Natural Area woodland types (priority types are in bold type)

 London Desire

London Basin: W5 Alnus glutinosa – Carex paniculata woodland W7 Alnus glutinosa – Fraxinus excelsior – Lysimachia nemorum woodland W8 Fraxinus excelsior – Acer campestre – Mercurialis perennis woodland W10 Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland W14 Fagus sylvatica - Rubus fruticosus woodland W15 Fagus sylvatica – Deschampsia flexuosa woodland W16 Quercus spp. - Betula spp. - Deschampsia flexuosa woodland East Anglian Plain: W2 Salix cinerea - Betula pubescens - Phragmites australis woodland W6 Alnus glutinosa – Urtica dioica woodland W8 Fraxinus excelsior – Acer campestre – Mercurialis perennis woodland W10 Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland East Anglian Chalk: W8 Fraxinus excelsior – Acer campestre – Mercurialis perennis woodland Suffolk Coast and Heaths: W10 Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland

6.3 PARKLAND AND VETERAN TREES

6.3.1 Parkland is a particular type of woodland mosaic in which semi-natural grassland would often have been an important component, sometimes more so than the 'woodland' component. Characteristic features of parkland include encircling ditches/banks, large veteran trees that have grown in an open, rather than restricted, woodland setting and species-rich grassland. Veteran trees can be exceptionally important for invertebrates and, in some cases, may provide sufficient reason to select the site, even with the lack of any other parkland component. Such trees might even be growing within an arable field.

6.3.2 HCr3

Areas of ancient parkland, preferably with veteran trees, and a semi-natural grassland ground flora should be considered for selection (WSS 8).

6.3.3 HCr4

Veteran parkland trees "known or likely to support significant dead wood or other invertebrate assemblages, or epiphytic bryophytes or lichens" may be selected even in the absence of other parkland features, such as semi-natural grassland. The stand should include a sufficient number and variety of trees to provide appropriate habitat conditions for the associated species of interest (WSS 5, 6, 8).

- 6.3.4 Wet woodland is a national BAP habitat, often found in a mosaic of other habitats from open water to dry woodland, especially as willow (*Salix*) scrub. Streamside or plateau Alder *Alnus glutinosa* woodland may form more discrete units. As a scarce woodland type, all stands of wet Alder wood should be considered for selection, subject to considerations of size and shape (e.g. a broad, rectangular wood is likely to be more significant than a very narrow stream-side belt). The supporting ground flora should be included. This woodland type is covered by selection criterion HCr2(d).
- 6.3.5 Stands of willow (*Salix* spp.) wood should be identified where they are known to support breeding habitat or significant foraging habitat, specialist woodland bird or invertebrate species, or where they form significant components of a mosaic site. Such sites should aim to include and protect the source of the water that maintains the habitat in its condition. Particularly large stands of wet woodland could be identified, without the supporting evidence of specialist woodland birds or invertebrates, consistent with criterion HCr2(d).

6.3.6 HCr5

All significant stands of Willow scrub woodland should be considered for selection. Selection should take into consideration the distribution of this woodland type in the county, size, associated fauna and the characteristic nature of the ground flora. Its place within a mosaic of vegetation types is also an important consideration (WSS 7).

6.4 SCRUB COMMUNITIES

6.4.1 In Essex, scrub communities come in many forms, from strips of suckering elm to dense blocks of Hawthorn and Blackthorn, coastal Shrubby Seablite and Broom communities, and brakes of Gorse within heathland settings. The south of the county has a suite of very characteristic scrub types associated with former plot land housing, in which garden trees, shrubs and herbs form an integral part of the more natural scrub growth that is now overcoming the old gardens.

6.4.2 HCr6

Large areas of scrub shall be considered for selection if they fulfil at least one of the following statements:

- a) large areas of scrub known to support significant breeding populations of scrub-dependent birds or provide significant shelter or foraging habitat for migrant passerines (WSS 6, 8: size, naturalness, typicalness);
- scrub-dependent birds include the following species: Nightingale Luscinia megarhynchos, Whitethroat Sylvia communis, Lesser Whitethroat Sylvia curruca, Grasshopper Warbler Locustella naevia, Dunnock Prunella modularis, Bullfinch Pyrrhula pyrrhula, Blackcap Sylvia atricapilla, and Willow Warbler Phylloscopus trochilus;
- b) scrub that forms part of a mosaic of good quality wildlife habitat in association with at least two other habitats from the following list: woodland, open water, heath, acid grassland, neutral grassland, calcareous grassland, marsh and swamp. The minimum size threshold should consider the relative abundance of semi-natural habitat in the surrounding countryside, and also the species diversity within the scrub block, with smaller blocks being permitted if they are particularly species-rich (WSS 8);
- c) plot land and similar post-industrial/brownfield scrub habitat in which the alien flora contributes positively to the wildlife value of the scrub. Such scrub should typically include grassy rides and glades or form part of a mosaic with at least two other habitats from the following list: woodland, open water, heath, acid grassland, neutral grassland, calcareous grassland, marsh and swamp. (WSS 8: typicalness, diversity); and /or
- d) the scrub is identifiable as a 'priority' community type for the Natural Area in which the site is located (WSS 8). These scrub types are:

- London Basin: elm scrub
- Greater Thames Estuary: Mediterranean-type Shrubby Seablite/Broom scrub.

6.5 ORCHARDS

6.5.1 Orchard cultivation is on the decline in Essex, so that any orchard site still bearing fruit trees is quite likely to be over 50 years old, even if the current stand of trees is not of that age. This Essex and national BAP habitat is associated with a number of notable invertebrate species and is also important for over-wintering birds where wind-fall fruit is left on the ground. Orchards with a species-rich ground flora are even rarer and should be selected as a priority, as they often contain notable plant species.

6.5.2 **HCr7**

Orchards will be considered for selection if they contain large, old trees with good lichen cover and/or include unusual local/traditional varieties of tree and/or support populations of notable species; and/or have a ground flora that would satisfy selection as a grassland site (WSS 7, 5 and 8).

6.5.3 HCr8

Large orchards shall be considered for selection if they regularly support significant breeding populations of any ERDL bird species, or significant overwintering populations of Fieldfares *Turdus pilaris*, Redwings *Turdus iliacus*, Mistle Thrushes *Turdus viscivorus*, or other migratory birds listed in the ERDL (WSS 5, 8: rarity, size).

6.6 ANCIENT AND SPECIES-RICH HEDGEROWS AND GREEN LANES

6.6.1 Despite widespread grubbing-out in previous decades, such features should not be routinely selected since many thousands of kilometres remain, and the existing resource is protected by the Hedgerow Regulations (1997) against further indiscriminate removal. However, ancient hedges and green lanes may be selected if they form important woodland/scrub corridors connecting or closely juxtaposed to other, protected wildlife sites. This provides a means of highlighting the importance of such wildlife corridors. Special consideration shall be given to suckering elm hedges, these being especially characteristic of Essex farmland and allied to elm scrub

communities capable of selection via HCr6(d). Additional protection is also provided to the more significant lanes through the local authority 'Protected Lanes' policy. In this instance, reasons for protection are typically based on historical and landscape criteria, rather than wildlife interest.

6.6.2 **HCr9**

A hedgerow or green lane shall be considered for selection if it fulfils one of the following statements:

- it provides appropriate habitat connectivity or functions as a corridor between two or more Wildlife Sites (WSS 7, 8: position in an ecological unit);
- it provides a significant extent of scrub or mosaic habitat in a part of the county otherwise deficient in such habitat (WSS 8: rarity); and/or
- it constitutes part of the 'ghost' outline of a former ancient wood and retains some of the characteristic flora and/or fauna of an ancient wood (WSS 7, 8).

6.7 GRASSLANDS

- 6.7.1 Old, unimproved and species-rich grasslands (including fen-meadows and rushpastures) are such a scarce resource that there should be a presumption in favour of selecting the majority of such habitats. The Essex Wildlife Site Review Panel documentation recommended using Natural England's Grassland Inventory as a source for 'automatically' selecting sites. This is resisted in these criteria, however, since the qualifying criterion for inclusion within the Inventory is that the site was deemed to be relatively species-rich in 1985/6 when the original survey was undertaken, and it is unclear how the update will identify new sites. Therefore, it is held that all sites must be selected on their current merits, although the Grassland Inventory should clearly be used as a focus for survey work.
- 6.7.2 The role of road verges in conserving albeit small fragments of species-rich grassland within the wider countryside should also be recognised. 'Special Verges' identified by the Special Verges Project will be considered for selection where they meet an appropriate grassland criterion.
- 6.7.3 Old, unimproved grasslands might be identified by the presence of 'indicator' species (see Appendix 4 of the full criteria document) or by documentary, verbal or

geomorphological evidence (e.g. presence of ridge and furrow or a landform indicating the site has not been ploughed). However, even quite recent grasslands can be selected if they support a diverse assemblage of flowering plants (both herbs and grasses), especially if they enhance invertebrate habitat (WSS 6), form part of a mosaic or are the only grasslands present within a significant part of the county.

6.7.4 HCr10

All old, largely unimproved grassland shall be considered for selection. Evidence for antiquity shall be taken from the presence of indicator plants, land-form or documentary records. Where appropriate, reference should also be made to the 'priority' National Vegetation classification (NVC) community type for the Natural Area in which the site is located, as well as size, location within the county, species diversity and fragility (WSS 7, 8).

Table 2 Essex Natural Area 'priority' grassland types

London Basin:
MG4 Alopecurus pratensis – Sanguisorba officinalis grassland
MG5a Cynosurus cristatus – Centaurea nigra grassland Lathyrus pratensis sub-
community
MG5c Cynosurus cristatus – Centaurea nigra grassland Danthonia decumbens
sub-community
East Anglian Plain:
MG4 Alopecurus pratensis – Sanguisorba officinalis grassland
MG5a Cynosurus cristatus – Centaurea nigra grassland Lathyrus pratensis sub-
community
MG5b Cynosurus cristatus – Centaurea nigra grassland Galium verum sub-
community
MG5c Cynosurus cristatus – Centaurea nigra grassland Danthonia decumbens
sub-community
MG8 Cynosurus cristatus – Caltha palustris grassland

Some grassland found in the county is not adequately described in the NVC.

Examples of those not adequately described include Meadow Barley *Hordeum secalinum* dominated stands, species-rich coastal grasslands with abundant Common Couch *Elytrigia repens*, and stands associated with Thames Terrace gravels.

6.7.5 **HCr11**

Old, unimproved or semi-improved pastures or meadows that do not clearly fit criterion HCr10 shall be considered for selection if they support a rich flora or a significant population of a notable species (WSS 5, 7, 8: rarity, fragility).

6.7.6 HCr12

Semi-improved or improved grasslands shall be considered for selection if they significantly increase the key habitat for a site selected on species grounds, such that the grassland is deemed to be part of the essential foraging habitat of that species (WSS 6).

6.7.7 HCr13

Floristically less interesting pieces of grassland shall be considered for selection if they form an integral part of a semi-natural habitat mosaic; specifically the grassland occurs in association with at least two of the following habitats: woodland, scrub, open water, heath, other grassland types, reedbed, tall herb fen, swamp and/or vegetation described in section 5.10 'post industrial sites with high nature conservation value'. The minimum size threshold for the mosaic should reflect the relative abundance of semi-natural habitat in the surrounding countryside (WSS 7, 8).

- 6.7.8 Special consideration should be given to large tracts of river flood-plain grassland, especially those still subjected to seasonal inundation. Even where the sward has been significantly improved, so that the flora has no particular merit, the environmental conditions created can be of significance for invertebrate populations and some over-wintering waders (e.g. Snipe *Gallinago gallinago*, Curlew *Numenius arquata*, and plovers *Pluvialis* spp.). Because of their risk of flooding, many such remaining tracts of flood-plain grassland can be considered to be old, even though they may have lost their characteristic flora. Such areas have often been under a grazing regime for long periods, and often support important invertebrate assemblages associated with animal dung. Continuity of grassland cover is also important for numerous other invertebrate species.
- 6.7.9 Such areas of flood-plain grassland can act as a buffer for the associated river. For example, reducing the impact of nutrient run-off compared to a river with arable cropping being practised right up to the top of the bank. Large tracts of semi-natural

vegetation along river valleys can also function as a wildlife corridor, assisting in the dispersal of fauna through the open countryside.

6.7.10 There can be justification in considering some riverside willow plantations within this broad category, where the wildlife interest is associated with the tall herb vegetation rather than the 'woodland' cover. In these situations, there is likely to be some cross-over with the swamp and tall-herb fen communities considered in section 6.12.

6.7.11**HCr14**

Significant areas of river flood-plain grassland should be considered for selection, especially those areas still subject to seasonal inundation. The role of such grasslands as wildlife corridors should also be considered (WSS6, 7, 8).

6.7.12 The extreme rarity of chalk grassland in Essex suggests that all sites supporting assemblages of chalk grassland species (see Appendix 5) should be considered for selection.

6.7.13 HCr15

All areas of grassland supporting assemblages of species included in Appendix 5 should be considered for selection (WSS 7, 8: rarity, fragility).

6.7.14 Acid grasslands are treated within section 6.9 'heathland'.

6.8 COASTAL GRAZING MARSH

6.8.1 There is some justification in assuming that all sites retaining characteristic field patterns and drainage systems which still have ecological links to the adjacent estuarine habitats should be considered for selection. This may be provided, for example, through movements of wildfowl and waders or tidal flow of brackish water over part of the site. Many such sites are of importance because of their size, wetness or remoteness from disturbance and are of particular importance for overwintering wildfowl and waders, as well as breeding species during the summer. As such, floristic diversity is not necessarily a key quality. Many important sites for brent geese Branta bernicla are improved grassland swards, with the key qualities being sward height, size of field, proximity of the open estuary and freedom from

disturbance. That said, many such sites will support characteristic assemblages of grazing marsh plants and animals and these may be worthy of conservation in their own right, even if use by wildfowl and waders is less significant due to disturbance, small size of site or inappropriate management. The Essex Red Data List includes many brackish water invertebrates for which coastal grazing marshes are an important habitat.

6.8.2 HCr16

All fragments of former coastal grazing marsh shall be considered for selection. Consideration should be given to size, diversity, the presence of anthills, low-ways and periodically inundated creeks, notable species and the degree of isolation from the associated estuary. The presence of a characteristic flora is desirable but is not essential, especially where the main focus of importance is over-wintering wildfowl and waders (WSS 7, 8).

6.8.3 HCr17

All sites exhibiting an unrestricted upper saltmarsh to grassland transition should be considered for selection (WSS 7, 8: naturalness, rarity).

6.9 <u>HEATHLAND</u>

- 6.9.1 Such is the scarcity of this habitat type in Essex, it is felt that all land supporting stands of heathland vegetation should be selected, however sparse the cover of ericaceous plants and however small the site. Furthermore, this habitat encompasses acid grassland, even if no ericaceous shrubs are present, as well as the very limited extent of sphagnum bogs remaining in the county. The basis for identifying blocks of heathland should be the Lowland Heathland Inventory although it should be emphasised that small fragments, still worthy of inclusion, may have been overlooked in the Inventory.
- 6.9.2 Sites should still be included even if they have succumbed to scrub or secondary woodland invasion if it is considered that the heathland could be restored with appropriate management and a characteristic ground flora still persists (WSS 8: potential value).

6.9.3 HCr18

EECOS, December 2008

All heathland sites listed on the Natural England Lowland Heathland Inventory for Essex should be considered for selection (WSS 7).

6.9.4 **HCr19**

Any other site supporting characteristic heathland or acid grassland species and with the potential for restoration shall be considered for selection (WSS 7, 8).

6.10 POST INDUSTRIAL SITES WITH HIGH NATURE CONSERVATION VALUE

- 6.10.1 This habitat, often referred to as 'brownfield', embraces a variety of derelict land, old mineral workings, post-industrial sites, silt lagoons, fly-ash dumps and other places largely created by human activity. They can be of significant importance for individual species of flora and fauna as well as assemblages of species. As a result, in many situations, one could argue for the selection of any given site through Species Selection Criteria, with several notable species favouring such sites. However, there is a certain suite of habitat conditions that are favourable to the support of biodiversity in general on these sites.
- 6.10.2 Post-industrial habitats of high nature conservation value may be characterised as unmanaged flower-rich grasslands with sparsely-vegetated areas developed on infertile substrates. Typically they comprise mosaics of the following habitats: areas of bare ground; early pioneer communities; longer established open grasslands; scrub; together with patches of other habitats such as heathland, swamp, ephemeral pools and inundation grassland. The vegetation can have similarities to early/pioneer communities (particularly grasslands) on more 'natural' substrates but, due to the severity of the edaphic conditions, the habitat can often persist for decades without active management (intervention).
- 6.10.3 Also included within this description are significant areas for wildlife developed from, or forming part of, the built environment. In particular those associated with derelict or ruined historic structures such as castles, walls, burial mounds and more recent military fortifications.
- 6.10.4 The main factors to consider when assessing brownfield/post-industrial sites or derelict buildings or structures for selection include:
 - rich and/or large examples of habitat(s) typical of the substrate/edaphic conditions, which demonstrate the characteristic mosaic of bare ground, pioneer communities, flower-rich grassland and other habitat patches;
 - presence of significant populations of notable species;
 - sites which have retained areas of bare ground and pioneer communities over an extended period, demonstrating arrested succession;
 - sites which are the last remaining examples in former industrial or urban areas where the habitat was formerly widespread or extensive;

- sites with a high scientific interest because of historical records or the nature of particular substrates or properties that may be especially rare; and/or
- the presence of an area of open water or the potential to become flooded, especially seasonally wet and saline areas.

6.10.5 HCr20

Brownfield/post-industrial sites or derelict buildings/structures of high nature conservation value will be considered for selection if they are known to support notable species or where it can be demonstrated they provide the habitat qualities necessary to support such species. The site may include sections of land that might not otherwise qualify for selection, if they provide one or more of the ecological requirements of the notable species (WSS 6, 7, 8).

6.11 <u>REEDBEDS</u>

6.11.1 All significant stands of more or less pure reed growth are included within this UK and Essex BAP habitat. Use by reed-specialist birds (e.g. Reed Warbler *Acrocephalus scirpaceus* and Sedge Warbler *A. schoenobaenus*, Cetti's Warbler *Cettia cetti* and Bearded Tit *Panurus biarmicus*) is desirable but not essential since the habitat is also important for a number of specialist invertebrates, notably some moths and solitary bees. Other swamp communities are discussed separately.

6.11.2 HCr21

All significant stands of reed Phragmites australis will be considered for selection (WSS 7), either in their own right or as part of a larger mosaic of habitats. Selection should take into account overall size, the shape of the bed (with wider stands more desirable), and also the degree of human disturbance.

6.11.3 HCr22

Smaller or narrower stands of reedbed shall be considered if they form part of a mosaic of other habitats, including open water, wet woodland, marsh and other swamp communities (WSS 8).

6.12 SWAMP AND TALL-HERB FEN

- 6.12.1 In Essex, most areas of tall-herb fen and swamp communities occur along the edges of rivers, ponds, lakes and other water bodies, rather than as extensive stands in their own right. Such marginal vegetation is likely to be included within any open water or mosaic Local Wildlife Site. Any extensive area of swamp vegetation or tall-herb fen is likely to be a scarce habitat, dependent upon a narrow range of environmental conditions to develop, and often supporting uncommon species. For some swamp types e.g. Sea Club-rush *Bolboschoenus maritimus*, Reedmace *Typha latifolia*, the vegetation is characteristically species-poor, but provide important habitat for many species of bird, mammal and/or invertebrate. In some of these situations, selection may be more appropriately dealt with via the 'Species Selection Criteria'.
- 6.12.2 Riverside willow plantations can develop a form of wet grassland mosaic with tallherb fen and sedge beds that may be considered under this category.

6.12.3 HCr23

Significant areas of species-rich swamp or tall-herb fen, or such habitat known to support notable species should be considered for selection. Usually such sites will include the associated water body or source of groundwater, if applicable.

6.13 FRESHWATER HABITATS

6.13.1 The complexities of characterising aquatic vegetation make the identification of sections of river, canal, borrow dyke or individual lakes and ponds on habitat grounds less precise than for terrestrial habitats. This section establishes a framework for site selection, but it is recommended that bodies of water, including obviously man-made structures such as farm reservoirs and flood storage areas, should mainly be designated via Species Selection Criteria aimed particularly at protecting the following important aquatic features:

- fish stocks, e.g. Allis Shad *Alosa alosa* and Twaite Shad *A. fallax*, Bullhead *Cottus gobio*, Barbel *Barbus barbus*, Brook Lamprey *Lampetra planeri*;
- invertebrates, e.g. White-clawed Crayfish Austropotamobius pallipes, Whitelegged Damselfly Platycnemis pennipes, and Beautiful Demoiselle Calopteryx virgo;
- flora, e.g. diverse assemblages of pond-weeds *Potamogeton* spp. or crowfoots *Ranunculus* spp.; and/or
- other notable species.

6.13.2 HCr24

Where a section of river, stream, canal or borrow dyke is designated via Species Selection Criteria, a minimum 500 metre section of that water course shall be designated (250 metres upstream and downstream of a positive sample site) or 250 metres upstream and downstream of the end points of a cluster of records from the same population (WSS6). The Wildlife Site shall be deemed to extend at least 2 metres away from the top of the bank into the adjacent habitat.

6.13.3 HCr25

Where two designated sections of watercourse are separated by no more than 1000 metres of undesignated water, the intervening section may be included within one large site, if it is deemed that the central section has the potential to be restored to good condition or realistically colonised by the species concerned (WSS 6, 8: potential value).

6.13.4 **HCr26**

Where sections of lakes or ponds hold species or vegetation stands of interest, the whole water body shall be designated (WSS 6, 8).

6.13.5 HCr27

Sections of river that support a suite of natural features, leading to a complex riverine habitat structure should be considered for selection. Such features should include a good diversity of emergent vegetation: floating aquatic plants; shallow 'riffles' and deeper pools; natural, rather than hard, engineered banks; and a more or less meandering, rather than canalised, course (WSS 8: naturalness, rarity, size, diversity, fragility).

6.14 SALINE LAGOONS

6.14.1 Within the broader definition of this habitat used in the Essex and UK BAP, all tidal or semi-tidal brackish or saline lagoons and inundated borrow dykes will be considered for selection. Close proximity to other coastal habitats of nature conservation value is also desirable.

6.14.2 HCr28

Sections of borrow dyke and tidal or semi-tidal brackish or saline lagoons should be considered for selection. Such sites should have some ecological link with adjacent coastal habitats (WSS 7, 8).

6.15 SAND DUNE AND SHINGLE

6.15.1 These habitat types are scarce in Essex and largely protected within the SSSI system. However, they are such fragile, rare and, typically, diverse habitats that there should be a presumption in favour of selecting all remaining fragments. Due to the scarcity of this habitat, most of the characteristic plants are on the Essex Red Data List.

6.15.2 HCr29

All areas of sand dune and shingle habitat exhibiting a characteristic land form and flora should be considered for selection (WSS 8).

6.16 OTHER HABITAT CRITERIA

- 6.16.1 The following Essex BAP habitats are not included within specific criteria, although in many cases the system allows for their characteristic species to support site selection through 'Species Selection criteria'.
- 6.16.2 **Cereal Field Margins** are only likely to be selected if part of a whole-farm conservation network and shown to be supporting populations of associated notable species.
- 6.16.3 **Coastal saltmarsh and eelgrass beds**: Wildlife Site status is usually restricted in Essex to terrestrial and freshwater habitats rather than inter-tidal habitats. Most, if

not all, eelgrass *Zostera* spp. beds off the Essex coast are already covered by SSSI protection as well as international designations.

- 6.16.4 **Urban Habitats**: the BAP for this category is very broad, encompassing old countryside features encapsulated in towns by urban sprawl, newly 'designed' green areas within urban development, and also brownfield and post-industrial sites. The most important urban habitat types are dealt with in section 6.10.
- 6.16.5 Two final habitat criterion, which should be considered with caution, address separate issues relating to site selection, which may arise from time to time and cannot be adequately resolved via the 'conventional' habitat or species criteria. The first deals with a site which suffers several 'near misses' against a number of other habitat or species criteria. For example, it might have an interesting suite of invertebrates but without any notable species being present, plus a good but not exceptional flora, or it appears to function as a wildlife corridor between two important sites. In these situations, there is some justification in including special cases within the selection process, although over-reliance on this criterion is not recommended.

6.16.6 HCr30

A site that comes close to qualifying on a number of other selection criteria can be considered for selection based upon its overall nature conservation interest. The case for selection must be supported by suitably qualified experts in those species and/or habitats involved (WSS 8).

6.16.7 The second although not strictly a habitat criterion, plays a similar 'supportive' role by providing a means to select a site which just fails to meet other habitat or species criteria, but which provides important opportunities for amenity or education consistent with the 2006 Defra guidance.

6.16.8 HCr31

A site that comes close to qualifying on a number of other selection criteria can be considered for selection based upon its amenity and/or education value. The case for selection must be supported by suitably qualified experts in the appropriate field of interest (WSS 10).

7. SPECIES SELECTION CRITERIA

7.1 PREAMBLE

- 7.1.1 Wildlife Site Statement 5 sets the scene for this section, in presuming that at least one viable population of all notable species known from Essex will be included within the Local Wildlife Site network, especially if not already protected within the SSSI series. The following criteria are included as a more detailed means of delivering that Statement. Under this category one can consider two sub-groups: Local Wildlife Sites identified for a single species and others identified to protect an assemblage of species. It is assumed that 'assemblages of important plant species' will have been covered by a Habitat Selection Criterion, so that one is left with individual plant species and both individual and assemblages of fauna of nature conservation interest.
- 7.1.2 In all cases selection should be subject to the condition that the site boundary encompasses a significant area of known habitat requirements. For example, nesting sites and food/prey foraging conditions are present in viable quantities. Thus, for a species such as the national BAP bumblebee *Bombus sylvarum* it would not be sufficient just to find a specimen on a site. There would need to be viable flower-rich areas comprising species such as Bird's-foot-trefoil *Lotus corniculatus*, Red Bartsia *Odontites vernus* and clovers *Trifolium* spp. plus likely nesting habitat (e.g. relatively unmanaged tall open warm grasslands) and over-wintering habitat (e.g. rough grassland). Furthermore, not all sites with singing Nightingales should be selected, but sites where breeding of several pairs is proven to be taking place might be selected.
- 7.1.3 Previous deliberations of the Essex Wildlife Sites Review Panel suggested that a scoring system should be developed to help select which species assemblages should be proposed as Local Wildlife Sites. This scoring system does not yet exist and so a more subjective and yet still defendable selection process is used here in the interim. Wildlife Site Statement 5 states that only significant populations of notable species should be considered for protection. There is therefore a need to have a selection process to determine what constitutes a 'significant population' for a given species or assemblage of species.

7.1.4 The following selection criteria are designed to identify sites where selection may be considered but eventual notification as a Local Wildlife Site will depend on further considerations. These include the viability of the habitat available to support the species or the potential to bring surrounding land into a favourable condition (in which case that land should be included within the Local Wildlife Site). It will also be necessary to consider whether or not a potentially stable breeding colony may exist (rather than just the transient occurrence of the species on a site), as well as the context of the population within its known range, both nationally and in the county.

7.2 AMPHIBIANS AND REPTILES

7.2.1 There are five native amphibians in Essex: Common Frog *Rana temporaria*, Common Toad *Bufo bufo*, Palmate Newt *Triturus helveticus*, Smooth Newt *T. vulgaris* and Great Crested Newt *T. cristatus*. The latter is a UK and Essex BAP species and fully protected under UK and European law (see Appendix 2 for more details about wildlife law). Some county selection criteria propose the selection of all breeding sites for Great Crested Newt, but this is felt to be an unworkable criterion in Essex on account of the number of Great Crested Newt ponds likely to occur in the county. The criterion adopted here is broader in scope, but it is recommended that local authorities support the maintenance of a separate 'alert map' of all Great Crested Newt ponds, so as to draw attention to the legal safeguards afforded to this species when planning or land use changes threaten ponds or associated habitats.

7.2.2 SCr1

Significant breeding populations of Great Crested Newts shall be considered for selection. Such sites should have a suitable flora for egg-laying and nursery areas, and should include a core area of terrestrial habitat used outside the breeding season. Consideration shall be given to the proximity or otherwise of adjacent populations (WSS 6, 7).

7.2.3 Palmate Newts would appear to be the scarcest herptile in Essex and are therefore worthy of more specific protection.

7.2.4 SCr2

Any site (other than a garden pond) known to support a breeding population of palmate newts shall be considered for selection. Such sites should have a

suitable flora for egg-laying and nursery areas and should include a core area of terrestrial habitat used outside the breeding season (WSS 5, 6, 12).

7.2.5 There is also a value in protecting general amphibian diversity.

7.2.6 **SCr3**

Any site (other than a garden pond) with three or more species of breeding amphibian shall be considered for selection. Such sites should have a suitable flora for egg-laying and nursery areas, and should include a core area of terrestrial habitat used outside the breeding season (WSS 5, 6, 12).

7.2.7 There are four species of reptile in Essex: Adder *Vipera berus*, Grass Snake *Natrix natrix*, Common (or Viviparous) Lizard *Lacerta vivipera* and Slow-worm *Anguis fragilis*.

7.2.8 **SCr4**

Any site supporting significant populations of three or more reptile species shall be considered for selection. Such sites should include sufficient terrestrial (and in the case of grass snake also aquatic) habitat to maintain viable populations of the species (WSS 5, 6).

7.2.9 There is also a need to consider a more general contribution to overall herptile biodiversity.

7.2.10 SCr5

The presence of two species of reptile and/or amphibian species can be used to further the case for selection in the instance of marginal sites that might not otherwise have been selected, under other criteria. Such sites should include sufficient terrestrial (and in the case of grass snake also aquatic) habitat to maintain viable populations of the species (WSS 5, 6).

7.3 <u>MAMMALS - BATS</u>

7.3.1 Bats are protected under UK and European Wildlife law, which makes it an offence to disturb roost sites. However, there is additional value in having a criterion to identify and protect hibernation sites.

7.3.2 **SCr6**

EECOS, December 2008

All colonial hibernation sites for any bats species in Essex (other than an occupied residential property) shall be considered for selection as a Local Wildlife Site (WSS 5, 7).

7.4 DORMOUSE

7.4.1 This is a national and Essex BAP species and one that is very scarce in Essex.

7.4.2 SCr7

All sites known to support breeding populations of Dormouse should be considered for selection. All woodland immediately contiguous with the known site should also be included if it supports habitat conditions thought to be suitable for dormice (WSS 5, 6, 7).

7.4.3 SCr8

All woodland with suitable habitat conditions connected by suitable area of habitat (e.g. one or more hedgerows) to a known Dormouse population should be considered for selection, as should the connecting corridors (WSS 5, 6, 7).

7.5 <u>OTTER</u>

7.5.1 Otters are fully protected under UK and European wildlife law. In recent years they have spread across much of Essex as a result of naturally extending populations and from released captive-bred stock. A number of artificial Otter holts have been constructed in order to encourage them to settle. Whilst they range over sections of river that are too long to accurately identify, their holts are worthy of protection.

7.5.2 **SCr9**

Any Otter holt, natural or artificial, known to have been occupied within the last 5 years, plus the sections of river 200 metres either side of that holt, and all semi-natural vegetation 20 metres behind that length of river bank shall be considered for selection (WSS 5, 7).

7.6 WATER VOLE

7.6.1 This is a national and Essex BAP species and appears to be scarce in Essex. The most robust populations are now confined to the coastal grazing marshes with the species declining or lost in most Essex river systems primarily due to predation by

North American Mink *Mustela vison*. In some urban watercourses, rats can be a significant threat to Water Vole colonies. Habitat loss through drought, pollution, and damage to burrow systems during water course management or development are also possible causes of local extinctions.

7.6.2 SCr10

Any watercourse or wetland system containing breeding populations of Water Vole should be considered for selection. Watercourses or wetland systems with sub-optimal habitat, that link otherwise fragmented populations, should also be considered if suitable habitat enhancement could be expected to result in the integration of those populations.

7.7 <u>BIRDS</u>

- 7.7.1 The basis for the conservation of bird species in Essex is taken to be the Essex Red Data List, which is largely based on the UK Red and Amber alert lists (produced by the British Trust for Ornithology), plus more detailed local knowledge from the Essex Birdwatching Society. Many species included in the ERDL are in need of conservation management and protection based upon changing agricultural and land management practices across the wider countryside, rather than the protection of small, specific sites. Thus, whilst the Yellowhammer *Emberiza citronella* is a farmland bird in decline, it would be unfeasible to identify all hedgerows and scrub blocks where it breeds. However, Little Tern colonies, Hawfinch *Coccothraustus coccothraustus* woodlands and heronries are more discrete units and should be considered for selection.
- 7.7.2 In addition to notable species, there are likely to be some sites that warrant selection as a result of the regular presence of significant breeding or over-wintering populations of relatively commonplace species, such as Jackdaw *Corvus monedula* or Curlew. In these situations, selection should be informed by advice from the Essex Birdwatching Society.

7.7.3 SCr11

Where significant breeding or over-wintering habitat of notable bird species can be reasonably identified as discrete areas, then they shall be considered for selection.

7.7.4 **SCr12**

Other sites shall be considered for selection where it can be demonstrated that they regularly support significant breeding or over-wintering populations of non-notable bird species.

7.8 INVERTEBRATES

- 7.8.1 The Invertebrate Site Register (ISR) for Essex is largely out of date and not exhaustive in its identification of important invertebrate habitat. As a result, it should be used only as a focus for further research into invertebrate populations. The first step in most cases will be to determine whether or not the species listed within the Register are still present.
- 7.8.2 A more suitable basis for selection of sites with significant invertebrate interest is the various scoring systems for invertebrate populations that have been developed (see Appendix 6). In particular, the Species Quality Index (SQI) is recognised nationally as a rational methodology for identifying important assemblages of invertebrates.

7.8.3 SCr13

A site known or suspected to support a breeding assemblage of invertebrates with a Species Quality Index of at least 5 will be considered for selection (minimum sample of 60 species, 8 hours of field work) (WSS 8: Diversity, Rarity).

7.8.4 Notwithstanding this, some species will be of such national rarity or local significance that they alone might qualify the site for selection:

7.8.5 SCr14

Significant populations of notable invertebrates or noteworthy assemblages of distinct taxa (e.g. dragonflies, butterflies) should be considered for selection. The interpretation of significance should take into account both the core populations at the centre of the species range and also stable populations on the periphery, especially where colony expansion or colonisation of nearby habitat is likely (WSS 5).

7.9 PLANTS

7.9.1 For the sake of simplicity, this category includes flowering plants, bryophytes, lichens and fungi.

7.9.2 SCr15

Significant populations of notable vascular plants, bryophytes, lichens and/or fungi should be considered for selection. Where there is ambiguity, guidance will be sought from the relevant county expert to help determine what represents a significant population for a particular species (WSS 5).

<u>APPPENDIX 2</u> <u>SUMMARY TABLE OF LOCAL WILDLIFE SITES</u>

Code	Site Name	Area (ha)	Grid Ref.
Co1	Florie's Hedgerows	1.4 ha	TL 860260
Co2	Buckler's Farm Wood	2.9 ha	TL 868251
Co3	New Wood	11.4 ha	TL 873163
Co4	Hill Wood	1.8 ha	TL 882167
Co5	Perry's Wood	3.6 ha	TL 883171
Co6	Inworth Wood	3.0 ha	TL 883179
Co7	Tiptree Waterworks	0.9 ha	TL 884167
Co8	Woolfney Wood	0.6 ha	TL 885268
Co9	Alder Car, White Colne	0.7 ha	TL 884293
Co10	Inworth Grange Pits	22.5 ha	TL 885159
Co11	Hickmore Fen	5.7 ha	TL 885277
Co12	Wakes Colne Meadow	1.3 ha	TL 889281
Co13	Eden Wood	2.7 ha	TL 891179
Co14	Little Tey Churchyard	0.3 ha	TL 892236
Co15	Acorn Wood	6.7 ha	TL 895293
Co16	St Luke's Church, Tiptree	0.4 ha	TL 895 160
Co17	Chappel Ponds and Millennium Green	8.1 ha	TL 897282
Co18	Cambridge Brook Marsh	3.7 ha	TL 897318
Co19	Pods and Conyfield Woods	61.2 ha	TL 902 177
Co20	Domsey Brook Pasture	1.6 ha	TL 902206
Co21	Birch Wood, Tiptree	4.9 ha	TL 903158
Co22	Hoe Wood	9.2 ha	TL 904264
Co23	Chappel Meadow	1.4 ha	TL 904287
Co24	Mount Bures churchyard	0.3 ha	TL 904325
Co25	Ransome's Grove	2.3 ha	TL 905168
Co26	Fan Wood	8.7 ha	TL905201
Co27	Stonefield Strip	6.7 ha	TL 905245
Co28	Sergeant's Orchard	3.1 ha	TL 909308
Co29	Long/Round Grove	2.3 ha	TL 909 206
Co30	Church House Wood	3.5 ha	TL 908250
Co31	Marks Tey Brick Pit	9.0 ha	TL 910244
Co32	Cadgers Complex	13.2 ha	TL 912160
Co33	Layer Wood and Grassreasons	53.9 ha	TL 914180
Co34	Blind Lane Road Verge	0.1 ha	TL 919191
Co35	Aldhamhall Wood	2.3 ha	TL 921253
Co36	Smythe's Green	1.0 ha	TL 921186
Co37	Long Wood	29.6 ha	TL 924158
Co38	Seller and Potash Woods and Lane	7.9 ha	TL 926213
Co39	Wormingford Mere	5.7 ha	TL 926328
Co40	Fordham Churchyard	0.5 ha	TL 927281
Co41	Lodge Hills	9.7 ha	TL 927325
Co42	Rectory Wood	1.5 ha	TL 929293
Co43	Fiddlers Wood	11.0 ha	TL 929267
Co44	Pits Wood	5.0 ha	TL 931234
Co45	Fordham Bridge Meadow	5.9 ha	TL 930272
Co46	Aldercar, Copford	3.4 ha	TL 931223
Co47	Daisy Green Grove	0.7 ha	TL 932258
Co48	Wormingford Churchyard	0.5 ha	TL 933323
Co49	Copfordhall Wood North	0.7 ha	TL 933235
Co50	Copford Hall Wood	3.4 ha	TL 934230
Co51	Keeper's Cottage Wood	1.3 ha	TL 935238

Co52	Old Vicarage Grove, Wormingford	0.7 ha	TL 936325
Co53	Beckingham Hall Road Verge	0.1 ha	TL 93622280
Co54	Lower Road, Birch Verges	0.3 ha	TL938201
Co55	Seven Star Green	0.8 ha	TL 939258
Co56	Aldercar, Wormingford	3.1 ha	TL 939320
Co57	Layer Breton Heath	11.6	TL 945187
Co58	Gol Grove/Hanging Wood	18.7 ha	TL 943222
Co59	Tye Grove	1.9 ha	TL 943234
Co60	Fordham Heath	10.7 ha	TL 945264
Co61	Wood near Fordham Place	0.8 ha	TL 944289
Co62	Stanway Pits	49.2 ha	TL 946239
Co63	Hillhouse Wood	15.4 ha	TL 945280
Co64	Calves Pasture	5.5 ha	TL 949198
Co65	West Bergholt Wet Woodlands	4.5 ha	TL 948286
C066	Birch Valley	9.0 ha	TL 947201
Co67	Warren Lane Pit	31.3 ha	TL 954228
Co68	Iron Latch Lane Woods and Meadow	23.9 ha	TL 956260
C069	Spring Wood	23.9 ha	TL 950200 TL 952275
Co70	Stitching Wood	6.7 ha	TL 952284
Co70 Co71	Grove Wood	3.5 ha	TL 952275
Co72	West Bergholt Hall Church	0.4 ha	TL 952275 TL 953281
	Billets Woods		
Co73		13.1 ha	TL 953202
Co74	Cooks Wood	13.2 ha	TL 956206
Co75	Ram Plantation	25.3 ha	TL 955214
Co76	Oliver's Thicks /Butcher's Wood	8.9 ha	TL 959218
Co77	West Bergholt Heath	1.1 ha	TL 961278
Co78	Gryme's Dyke	7.1 ha	TL 960233
Co79	West Bergholt Church	0.5 ha	TL 961278
Co80	Creak's Grove	4.4 ha	TL 962328
Co81	Slough Grove	3.9 ha	TL 964313
Co82	Cook's Lane, Lexden	7.5 ha	TL 965253
Co83	Pitchbury Wood	18.2ha	TL 966293
Co84	Abbotts Hall Marshes	41.7 ha	TL 965137
Co85	Chest Wood and Roman River Complex	55.6 ha	TL 967208
Co86	Olivers Woods	5.5 ha	TL 968213
Co87	Spring Grove	6.3 ha	TL 970267
Co88	Great Horkesley Churchyard	0.6 ha	TL 974322
Co89	Sodoms Wood	4.9 ha	TL 972219
Co90	Lexden Park	9.5 ha	TL 972248
Co91	Lexden Springs LNR	2.0 ha	TL 972253
Co92	West House Wood	3.2 ha	TL 975270
Co93	Malting Green	1.3 ha	TL 976200
Co94	Roman River Willow/Aldercar	1.3 ha	TL 978208
Co96	King's Ford Grove	11.2 ha	TL 977212
Co97	Irvine Road Orchard	0.8 ha	TL 980243
Co98	Mill Grove	3.2 ha	TL 982205
Co99	Copthall Grove	6.4 ha	TL 983154
Co100	Bounstead Bridge West	1.5 ha	TL 983206
Co100	Hilly Fields	43.9 ha	TL 984254
Co101 Co102	Bounstead Bridge	1.4 ha	TL 985204
Co102 Co103	Bounstead Strip	0.1 ha	TL 986207
Co103 Co104	-	46.7 ha	TL 983258
Co104 Co105	Cymbeline Meadows Harrow Wood	40.7 ha 1.7 ha	
		3.5 ha	TL 986307
Co106	Friday Wood North		TL 989214
Co107	Little Wood	6.6 ha	TL 989332
Co108	Layer Brook Pasture	15.2 ha	TL 992201

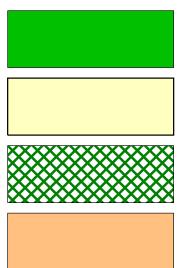
Co109	Colchester Roman Walls	0.5 ha	TL 997253
Co110	Berechurch Grassland	4.0 ha	TL 993211
Co111	Boxtedhall Great Wood	13.5 ha	TL 996339
Co112	Boxtedhall Wood Marsh	11.5 ha	TL 998341
Co113	Colchester Cemetery	21.4 ha	TM 000234
Co114	Bull Meadow LNR	1.4 ha	TM 002259
Co115	Langham Road Grassland	2.9 ha	TM 001296
Co115	High Woods	145.0 ha	TM 001290
	Manwood Chase	57.4 ha	
Co117			TM 004002
Co118	Cowdray Marsh	2.2 ha	TM 006259
Co119	Pete Tye Common	17.8 ha	TM 006180
Co120	Ball Grove	10.3 ha	TM 006209
Co121	Bourne Valley	9.5 ha	TM 008238
Co122	Middlewick Ranges	70.1 ha	TM 009228
Co123	East Wood	5.2 ha	TM 010274
Co124	Cophedge Wood	8.0 ha	TM 010337
Co125	The Moors	8.1 ha	TM 011250
Co126	Haye Grove/Manwood Oaks	2.1 ha	TM 011201
Co127	Donyland Woods West	2.0 ha	TM 011208
Co128	Birch Brook Wood	30.3 ha	TM 010222
Co120	Ash Wood	6.7 ha	TM 010222 TM 011335
Co12) Co130	Strood Marsh	6.8 ha	TM 011555 TM 013153
Co131	Langenhoe Lodge churchyard	0.2 ha	TL 013174
Co132	Magdalen Wood	1.3 ha	TM 015272
Co133	Kiln Wood	9.2 ha	TM 017295
Co134	Langham Water works	12.0 ha	TM 016343
Co135	Donyland Wetlands	9.5 ha	TM 019223
Co136	Black Brook	51.3 ha	TM 020323
Co137	Hythe Brownfield	17.5 ha	TM 019232
Co138	St. Andrew's Churchyard, Greenstead	0.7 ha	TM 019249
Co139	Roman River East	49.7 ha	TM 021204
Co140	University Marshes	26.0 ha	TM 023237
Co141	Fingringhoe Ranges	114.0 ha	TM 029203
Co142	Hythe Lagoons	15.1 ha	TM 025229
Co143	Welsh Wood	3.7 ha	TM 026265
Co144	Rowhedge Pits	28.2 ha	TM 026213
Co145	Langham Verges	0.05 ha	TM 020213 TM 02793345
Co145	Salary Brook	20.5 ha	TM 028250
	•	0.3 ha	
Co147	Fingringhoe Churchyard		TM 029203
Co148	Wivenhoe Park	38.1 ha	TM 030240
Co149	West Mersea Foreshore	5.9 ha	TM 020123
Co150	Home Wood	7.8 ha	TM 031247
Co151	Birch Wood, Langham	9.3 ha	TM 031306
Co152	Thousand Acres	2.6 ha	TM 035253
Co153	St Mary's Churchyard, Langham Hall	0.4 ha	TM 034337
Co154	Wivenhoe Wood	11.4 ha	TM 035222
Co155	Gun Hill Grassland	0.7 ha	TM 038333
Co156	Gun Hill Place	9.2 ha	TM 039331
Co157	The Coombs	2.2 ha	TM 039335
Co158	Barrage Marsh	3.6 ha	TM 040211
Co159	Brickhouse Farm Pits	51.9ha	TM 041205
Co160	Reeveshall Reedbed	11.3 ha	TM 044160
Co161	Wivenhoe Cross Pit	6.3 ha	TM 046230
Co162	Dalethorpe Park	6.6 ha	TM 046230
Co162 Co163	Bridges Farm	16.4 ha	TM 040332 TM 053334
Co164	Manwood Grove	1.0 ha	TM 056148

Co165	Dedham Churchyard	0.8 ha	TM 057330
Co166	Fen Farm Saltmarsh	1.1 ha	TM 061141
Co167	Dedham Old River Marshes	42.6 ha	TM 067329
Co168	Cudmore Grove Country Park	8.7 ha	TM 067147

APPPENDIX 3

REGISTER OF COLCHESTER BOROUGH LOCAL WILDLIFE SITES

Key to LoWS Register Maps

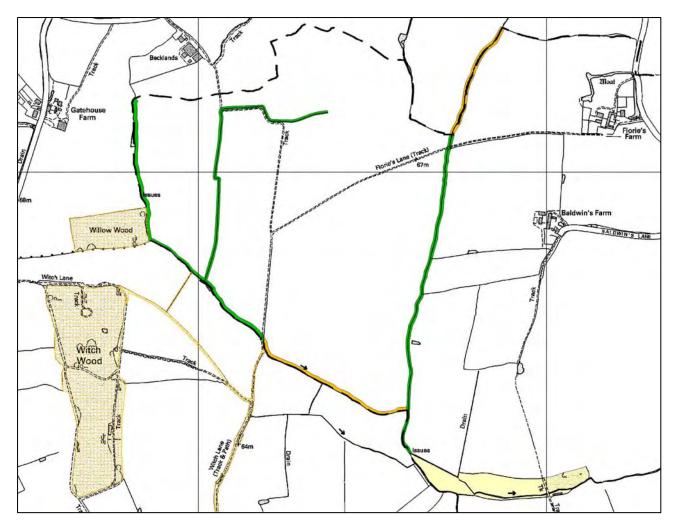


Highlighted LoWS

Background LoWS

Potential LoWS

SSSI



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Co1 Florie's Hedgerows (1.4 ha) TL 860260

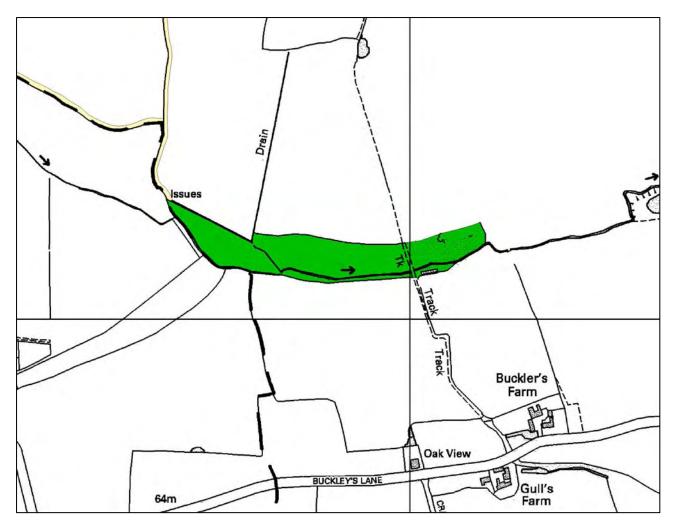
This site comprises the boundary bank "ghost" outline of the grubbed Florie's Wood and adjoining ancient hedgerow. Parts of this Site lie in Braintree District (highlighted in dark yellow). This series of hedgerows is linked to others that lie within Braintree District (pale yellow) and forms an extensive network of species-rich ancient hedgerow, not commonly seen in the modern Essex landscape.

A particularly wide variety of woody species is present as trees grown from coppice, standards and shrubs, including Wild Service-tree (*Sorbus torminalis*), Small-leaved Lime (*Tilia cordata*), Hornbeam (*Carpinus betulus*), Wild Cherry (*Prunus avium*), Midland Hawthorn (*Crataegus laevigata*), Hazel (*Corylus avellana*) and Spindle (*Euonymus europaeus*). The bank flora includes Moschatel (*Adoxa moschatellina*) and Primrose (*Primula vulgaris*).

Selection criteria: HCr9

BAP Priority Habitats: Hedgerows (UK/Essex)

Date of selection: 1991 (in part)



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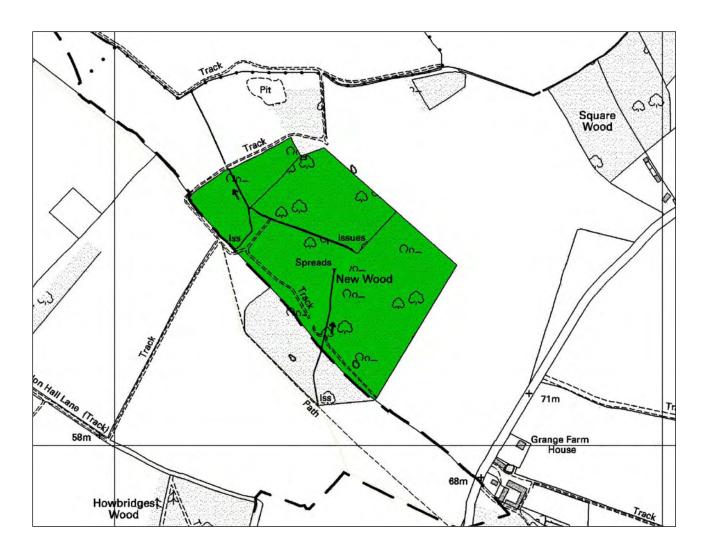
Co2 Buckler's Farm Wood (2.9 ha) TL 868251

This wood, straddling the upper reaches of the Roman River, comprises streamside Alder (*Alnus glutinosa*) with tall Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*) standards that are mainly found on the edges of the woodland. Hazel (*Corylus avellana*) and Hawthorn (*Crataegus monogyna*) are found scattered throughout the wood. Dog's Mercury (*Mercurialis perennis*) is abundant in the ground flora while the central area has a marshy substrate dominated by Pendulous Sedge (*Carex pendula*). Ramsons (*Allium ursinum*), which favours moist conditions, is typically found in more open conditions alongside the river. Other species of interest include Bluebell (*Hyacinthoides non- scripta*), Wood-sedge (*Carex sylvatica*) and Moschatel (*Adoxa moschatellina*).

Selection criteria: HCr1(b), HCr2(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK)

Date of selection: 1991



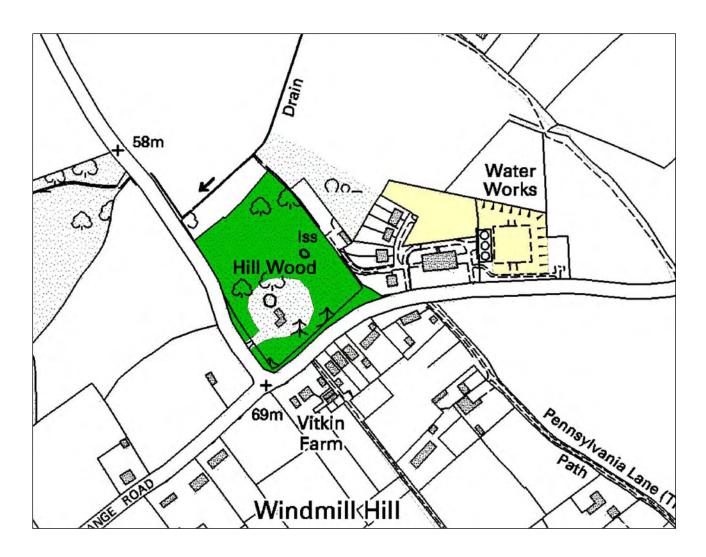
Co3 New Wood (11.4 ha) TL 873163

Hornbeam (*Carpinus betulus*) characterises this ancient woodland, which contains some recent coppice as well as occasional Pedunculate Oak (*Quercus robur*) standards and Field Maple (*Acer campestre*). Midland Hawthorn (*Crataegus laevigata*) occurs in the shrub layer along with Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and Bramble (*Rubus fruticosus* agg.). The ground flora displays a number of interesting species including Bluebell (*Hyacinthoides non-scripta*), Barren Strawberry (*Potentilla sterilis*), Three-nerved Sandwort (*Moehringia trinervia*), and Wood Speedwell (*Veronica montana*). Wood Sorrel (*Oxalis acetosella*) has also been recorded.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



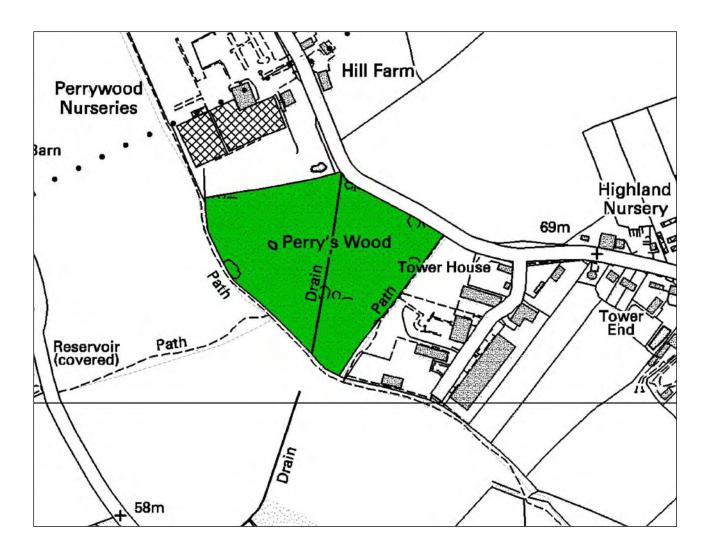
Co4 Hill Wood (1.8 ha) TL 882167

Hill Wood is dominated by Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*) coppice with occasional Field Maple (*Acer campestre*) and Hazel (*Corylus avellana*), which is being managed by the resident owner. A resumption of coppice and cessation of geese and chicken rearing would benefit the sparse ground flora and understorey, which includes patches of Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*), Gooseberry (*Ribes uva-crispa*) and Bramble (*Rubus fruticosus*).

Selection criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



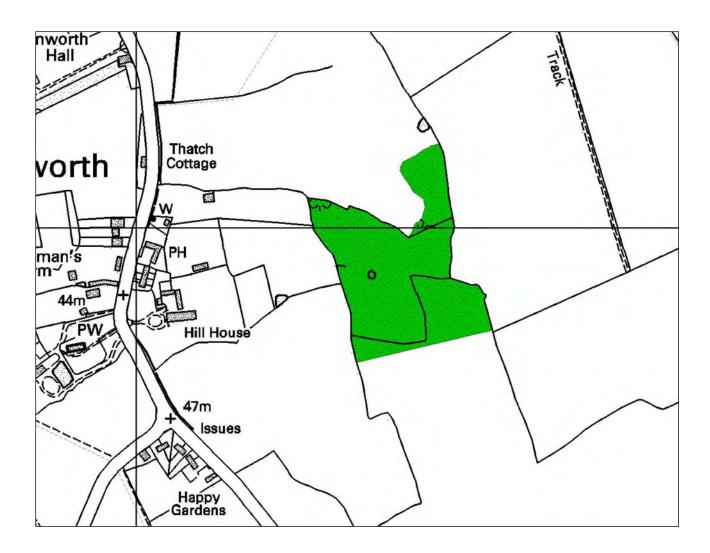
Co5 Perry's Wood (3.6 ha) TL 883171

This ancient wood has good canopy/understorey structure with good levels of seed regeneration comprising mainly Ash (*Fraxinus excelsior*), elm (*Ulmus* sp.), Hawthorn (*Crataegus monogyna*) and Hazel (*Corylus avellana*) with occasional Pedunculate Oak (*Quercus robur*), Field Maple (*Acer campestre*) and Hornbeam (*Carpinus betulus*) coppice. The ground flora is generally sparse but includes Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*) and Bugle (*Ajuga reptans*). There are two shaded ponds in the western corner, which support Pendulous Sedge (*Carex pendula*). A pig enclosure to the west of the ponds is causing disturbance to woodland flora.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



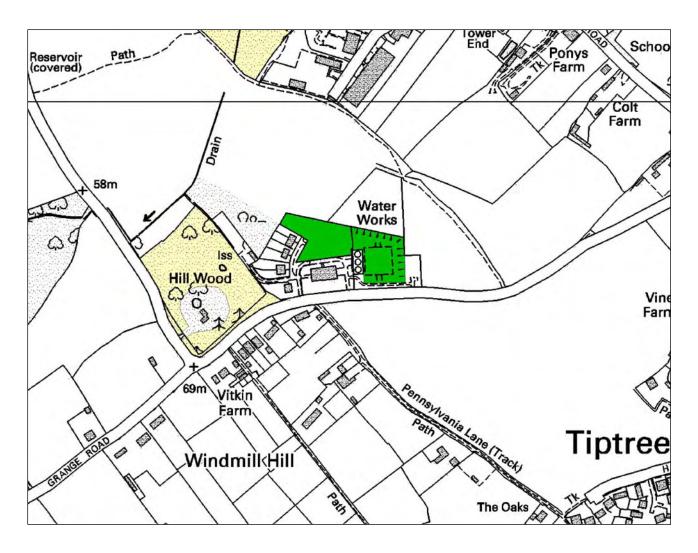
Co6 Inworth Wood (3.0 ha) TL 883179

This woodland consists of abundant Hornbeam (*Carpinus betulus*) and Pedunculate Oak (*Quercus robur*) with frequent Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*). The understorey is varied in structure and largely comprises sapling regeneration following recent coppicing in central areas, although Bramble (*Rubus fruticosus* agg.) is dominant in places. Red Currant (*Ribes rubra*), Broom (*Cytisus scoparius*) and Midland Hawthorn (*Crataegus laevigata*) are also present in the understorey. The ground flora includes frequent Bluebell (*Hyacinthoides non-scripta*), and Dog's Mercury (*Mercurialis perennis*) as well as Primrose (*Primula vulgaris*), Three-nerved Sandwort (*Moehringia trinervia*) and Goldilocks Buttercup (*Ranunculus auricomus*). The south-eastern block is more recent woodland but the Hornbeam canopy with carpets of Dog's Mercury provides a natural extension to the woodland habitat.

Selection criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



Co7 Tiptree Waterworks (0.9 ha) TL 884167

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 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 Ryegrass (*Lolium perenne*).

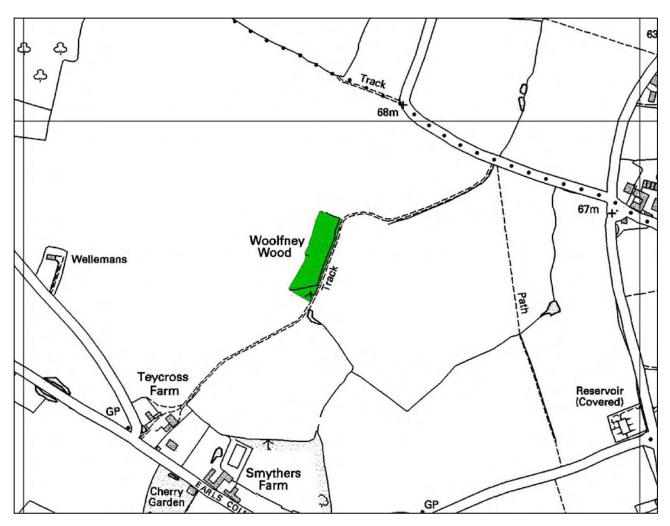
The western section is damper and has a more species-rich sward, which includes Bird's-foot-trefoil, Yorkshire-fog, Lesser Trefoil (*Trifolium dubium*), Common Knapweed (*Centaurea nigra*), Marsh Thistle (*Cirsium palustre*), Meadow Barley (*Hordeum secalinum*) and Crested Dog's-tail (*Cynosurus cristatus*). Common Sedge (*Carex nigra*) is of particular note here.

Selection criteria: HCr11

BAP Priority Habitats: Lowland Dry Acid Grassland (UK)

Date of selection: December 2008

Date of last revision: -



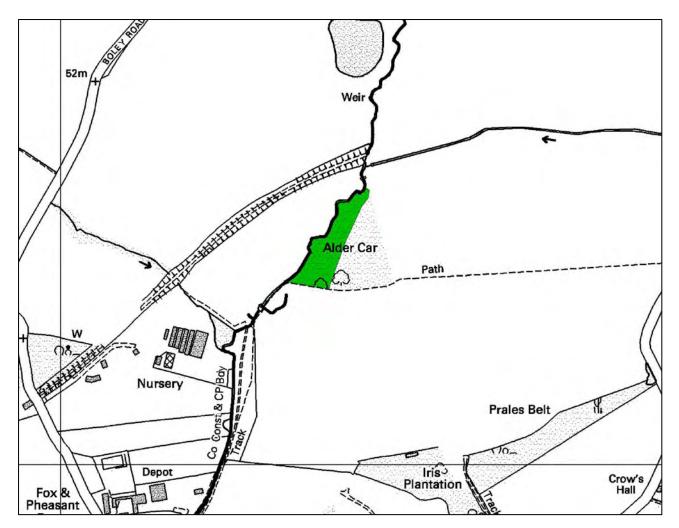
Co8 Woolfney Wood (0.6 ha) TL 885268

This remaining fragment of a once much larger ancient wood has a mixed canopy and understorey of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Field Maple (*Acer campestre*), Hazel (*Corylus avellana*) and Elder (*Sambucus nigra*). Midland Hawthorn (*Crataegus laevigata*), a species associated with ancient woodland, is also present. The ground flora has Wood Anemone (*Anemone nemorosa*), another species exhibiting a strong affinity with ancient woodland. The ground layer also has a fine display of Bluebell (*Hyacinthoides non-scripta*) with Dog's Mercury (*Mercurialis perennis*) and other typical woodland species.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co9 Alder Car, White Colne (0.7 ha) TL 884293

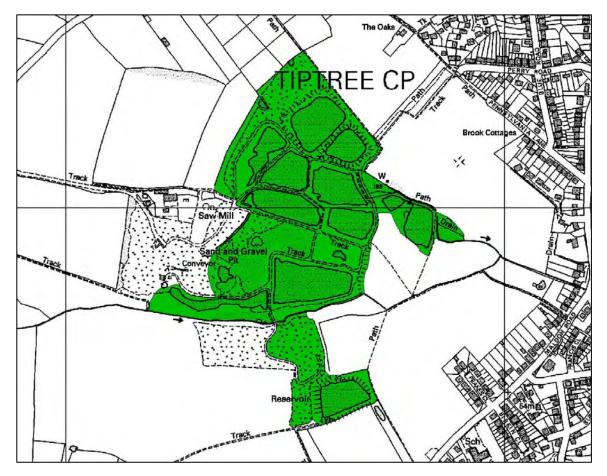
This small site highlights the richness and diversity of stream valley woodland. Lining the stream channel is Alder (*Alnus glutinosa*) coppice with standards. The southern edge of the wood has some Small-leaved Lime (*Tilia cordata*), usually only found in ancient woods and hedgerows. Beneath this canopy the ground flora is an assemblage of species indicative of ancient woodland. Bluebell (*Hyacinthoides non-scripta*), Wood Anemone (*Anemone nemorosa*), Ramsons (*Allium ursinum*), Dog's mercury (*Mercurialis perennis*) and Cuckooflower (*Cardamine pratensis*) are all found in this area.

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Wet Woodland (UK); Ancient Woodland (Essex)

Date of selection: December 2008

Date of last revision: -



Co10 Inworth Grange Pits (22.5 ha) TL 885159

This series of pits is a mosaic of marsh, grassland, scrub, wood and bare sandy cliffs and banks. Areas of disturbed ground support species such as Common Cudweed (*Filago vulgaris*), Common Centaury (*Centaurium erythraea*), Bristly Oxtongue (*Picris echioides*), Perforate St John's-wort (*Hypericum perforatum*) and Common Bird's-foot-trefoil (*Lotus corniculatus*). Wood Sage (*Teucrium scorodonia*) and Sheep's Sorrel (*Rumex acetosella*) are also present. Damper areas also include Hard Rush (*Juncus inflexus*), Gipsywort (*Lycopus europaeus*) and Water-plantain (*Alisma plantago-aquatica*).

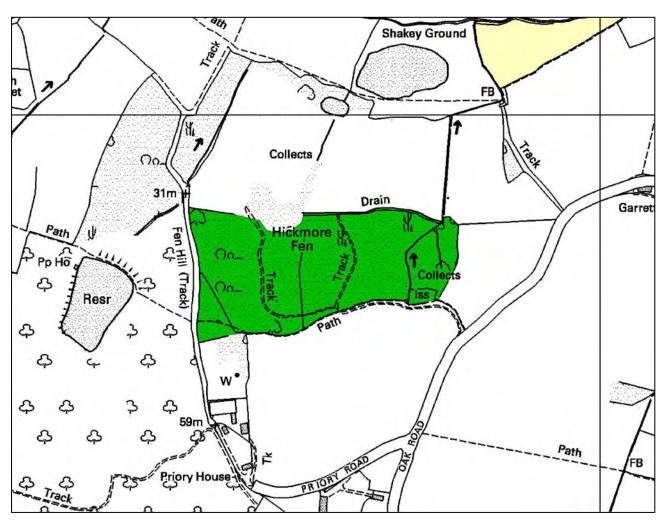
Wet willow (*Salix* spp.) woodland grows in central areas whilst scattered scrub occupies much of the higher ground, with Bramble (*Rubus fruticosus* agg.), Gorse (*Ulex europaeus*), and Broom (*Cytisus scoparius*). Recent Pedunculate Oak (*Quercus robur*) and planted Wild Service-tree (*Sorbus torminalis*) are also present along the southern margins of gravel pit lakes.

The mature ponds and lakes have a flora which includes Soft-rush (*Juncus effusus*), Bulrush (*Typha latifolia*) and Common Reed (*Phragmites australis*), although much of the margins are overhung by willows. The southern lake has sandy vertical banks and Common Spike-rush (*Eleocharis palustris*), an Essex Red Data List species, amongst the marginal plants. The northern lakes have only recently been decommissioned as working pits and have been modified and re-landscaped as part of a restoration scheme to create acid grassland. Here the lake margins and the dry, cracking ground of a dried lagoon supports locally dominant rushes and tall swamp vegetation including Compact Rush (*Juncus conglomeratus*), Soft Rush, Common Reed, Bulrush and willowherbs (*Epilobium* spp.) amongst willow saplings.

Selection criteria: HCr2(c), HCr5, HCr6(b), HCr13, HCr20, HCr22, HCr26

BAP Priority Habitats: Open Mosaic Habitats on Previously Developed Land (UK); Brownfield (Essex)

Date of selection: 1991



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Co11 Hickmore Fen (5.7 ha) TL 885277

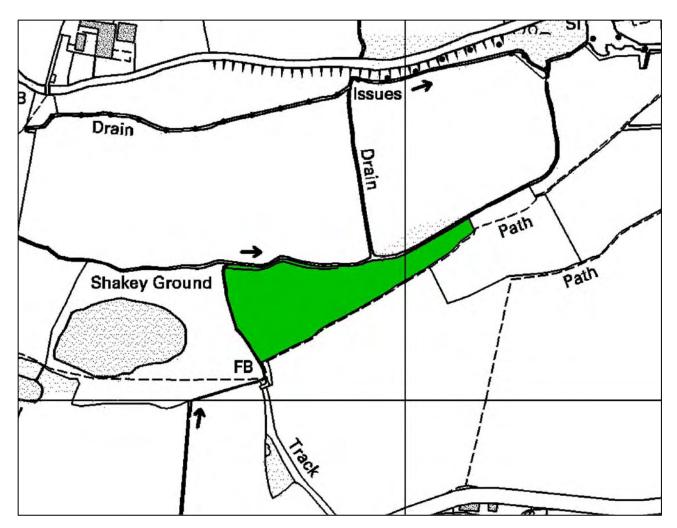
Hickmore Fen is an area of dry and boggy secondary woodland, with Hornbeam (*Carpinus betulus*) on the western bank by Fern Hill track being much the oldest feature. Most of the central part of the wood has Hazel (*Corylus avellana*) coppice with scattered Pedunculate Oak (*Quercus robur*) and Elm (*Ulmus* sp.). Though rare, some Alder (*Alnus glutinosa*) is found in the wet habitat and Small-leaved Lime (*Tilia cordata*), a tree usually confined to ancient woodland, survives, possibly from an earlier wooded phase. The eastern part of the wood is also very boggy in the down slope area. A diverse flora occurs within this woodland, with species recorded including Bluebell (*Hyacinthoides non-scripta*), Ramsons (*Allium ursinum*), (Pendulous Sedge (*Carex pendula*), Dog's Mercury (*Mercurialis perennis*), Moschatel (*Adoxa moschatellina*) and Wood Speedwell (*Veronica montana*).

Selection Criteria: HCr2(d)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK)

Date of selection: December 2008

Date of last revision: -



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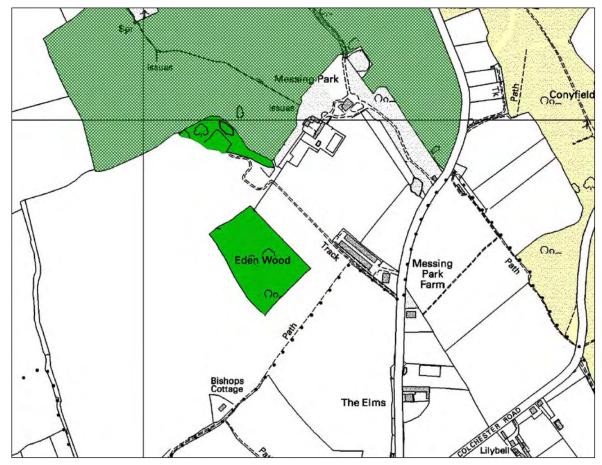
Co12 Wakes Colne Meadow (1.3 ha) TL 889281

This river valley meadow supports a damp-grassland flora with a good range of grasses and herbs. Grasses include Marsh Foxtail (*Alopecurus geniculatus*), Sweet Vernal-grass (*Anthoxanthum odoratum*) and Meadow Barley (*Hordeum secalinum*), whilst herbs such as Cuckooflower (*Cardamine pratensis*), Meadowsweet (*Filipendula ulmaria*), Ragged Robin (*Lychnis flos-cuculi*) and Oval Sedge (*Carex leporina*) underline the wet soil conditions. Oval Sedge is an Essex Red Data List species and as with many species of sedge found in Essex has declined in distribution during recent decades.

Selection criteria: HCr10

BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: 1991



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Co13 Eden Wood (2.7 ha) TL 891179

Eden Wood is 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*).

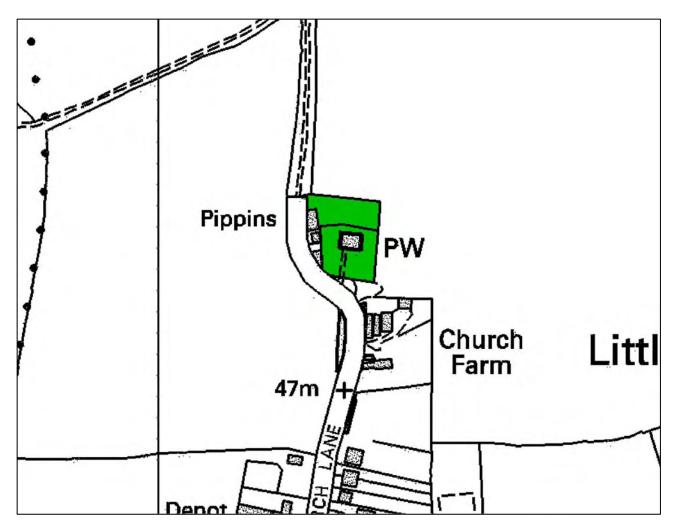
A small remnant area of woodland along the southern margins of Messing Park is included in this Local Wildlife Site for its varied canopy and ground flora. This area might previously have been part of a larger Eden Wood. Trees include Horse-chestnut (*Aesculus hippocastanum*), Pedunculate Oak, Hornbeam 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.

Selection Criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient woodland (Essex)

Date of selection: December 2008

Date of last revision: -



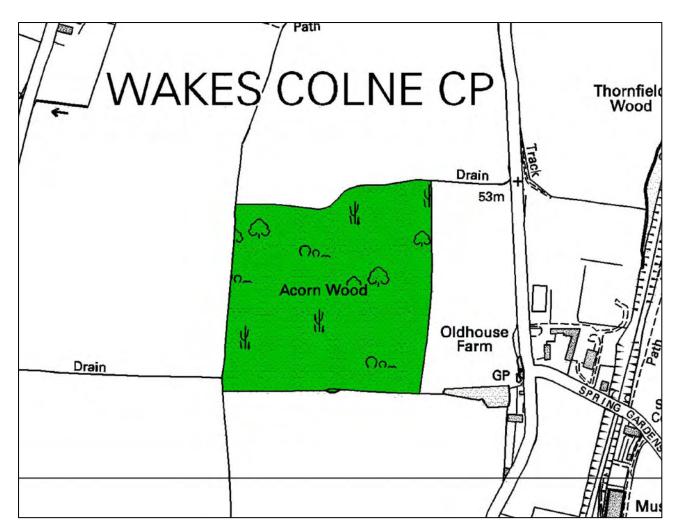
Co14 Little Tey Churchyard (0.3 ha) TL 892236

This small churchyard, sympathetically managed for wildlife, 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 Black Knapweed (*Centaurea nigra*), Field Scabious (*Knautia arvensis*) Primrose (*Primula vulgaris*) and Cowslip (*P. 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*), Sulphur Clover (*Trifolium ochroleucon*) and Rough Hawk-bit (*Leontodon hispidus*). The latter two are recorded as Essex Red Data List species.

Selection criteria: HCr10, SCr15

BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: 1991



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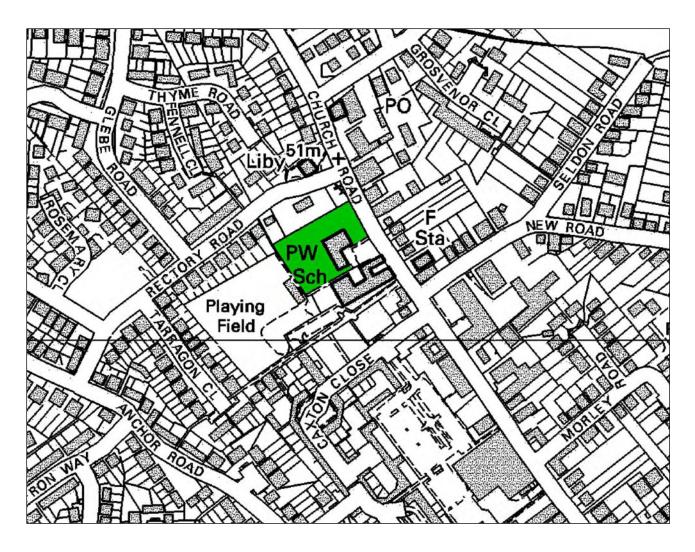
Co15 Acorn Wood (6.7 ha) TL 895293

This ancient wood has a mixed canopy of Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) with some Sweet Chestnut (*Castanea sativa*), which is generally confined to the north east corner. Hazel (*Corylus avellana*) coppice forms the main shrub canopy along with Elder (*Sambucus nigra*). Bramble (*Rubus fruticosus* agg) scrub is frequent throughout the wood whilst Dog's Mercury (*Mercurialis perennis*) and Common Nettle (*Urtica dioica*) are the most common ground flora species. Species of interest in this include Wood Anemone (*Anemone nemorosa*), Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*) and Wood Sedge (*Carex Sylvatica*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



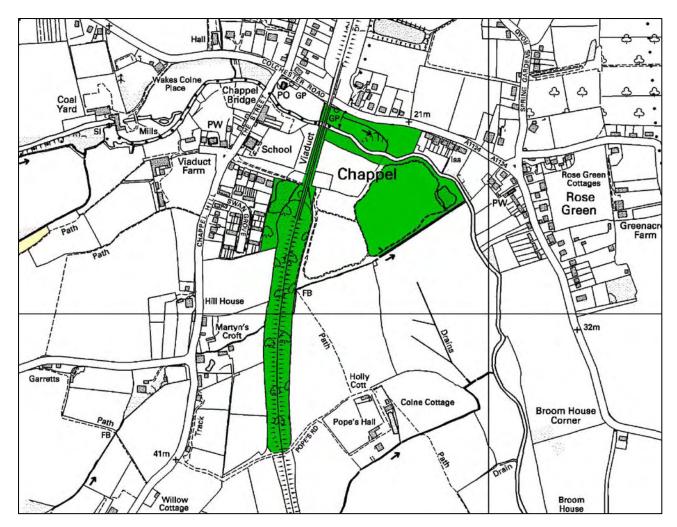
Co16 St Luke's Church, Tiptree (0.4 ha) TL 895 160

This is a regularly mown churchyard, which contains a diverse range of herb species and fine grasses associated with dry grassland habitats. The majority of plants are found to the rear of the church on the mounded graves which escape the regular cuts and provide interesting micro-climates, with species such as Agrimony (*Agrimonia eupatoria*), Common Knapweed (*Centaurea nigra*), Wild Carrot (*Daucus carota*), Oxeye Daisy (*Leucanthemum vulgare*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Heath Speedwell (*Veronica officinalis*). The northern portion of the churchyard supports some notable species typical of well-drained and light soils, with Tormentil (*Potentilla erecta.*), Sheep's Sorrel (*Rumex acetosella*), Trailing St John's-wort (*Hypericum humifusum*) and Harebell (*Campanula rotundifolia*) growing on graves, the latter being an Essex Red Data List species. Although the intensive management reduces the prevalence of coarse grasses, the flora would benefit greatly from a less frequent cutting regime. Swifts were found to be nesting in the bell tower of St Luke's Church.

Selection criteria: HCr10, SCr15

BAP Priority Habitats: Lowland Dry Acid Grassland/Lowland Meadow (UK); Lowland Grassland (Essex)

Date of selection: December 2008



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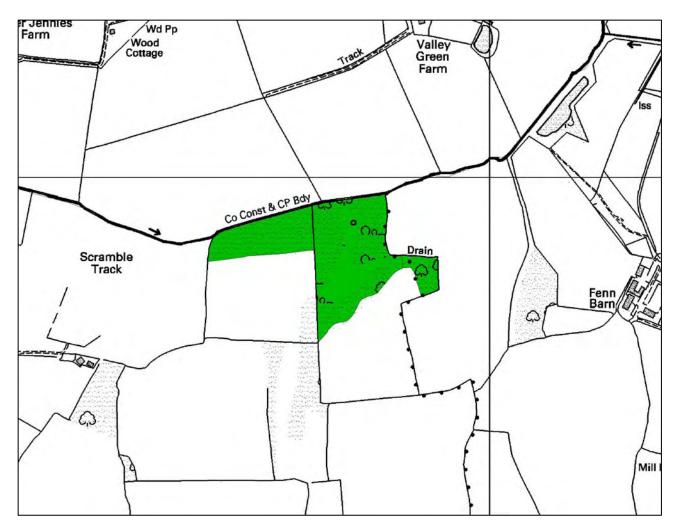
Co17 Chappel Ponds and Millennium Green (8.1 ha) TL 897282

The ponds to the west side of the viaduct are of particular note for the presence of a large Great-crested Newt population. The plantation and ruderal habitat by the River Colne is also valuable terrestrial habitat for the newts. In addition, Chappel Millennium Green was created in 2000, with part of the area south of the river being managed for wildlife. The wet, rough grassland extends the habitat suitable for Great Crested Newts, and benefits many other species including reptiles, invertebrates, small mammals and birds. The habitat in this area comprises tall sward grassland with a marshy area to the south, and a pond in the east corner. The wet area supports stands of Floating Sweet-grass (*Glyceria fluitans*), Great Willowherb (*Epilobium hirsutum*), Rushes (*Juncus spp.*) and a large stand of Water Horsetail (*Equisetum fluviatile*), an Essex Red Data List species. Cuckooflower (*Cardamine pratensis*) is also found scattered throughout the grassland in damp habitat.

Selection criteria: HCr12, SCr1

UK BAP Priority Habitats:

Date of selection: 1991 (in part)



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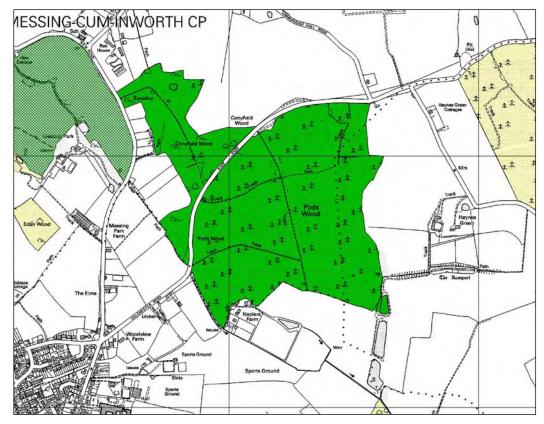
Co18 Cambridge Brook Marsh (3.7 ha) TL 897318

This site comprises woodland, fen-like communities, wet grassland and scrub. This results in a diverse shaded and open habitat. Species such as Ransoms (*Allium ursinum*) and Wood Speedwell (*Veronica montana*) tolerate the shaded habitat, but perhaps the most interesting areas are the wet grassland and sedge habitats that support a rich and varied flora amongst which are Cuckooflower (*Cardamine pratensis*), Common Spotted Orchid (*Dactylorhiza fuchsii*) and Meadowsweet (*Filipendula ulmaria*). Large Bittercress (*Cardamine amara*), an Essex Red Data List species, is also established in the margins of the sedge habitat. This plant is generally found in wet stream valleys and marshes in the central north Essex area.

Selection criteria: HCr2(c), HCr6(b), HCr23, SCr15

BAP Priority Habitats: Lowland Fens

Date of selection: 1991



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Co19 Pods and Conyfield Woods (61.2 ha) TL 902 177

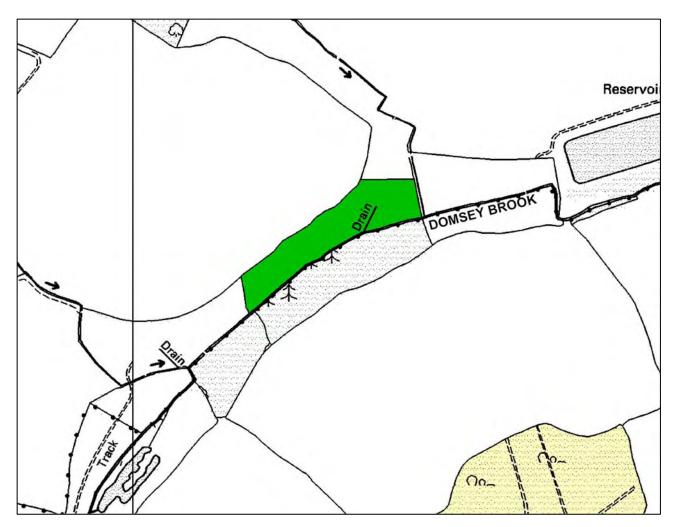
Conyfield Wood has been partially replanted with conifers and Beech (*Fagus sylvatica*) amongst a native canopy of Ash (*Fraxinus excelsior*), Pedunculate Oak (*Quercus robur*), Hornbeam (*Carpinus betulus*), Sweet Chestnut (*Castanea sativa*), birch (*Betula* sp.) and Field Maple (*Acer campestre*). Sycamore (*Acer pseudoplatanus*) is becoming well established and locally dominant in central parts. Other areas are dominated by dense birch and Bramble (*Rubus fruticosus* agg.) scrub. 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*) and Pignut (*Conopodium majus*) are also notable amongst the ground flora.

Pods Wood is an ancient Hornbeam coppice woodland previously extensively replanted with conifers including Scots (*Pinus sylvestris*) and Corsican Pine (*Pinus nigra* var. *maritima*), 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 Soft-grass (*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.

Selection criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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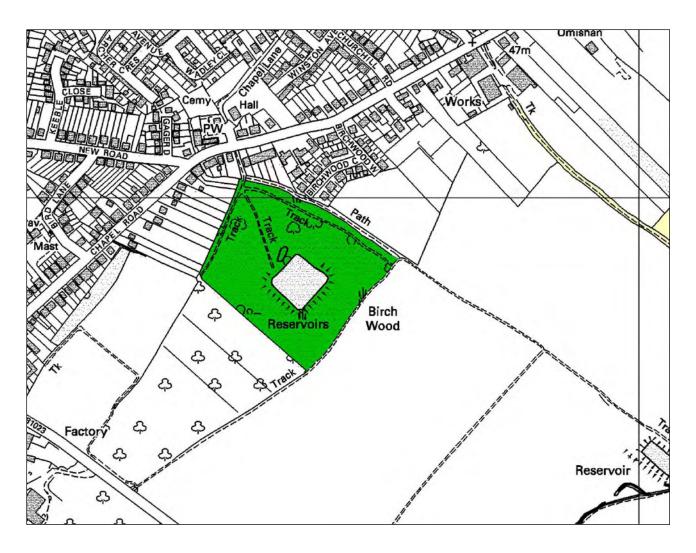
Co20 Domsey Brook Pasture (1.6 ha) TL 902206

Located to the north side of Domsey Brook the majority of the meadow is dry grassland with a sward including Sweet Vernal-grass (*Anthoxanthum odoratum*), Meadow Barley (*Hordeum secalinum*), Red Fescue (*Festuca rubra*), Creeping Bent-grass (*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 rare Essex Red Data List plants: Common Meadow-rue (*Thalictrum flavum*) and Common Sedge (*Carex nigra*). In addition, Ragged-Robin (*Lychnis flos-cuculi*) a species also in decline within the county is also found where the drainage is poor.

Selection criteria: HCr10, SCr15

BAP Priority Habitats: Lowland Grassland (UK/Essex)

Date of selection: December 2008



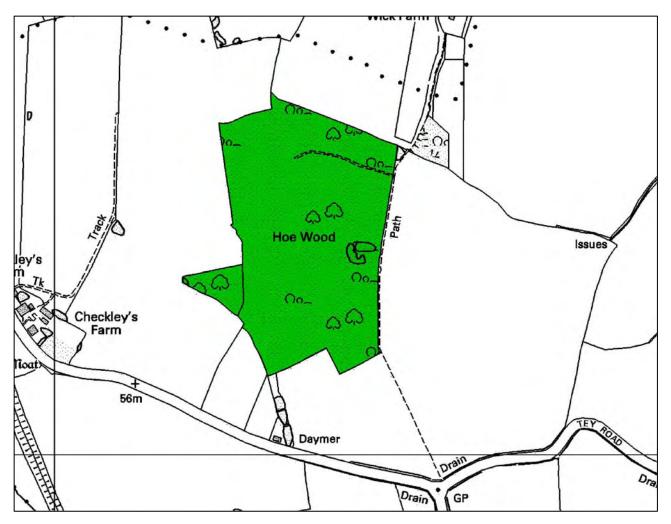
Co21 Birch Wood, Tiptree (4.9 ha) TL 903158

Birch Wood comprises overgrown Hornbeam (*Carpinus betulus*) coppice with Pedunculate Oak (*Quercus robur*) standards, along with occasional Ash (*Fraxinus excelsior*), Hazel (*Corylus avellana*) and Silver Birch (*Betula pendula*). Sessile Oak (*Quercus petraea*) has also been recorded. The ground flora is suffering under recreational pressure and dense shading, with large areas of bare and trampled ground, but still supports some Wood Anemone (*Anemone nemorosa*), Greater Stitchwort (*Stellaria holostea*) and Bluebell (*Hyacinthoides non-scripta*). The understorey is also lacking in structure but includes some Holly (*Ilex aquifolium*), Red Currant (*Ribes rubrum*), Hawthorn (*Crataegus monogyna*) and abundant Elder (*Sambucus nigra*). The central reservoir supports limited marginal vegetation and has been excluded from the Local Wildlife Site.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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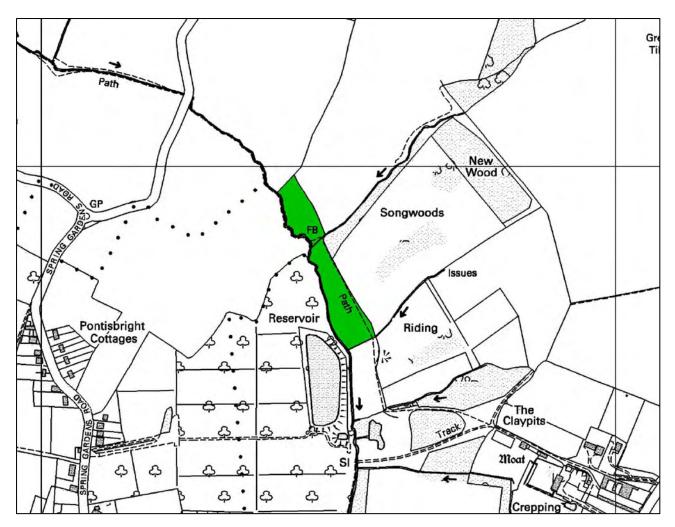
Co22 Hoe Wood (9.2 ha) TL 904264

Hoe Wood comprises Oak (*Quercus robur*)/Ash (*Fraxinus excelsior*) wood with Hazel (*Corylus avellana*) coppice with some old Sweet Chestnut (*Castanea sativa*) and Hornbeam (*Carpinus betulus*) coppice. Wild Service Tree (*Sorbus torminalis*) and Small-leaved Lime (*Tilia cordata*) are 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*).

Selection criteria: HCr1(a), SCr15

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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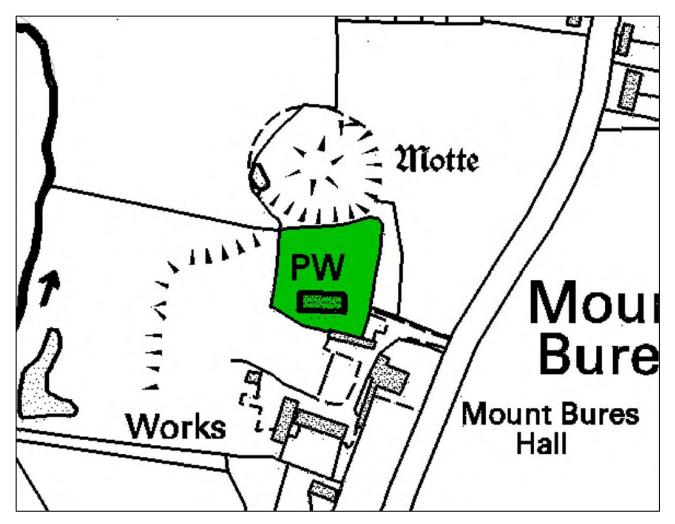
Co23 Chappel Meadow (1.4 ha) TL 904287

Located east of a tributary stream draining into the River Colne, these partially improved marshy meadows retain qualities of formerly more species-rich grassland. Sweet Vernal-grass (*Anthoxanthum odoratum*) is abundant along with Soft-brome (*Bromus hordeaceus*) and Meadow Foxtail (*Alopecurus pratensis*), which indicate enrichment to the soils. Meadow Buttercup (*Ranunculus acris*) and Cuckooflower (*Cardamine pratensis*) are characteristic of the damp conditions. Small Sweet-grass (*Glyceria declinata*), an Essex Red Data List species that is now uncommon in the county, survives in this meadow albeit in very small quantity.

Selection Criteria: HCr11

BAP Priority Habitats: Lowland Grassland (Essex)

Date of selection: December 2008



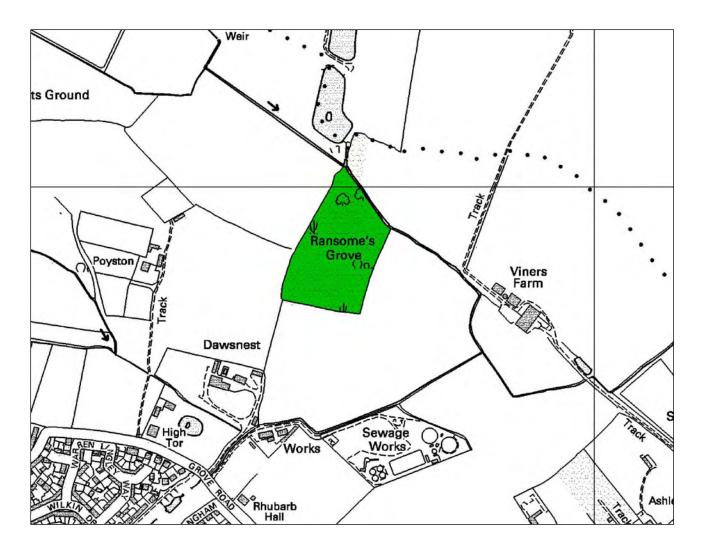
Co24 Mount Bures churchyard (0.3ha) TL 904325

This churchyard supports a wide variety of grass species including Sweet Vernal-grass (*Anthoxanthum odoratum*), Yellow Oat-grass (*Trisetum flavescens*), Red Fescue (*Festuca rubra*) and Bent-grasses (*Agrostis* spp.). Field Wood-rush (*Luzula campestris*) is frequent throughout the churchyard and is generally an indicator of infertile grassland. In addition, a species-rich and diverse herb flora thrives including Common Knapweed (*Centaurea nigra*), Barren Strawberry (*Potentilla sterilis*), Burnet Saxifrage (*Pimpinella saxifraga*), Pignut (*Conopodium majus*) and Lesser Calamint (*Clinopodium calamintha*). Harebell (*Campanula rotundifolia*) is also frequent in the vicinity of the church and is of particular interest as it has declined considerably in its county distribution during recent decades. Both Harebell and Lesser Calamint are Essex Red Data List species.

Selection criteria: HCr10, SCr15

BAP Priority Habitats: Lowland Dry Acid Grassland (UK); Lowland Grassland (Essex)

Date of selection: December 2008



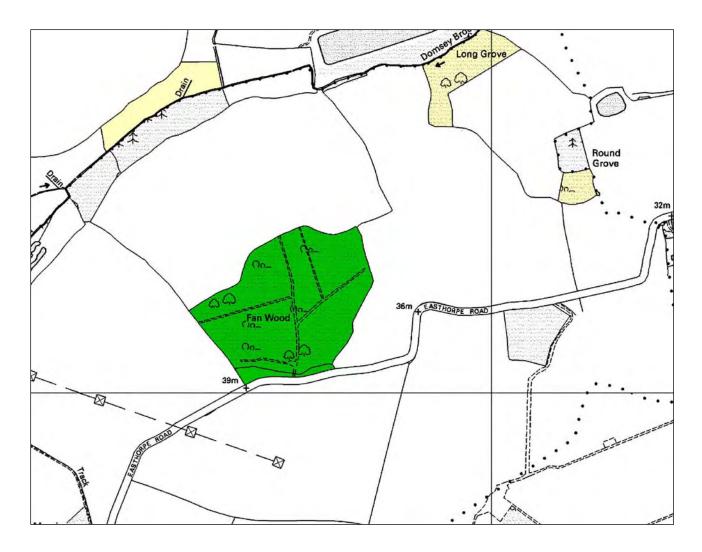
Co25 Ransome's Grove (2.3 ha) TL 905168

This is a Hornbeam (*Carpinus betulus*) woodland supporting some old Hornbeam and Ash (*Fraxinus excelsior*) coppice stools and a variety of other standards including Pedunculate Oak (*Quercus robur*), Field Maple (*Acer campestre*), Silver Birch (*Betula pendula*) and Wild Service-tree (*Sorbus torminalis*). The ground flora is relatively species-poor due to heavy shading, but does include Bluebell (*Hyacinthoides non-scripta*) and Primrose (*Primula vulgaris*). The understorey is patchy with some Elder (*Sambucus nigra*), Box (*Buxus sempervirens*), rose (*Rosa* sp.) and Bramble (*Rubus fruticosus* agg.). A small pond includes Skullcap (*Scutellaria galericulata*) as well as Bittersweet (*Solanum dulcamara*) and Celery-leaved Buttercup (*Ranunculus sceleratus*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



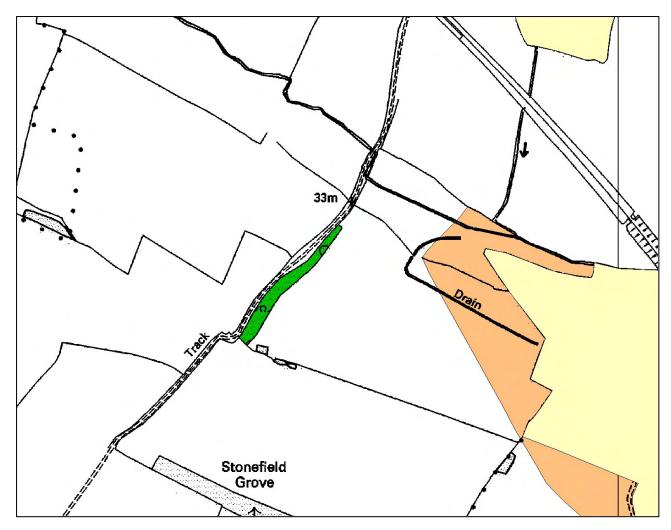
Co26 Fan Wood (8.7 ha) TL905201

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 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. The Site includes a strip of modern scrub woodland adjacent to the road that forms a natural ecological extension to the main wood.

Selection criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



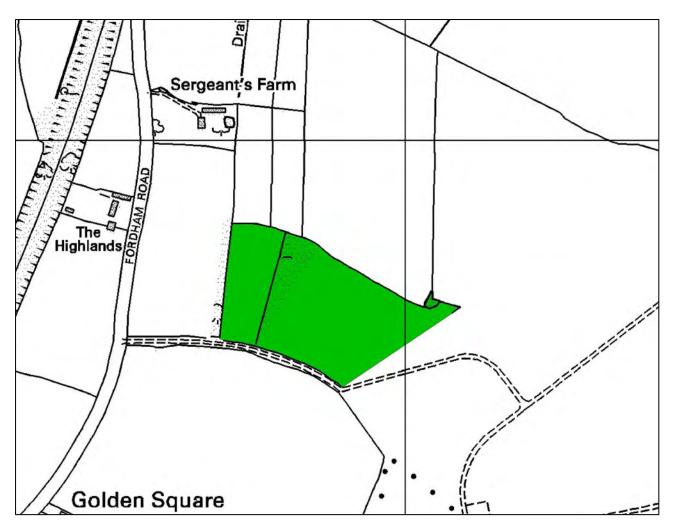
Co27 Stonefield Strip (6.7 ha) TL 905245

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. Bluebells (*Hyacinthoides non-scripta*) are abundant throughout the ground flora, with interspersed patches of Dog's Mercury (*Mercurialis perennis*). Goldilocks Buttercup (*Ranunculus auricomus*), an indicator of ancient woodland, is also present. A strong wood bank and ditch on the west edge of the wood combined with the general woodland structure and flora allude to this fragment being an ancient wood fragment.

Selection Criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: December 2008



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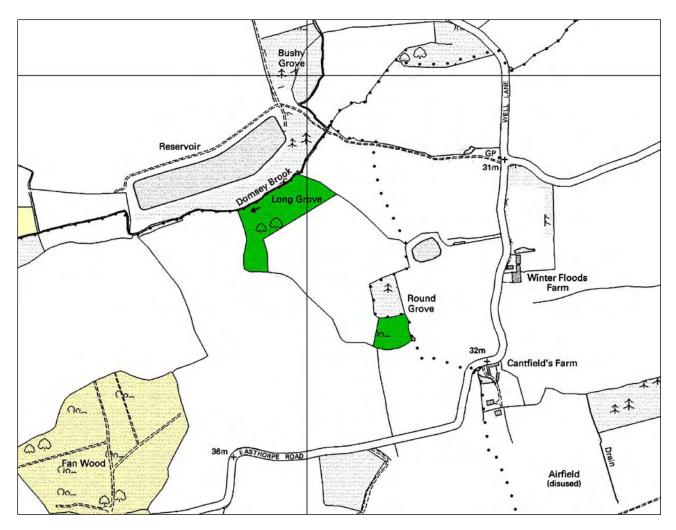
Co28 Sergeant's Orchard (3.1 ha) TL 909308

This Essex Wildlife Trust reserve retains a small fragment of old orchard habitat, with recently planted fruit trees in the western area. Apart from often having rare fruit varieties, old orchards managed in a low intensity way i.e. without the use of chemicals, provide valuable habitats for birds, mammals and invertebrates. Dead wood often found on old orchard trees can support many species of invertebrate. A recent survey of this site has found a wealth of interest across a broad spectrum of invertebrate groups, including the Nationally Scarce Hop-garden Earwig (*Apterygida media*), the Nationally Rare (RDBK) sepsid fly *Meroplius fukuharai*, the RDB3 solitary bee *Andrena proxima* and the Nationally Scarce bumblebee *Bombus rupestris*. Also present is the carder-bee *Bombus muscorum*, which has been designated as a UK Biodiversity Action Plan and Essex Red Data List species. The reserve also includes meadow habitat being created to the east, specifically as bumblebee foraging habitat. The flora includes Red Clover (*Trifolium pratense*) and White Clover (*T. repens*), which are important forage plants for these insects. *B. muscorum* has a mainly coastal distribution, so this inland location in the northern part of Colchester Borough is unusual.

Selection Criteria: HCr7, HCr12, SCr13, SCr14

BAP Priority Habitats: Traditional Orchards (UK); Old Orchards (Essex)

Date of selection: December 2008



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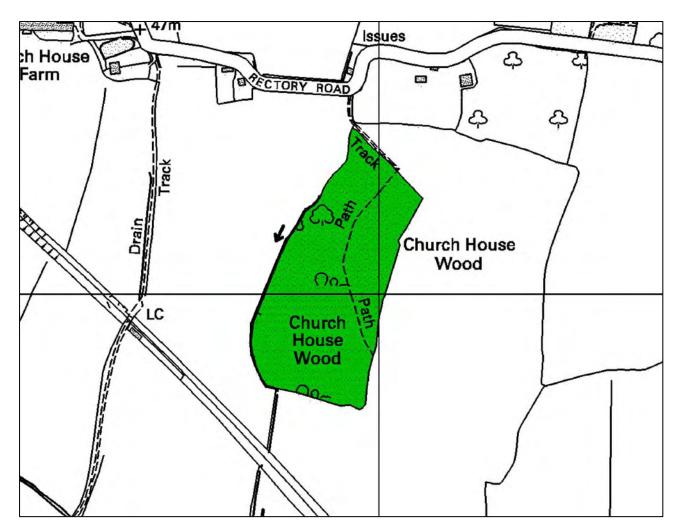
Co29 Long/Round Grove (2.3 ha) TL 909 206

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 a dominant cover of Dog's Mercury (*Mercurialis perennis*) under 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. The ground flora in both woods is, however, mainly rank and supports an abundance of 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*). Long Grove also contains some larger oak standards (*Quercus robur*) and Hazel coppice (*Corylus avellana*).

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: December 2008



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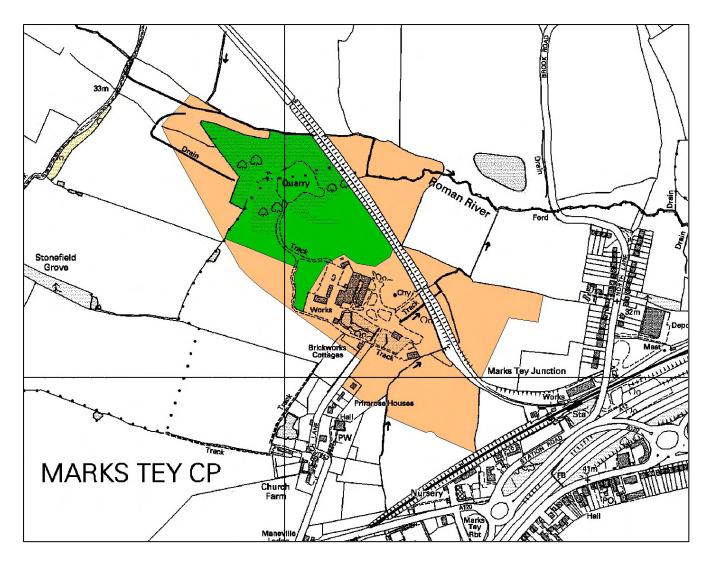
Co30 Church House Wood (3.5 ha) TL 908250

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*). Other species recorded include Wood Sage (*Teucrium scorodonia*) confined to the drier areas of the woodland and Wood Speedwell (*Veronica montana*) found in the damper locations.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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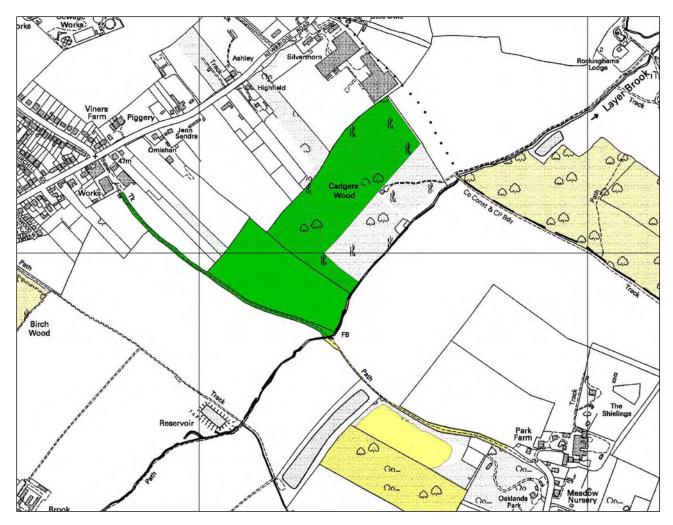
Co31 Marks Tey Brick Pit (9.0 ha) TL 910244

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. 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 (*Senecio jacobaea*), 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.

Selection criteria: HCr5; HCr20

BAP Priority Habitats: Open Mosaic Habitats on Previously Developed Land (UK); Brownfield Sites (Essex)

Date of original selection: December 2008



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Co32 Cadgers Complex (13.2 ha) TL 912160

Cadgers Wood

A large section of this wood is of coppiced Hornbeam (*Carpinus betulus*) and Small-leaved Lime (*Tilia cordata*). Boundary trees include Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Smooth-leaved Elm (*Ulmus carpinifolia*) and Wild Service-tree (*Sorbus torminalis*). Large areas, in particular in the northern half, are dominated by willow (*Salix* sp.) and birch (*Betula* sp.) scrub and 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 and Primrose (*Primula vulgaris*). Bracken is well established along the south-eastern boundary and Cuckooflower (*Cardamine pratensis*) and Bugle (*Ajuga reptans*) are found along the damp rides in the north-west. The woodland suffers from heavy use for paint balling, and there are signs of disturbance throughout including paint, tracks and temporary shelters.

Grassland and Scrub

This area includes Tiptree Parish Field and comprises tussocky grassland with scattered recent Pedunculate Oak trees and Bramble with along with dense Blackthorn scrub adjacent to Cadger's Wood. The grassland sward is grazed short in places by rabbits and also contains anthills. There is a range of grasses with coarse competitive species along with finer grasses such as Common Bent-grass (*Agrostis capillaris*) and Creeping Bent-grass (*A stolonifera*). The diversity of herbs is restricted to a few species including Common Bird's-foot-trefoil (*Lotus corniculatus*), 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.

Six species of common Bumblebee have been recorded - a notable assemblage which highlights the invertebrate interest of the field. Recent management work has been aimed at limiting the spread of oak scrub, and maintaining the scrub and grassland mosaic.

N.B. It should be noted that only part of this site is currently held by the Parish Council as an open space. The western end is currently (2008) in private ownership.

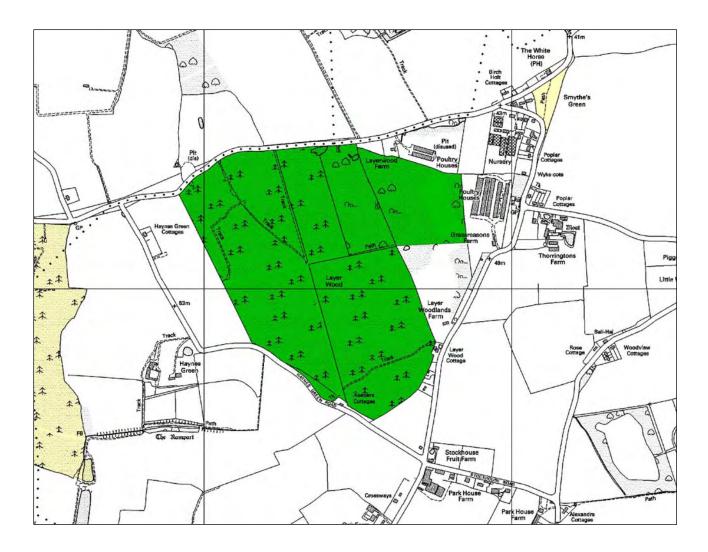
Green Lane, Tiptree to Paternoster Heath

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, Midland Hawthorn (*Crataegus laevigata*) and Field Maple (*Acer campestre*). The ground flora is mostly rank although Bluebell, Primrose and Greater Stitchwort (*Stellaria holostea*) are present. The lane continues over the district border into Maldon district and forms a woodland corridor between a cluster of woodland Local Wildlife Sites.

Selection criteria: HCr1(a), HCr9(a), HCr11

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Hedgerows (UK); Ancient Woodland (Essex)

Date of selection: 1991



Co33 Layer Wood and Grassreasons (53.9 ha) TL 914180

Layer Wood

Layer Wood comprises a mixed canopy which includes Hornbeam (Carpinus betulus), Ash (Fraxinus excelsior) and Beech (Fagus sylvatica), although dense birch (Betula sp.) is the dominant tree throughout most compartments where it has taken the place of recently felled conifers. Scots Pine (*Pinus sylvestris*), Corsican Pine (Pinus nigra var. maritima) and European Larch (Larix decidua) remain abundant in certain parts of the woodland. Butcher's-broom (Ruscus aculeatus) and Holly (Ilex aquifolium) are included in the understorey. The ground flora is sparse underneath the most of the canopy, where Bracken (Pteridium aquilinum), Foxglove (Digitalis purpurea) and Wood Sage (Teucrium scorodonia) are typical species and the rides and margins of tracks have the greatest botanical interest. Wood-spurge (Euphorbia amygdaloides), Heath Speedwell (Veronica officinalis), Tormentil (Potentilla erecta), Tufted Hair-grass (Deschampsia cespitosa), Trailing St John's-wort (Hypericum humifusum) and Slender St John's-wort (Hypericum pulchrum), an Essex Red Data List (ERDL) species, are found along the sides of dry tracks. The damp grassy rides support a number of notable plants such as Lesser Spearwort (Ranunculus flammula), Creeping-Jenny (Lysimachia nummularia), Common Marsh-bedstraw (Galium palustre) and Water-purslane (Lythrum portula), the latter being on the ERDL. A central pond supports Marsh-marigold (Caltha palustris) and the shaded northern pond has a good range of bankside species including Cyperus Sedge (*Carex pseudocyperus*), Pendulous Sedge (Carex pendula), Lesser Spearwort and Skullcap (Scutellaria galericulata).

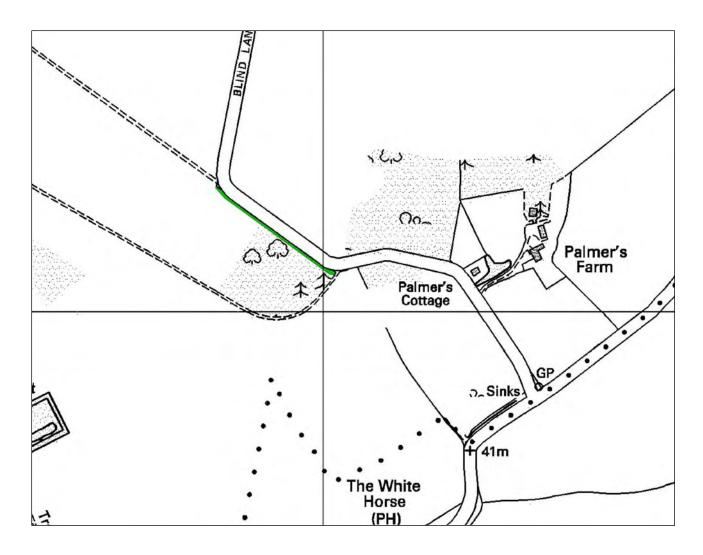
Grassreasons

This site grades from mature Pedunculate Oak (*Quercus robur*) wood in the north through to dense scrub and damp, rushy grassland and provides habitat diversification alongside the Layer Wood. The grassland is dominated by tall ruderals species, such as Marsh Thistle (*Cirsium palustre*), Hairy St John's-wort (*Hypericum hirsutum*), Common Fleabane (*Pulicaria dysenterica*), Common Centaury (*Centaurium erythraea*), Nettle (*Urtica dioica*) and willowherbs (*Epilobium spp.*). The damp margins of a pond support Hard Rush (*Juncus inflexus*), Soft-rush (*Juncus effusus*), Compact Rush (*Juncus conglomeratus*), Remote Sedge (*Carex remota*) and False Fox-sedge (*Carex otrubae*). Common Spotted Orchid (*Dactylorhiza fuchsii*) and Velvet Bent-grass (*Agrostis canina*) have been previously recorded.

Selection criteria: HCr1(a), HCr2(a), HCr2(c), HCr6(b), HCr13

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



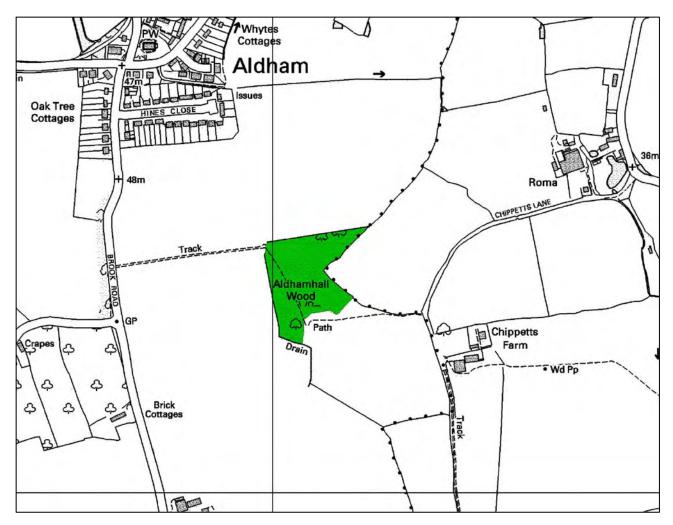
Co34 Blind Lane Road Verge (0.1 ha) TL 919191

This verge contains a good number of grasses and herbs and retains some of the botanical interest that has been lost from the adjacent Blind Lane poplar plantation through lack of management. Underneath regularly spaced poplars (*Populus* sp.), the grasses include Sweet Vernal-grass (*Anthoxanthum odoratum*), Crested Dog's-tail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*), Meadow Foxtail (*Alopecurus pratensis*) and Meadow-grasses (*Poa* sp.) amongst taller competitive species such as Cock's-foot (*Dactylis glomerata*). The range of herbs includes Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Knapweed (*Centaurea nigra*), Selfheal (*Prunella vulgaris*), Agrimony (*Agrimonia eupatoria*), Common Fleabane (*Pulicaria dysenterica*) and Grass Vetchling (*Lathyrus nissolia*) and the ditch contains stands of horsetail (*Equisetum* sp.). Common Spotted-orchid (*Dactylorhiza fuchsii*) and Bee Orchid (*Ophrys apifera*), an Essex Red Data Book species, also persist although the verge would benefit from some management as Bramble (*Rubus fruticosus* agg.) and Hawthorn (*Crataegus monogyna*) are encroaching.

Selection criteria: HCr11

BAP Priority Habitats:

Date of selection: December 2008



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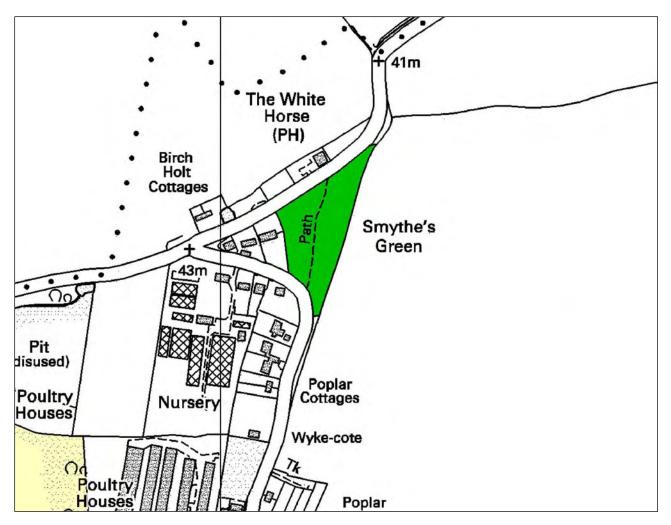
Co35 Aldhamhall Wood (2.3 ha) TL 921253

This small ancient wood is the remains of once larger woodland, extending south west now lost to agriculture. It has a mixed canopy of Pedunculate Oak (*Quercus robur*), Sweet Chestnut (*Castanea sativa*) and Ash (*Fraxinus excelsior*) with an extensive understorey of Hazel (*Corylus avellana*). A small block of Aspen (*Populus tremula*) occupies an area in the north east of the wood. The ground flora is dominated by Bramble (*Rubus fruticosus agg*) and Bluebell (*Hyacinthoides non-scripta*). Patches of Wood Anemone (*Anemone nemorosa*), testify to the ancient origins of the wood. The diminutive plant Pignut (*Conopodium majus*) is also found in this wood.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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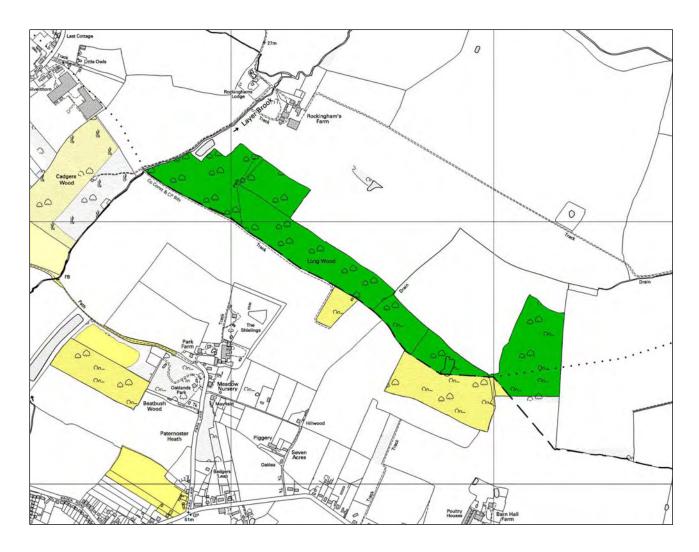
Co36 Smythe's Green (1.0 ha) TL 921186

This small area of rough grassland and scrub contains a range of grasses including Crested Dog's-tail (*Cynosurus cristatus*), Sweet Vernal-grass (*Anthoxanthum odoratum*) and Meadow Foxtail (*Alopecurus pratensis*). There are few herb species of special interest and coarse grasses such as False Oat-grass (*Arrhenatherum elatius*) and Cock's-foot (*Dactylis glomerata*) are becoming more dominant. Herbs include Common Knapweed (*Centaurea nigra*), Common Fleabane (*Pulicaria dysenterica*) and Greater Bird's-foot-trefoil (*Lotus pedunculatus*) and there are several damp areas comprising abundant Hard Rush (*Juncus inflexus*) and Soft Rush (*Juncus effusus*). The site appears to have declined in interest, which may be apportioned to encroachment of marginal Bramble (*Rubus fruticosus* agg.) and Blackthorn (*Prunus spinosa*) scrub, lack of management and the inappropriate planting of willow (*Salix* sp.) and birch (*Betula* sp.) trees. Lady's Bedstraw (*Galium verum*) and Spiny Restharrow (*Ononis spinosa*) have been recorded in the past but may since have been lost.

Selection criteria: HCr11

BAP Priority Habitats: Lowland Grassland (Essex)

Date of selection: 1991



Co37 Long Wood (29.6 ha) TL 924158

Long Wood contains Pedunculate Oak (*Quercus robur*) standards with Hornbeam (*Carpinus betulus*) coppice structure with a good variety of other woody species, including Wild Service-tree (*Sorbus torminalis*) and Small-leaved Lime (*Tilia cordata*). The southern portion includes areas of dense elm (*Ulmus sp.*) alongside Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*) scrub and damp rides. The ground layer is largely occupied by Brambles (*Rubus fruticosus agg.*) but includes Wood Anemone (*Anemone nemorosa*), Remote Sedge (*Carex remota*), Primrose (*Primula vulgaris*), Bluebell (*Hyacinthoides non-scripta*) and Ramsons (*Allium ursinum*). Central slopes also support Bracken (*Pteridium aquilinum*) as well as Sycamore (*Acer pseudoplatanus*) saplings, which should be controlled to prevent further spread. The understorey is lacking in structure and species but does include some Holly (*Ilex aquifolium*), Elder (*Sambucus nigra*), Honeysuckle (*Lonicera periclymenum*) and Butcher's Broom (*Ruscus aculeatus*). A small portion of this wood lies within Maldon District.

Selection Criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co38 Seller and Potash Woods and Lane (7.9 ha) TL 926213

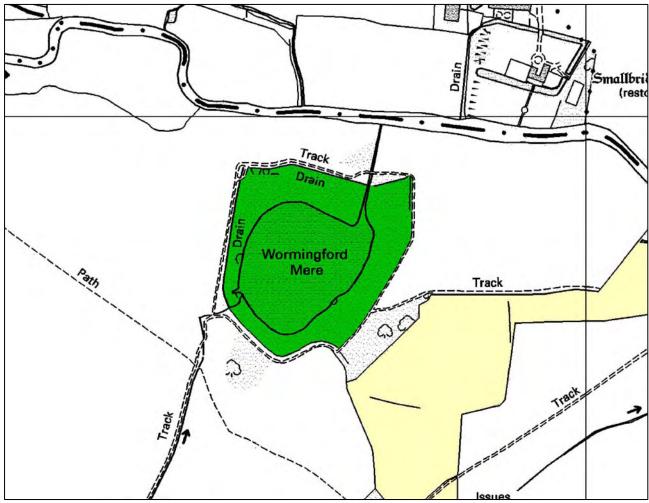
The ancient Potash Wood comprises Hornbeam (*Carpinus betulus*) coppice with Pedunculate Oak (*Quercus robur*) standards throughout. The canopy also includes Ash (*Fraxinus excelsior*) and Field Maple (*Acer campestre*) and the open understorey contains Elder (*Sambucus nigra*), Hawthorn (*Crataegus monogyna*), Cherry Laurel (*Prunus laurocerasus*) 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. Some replanting with conifers has occurred, but a large eastern section has recently 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*).

These two woods are linked by Seller's Lane, comprising a former trackway now only passable along the section north of Seller Wood, with the other two sections forming dense bands of scrub with standards and trees grown from coppice. Fourteen woody species have been recorded, 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.

Selection criteria: HCr1(a), HCr2(a), HCr9(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Hedgerows (UK); Ancient Woodland (Essex)



Date of selection: 1991

Date of last revision: December 2008

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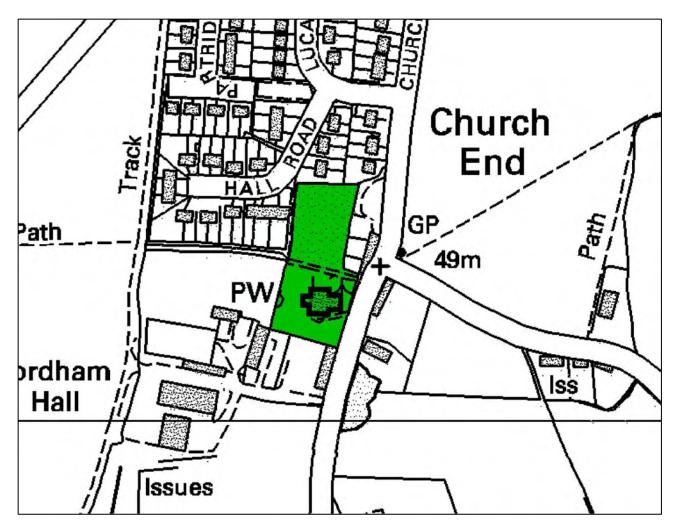
Co39 Wormingford Mere (5.7 ha) TL 926328

Wormingford Mere is surrounded by mature woodland with a high canopy of Alder (*Alnus glutinosa*) and Horse Chestnut (*Aesculus hippocastanum*). Other species found in the shrub layer include Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*), Spindle (*Euonymus europaeus*) and Buckthorn (*Rhamnus cathartica*), an Essex Red Data List species. Ramsons (*Allium ursinum*) forms extensive ground flora cover in the shaded areas beneath the canopy. Other species found throughout the woodland include Dog's Mercury (*Mercurialis perennis*), Yellow Archangel (*Lamiastrum galeobdolon*) and Moschatel (*Adoxa moschatellina*) where there is less competition from other vegetation. Amongst a marginal flora dominated by stands of Common Reed (*Phragmites australis*) are Water Mint (*Mentha aquatica*) and Large Bittercress (*Cardamine amara*), the latter being an Essex Red Data List species. The lake also supports Cormorant, Canada Geese, Teal, Mallard, Tufted Duck and Shoveler whilst the Reed bed provides habitat for Reed and Sedge Warbler. The invertebrates have not been widely surveyed but an important assemblage of spiders is known to occur, including severally Nationally Scarce species.

Selection criteria: HCr2(d), HCr26, SCr15

BAP Priority Habitats: Wet Woodland (UK)

Date of selection: 1991



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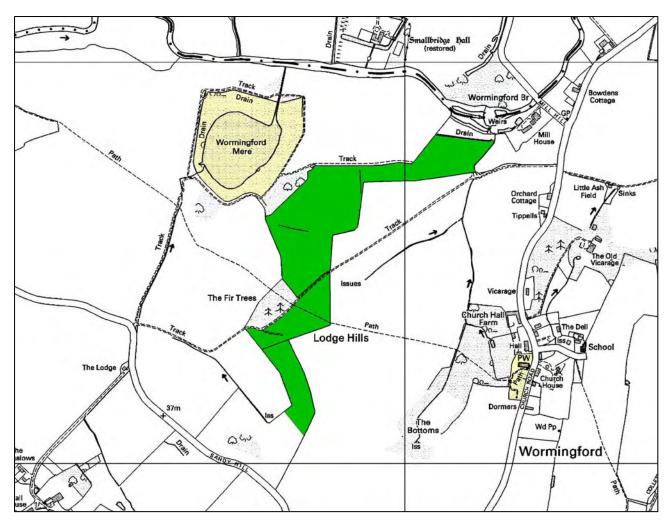
Co40 Fordham Churchyard (0.5 ha) TL 927281

Most of the floristic interest of this churchyard is found in the immediate vicinity of the church. A wide variety of grass species has been recorded, including Red Fescue (*Festuca rubra*), Yellow Oat-grass (*Trisetum flavescens*), Meadow-grasses (*Poa* spp.) and Yorkshire-fog (*Holcus lanatus*). Field Wood-rush (*Luzula campestris*) a small low growing plant, is frequent amongst the grasses. Plants of particular interest include Burnet Saxifrage (*Pimpinella saxifraga*) and two Essex Red Data List species: Lesser Calamint (*Clinopodium calamintha*) and Wild Clary (*Salvia verbenaca*), this latter species often associated with old churchyard grasslands.

Selection criteria: HCr10, SCr15

BAP Priority Habitats:

Date of selection: 1991



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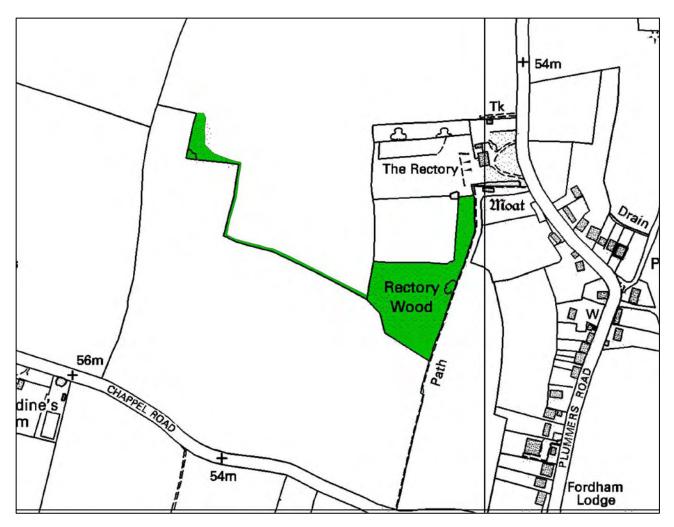
Co41 Lodge Hills (9.7 ha) TL 927325

This area of extensive grazed hillside grassland has westerly and northerly aspects sloping towards the River Stour. The well drained upper slopes mainly exhibit acid conditions whilst species of the lush lower grassland slopes are those indicative of neutral semi-improved grassland. Among a wide diversity of grasses found are Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue (*Festuca rubra*), Crested Dog's-tail (*Cynosurus cristatus*), Bent-grasses (*Agrostis* spp.), Yorkshire-fog (*Holcus lanatus*), Meadow-grasses (*Poa* spp.) and Yellow Oat-grass (*Trisetum flavescens*). Species of the upper slopes characterising the acid soils include Gorse (*Ulex europaeus*), Sheep's Sorrel (*Rumex acetosella*), Common Stork's-bill (*Erodium cicutarium*) and Mouse-ear-hawkweed (*Pilosella officinarum*). The bank grassland towards the south of the site has abundant Field Wood-rush (*Luzula campestris*) generally indicative of relatively infertile grassland. Other species recorded include Common Bird's-foot-trefoil (*Lotus corniculatus*), Lesser Trefoil (*Trifolium dubium*), Autumn Hawkbit (*Leontodon autumnalis*) and Grass Vetchling (*Lathyrus nissolia*). Larger tracts of relatively unimproved grassland are rare in the Essex landscape, and therefore constitute important habitat for conservation.

Selection criteria: HCr11

UK BAP Priority Habitats: Lowland Dry Acid Grassland (UK)

Date of selection: December 2008



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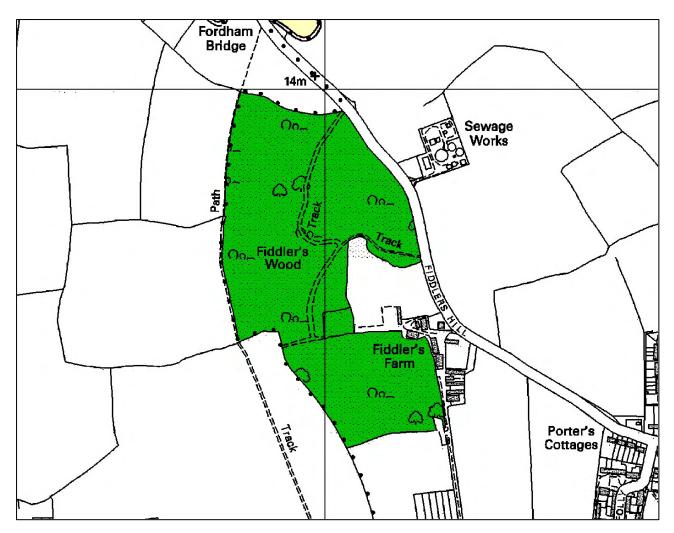
Co42 Rectory Wood (1.5 ha) TL 929293

Rectory Wood has a high canopy of Pedunculate Oak (*Quercus robur*) standards, with some Beech (*Fagus sylvatica*). Blocks of Hazel (*Corylus avellana*) and Sweet Chestnut (*Castanea sativa*) coppice form a scattered shrub canopy, along with several Holly (*Ilex aquifolium*) bushes. The ground flora is bare in places, but Wood Anemone (*Anemone nenorosa*), a plant strongly associated with ancient woodland, is abundant to the north of the wood. Other species present include Red Currant (*Ribes rubrum*) and Gooseberry (*Ribes uva-crispa*). The hedgerow continuing west of the wood is the 'ghost' outline of the once larger extent of Rectory wood. A diverse tree, shrub and ground flora is to be found along its length. Small-leaved Lime (*Tilia cordata*) and Midland Hawthorn (*Crataegus laevigata*), species typical of ancient wood and hedgerows, are accompanied by other herbs of interest including Wood Anemone and Bluebell (*Hyacinthoides non-scripta*).

Selection criteria: HCr1(b), HCr9

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Hedgerows (UK); Ancient Woodland (Essex)

Date of selection: December 2008



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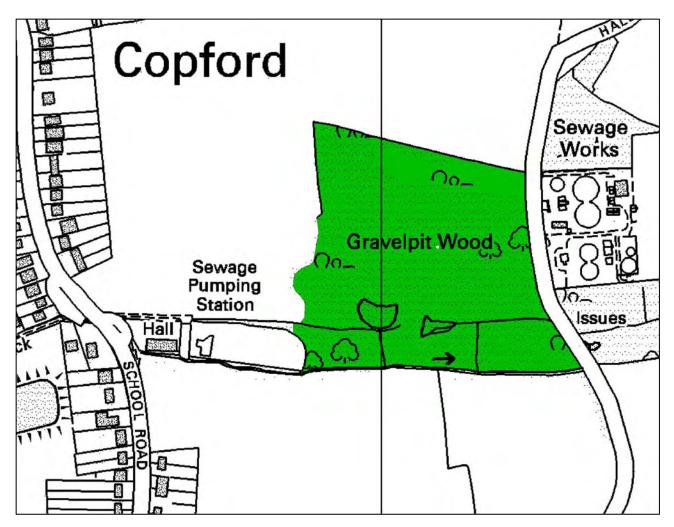
Co43 Fiddlers Wood (11.0 ha) TL 929267

This ancient wood comprises Pedunculate Oak (*Quercus robur*), Sweet Chestnut (*Castanea sativa*), Ash (*Fraxinus excelsior*), Silver Birch (*Betula pendula*) and Hazel (*Corylus avellana*) with some planted Beech (*Fagus sylvatica*) and a scrub layer of Blackthorn (*Prunus spinosa*) and Elder (*Sambucus nigra*). The ground flora, though largely dominated by Bramble (*Rubus fruticosus agg*) in places, has areas where Bluebell (*Hyacinthoides non-scripta*) and Wood Anemone (*Anemone nemorosa*) are abundant.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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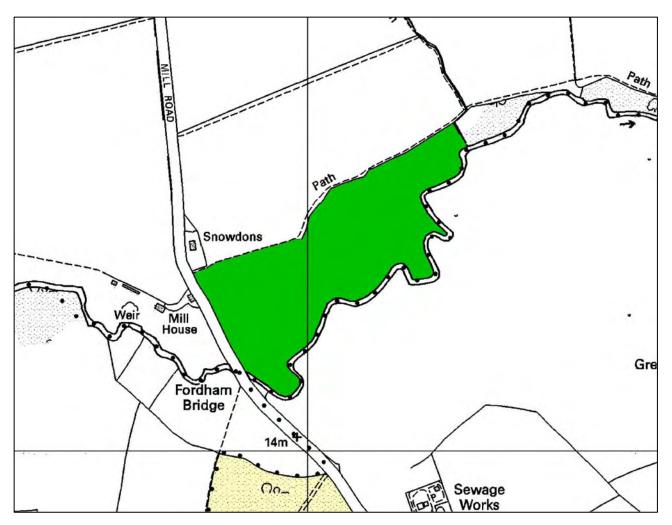
Co44 Pits Wood (5.0 ha) TL 931234

Situated in old gravel pit workings, this wood has a diverse canopy and scrub composition which includes Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Hornbeam (*Carpinus betulus*), Spindle (*Euonymus europaeus*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*) and Elm (*Ulmus sp.*) with a developing woodland flora dominated by Dog's Mercury (*Mercurialis perennis*) and Bramble (*Rubus fruticosus agg*). 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*), Marsh Bedstraw (*Galium palustre*) and Cyperus Sedge (*Carex pseudocyperus*).

Selection Criteria: HCr2(c)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK)

Date of selection: 1991



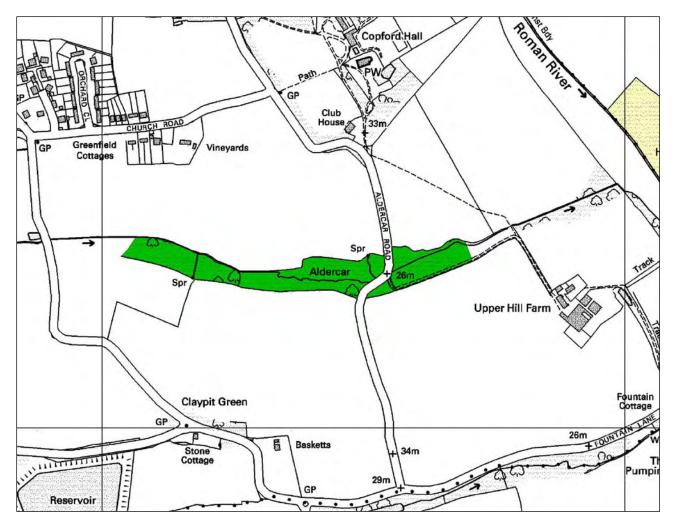
Co45 Fordham Bridge Meadow (5.9 ha) TL 930272

This grassland by the River Colne is part of the extensive Fordham Hall Estate, now owned and managed by the Woodland Trust. This site was formerly an arable field, but is now extensive grass and swamp habitat. Stands of Reed Canary-grass (*Phalaris arundinacea*), Common Reed (*Phragmites australis*), Soft Rush (*Juncus effusus*) and Greater Pond-sedge (*Carex riparia*) dominate areas of this wet grassland. Herbs found include Water Mint (*Mentha aquatica*), Meadowsweet (*Filipendula ulmaria*) and Cuckooflower (*Cardamine pratensis*), but of most significance are the large stands of Common Spike-rush (*Eleocharis palustris*), an Essex Red Data List species now uncommon in the Essex countryside due to loss of wetland habitat.

Selection criteria: HCr14, SCr15

UK BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: December 2008



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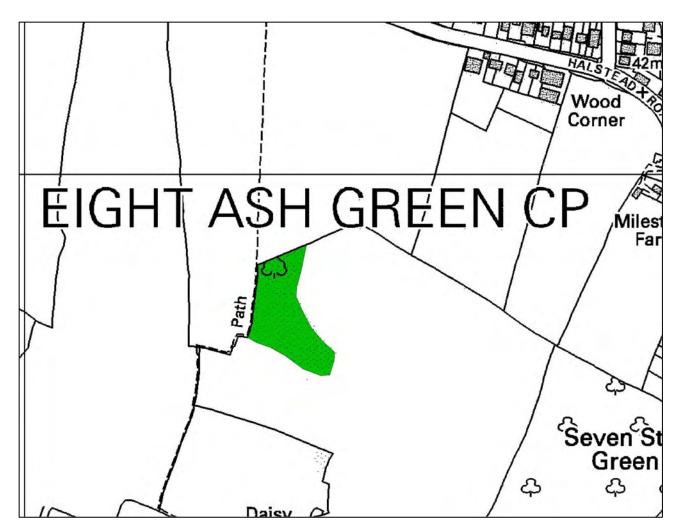
Co46 Aldercar, Copford (3.4 ha) TL 931223

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*). The marshy ground flora is of interest for the extensive cover of Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*) and horsetail (*Equisetum* sp.) as well as less frequent Moschatel (*Adoxa moschatellina*), Wood Speedwell (*Veronica montana*), Wood Anemone (*Anemone nemorosa*), Hart's-tongue Fern (*Phyllitis scolopendrium*) and Red Currant (*Ribes rubrum*). The western portion contains open willow carr supporting tall ruderals such as Meadowsweet (*Filipendula ulmaria*), Marsh Thistle (*Cirsium palustre*) and willowherbs (*Epilobium* sp.), and includes Cuckooflower (*Cardamine pratensis*) and Marsh-marigold (*Caltha palustris*). Parts of the eastern block have been subject to recent disturbance, tree felling and earth movement.

Selection criteria: HCr2(b), HCr2(d)

BAP Priority Habitats: Wet Woodland, Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



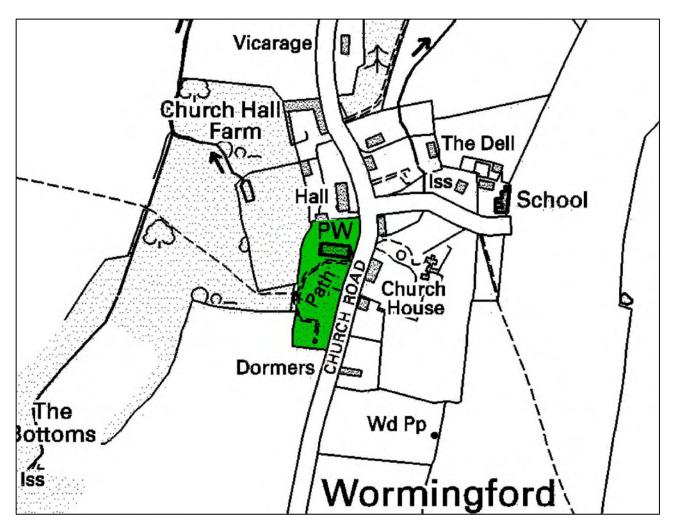
Co47 Daisy Green Grove (0.7 ha) TL 932258

This small remnant of woodland mainly comprises Pedunculate Oak (*Quercus robur*) standards with Hazel (*Corylus avellana*) coppice and occasional Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) while Bramble (*Rubus fruticosus* agg) scrub is frequent throughout. Although not listed as ancient wood on the English Nature Inventory, the structure and in particular the ground flora composition suggests that it is possibly an ancient fragment. Amongst the ground flora is Wood Anemone (*Anemone nemorosa*), a plant with a strong affinity to ancient woodland, whilst Goldilocks Buttercup (*Ranunculus auricomus*) and Wood Sedge (*Carex sylvatica*) are also ancient woodland indicator species.

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: December 2008



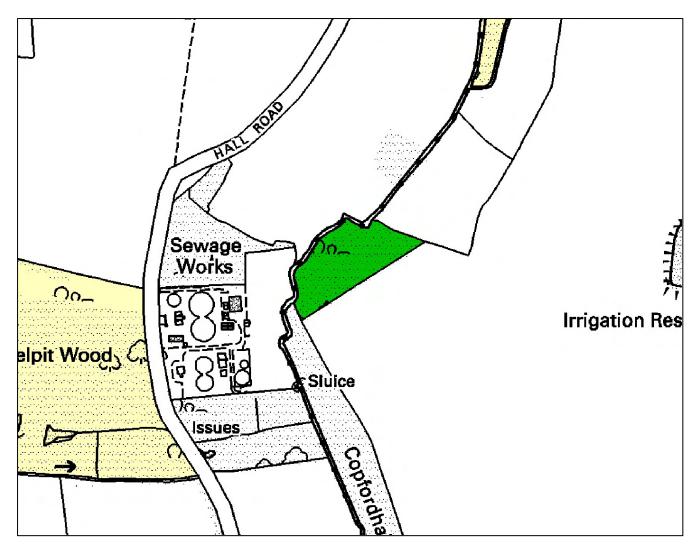
Co48 Wormingford Churchyard (0.5 ha) TL 933323

This churchyard has a wide variety of grasses including Sweet Vernal-grass (*Anthoxanthum odoratum*), Crested Dog's-tail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*), Yellow Oat-grass (*Trisetum flavescens*) and Meadow-grasses (*Poa* spp.). Species of interest recorded include three Essex Red Data List plants: Lesser Calamint (*Clinopodium calamintha*), Wild Clary (*Salvia verbenaca*), often associated with old churchyard grasslands and Hart's-tongue Fern (*Phyllitis scolopendrium*), an evergreen perennial fern mostly found in shady moist locations. Bats are known to have used the church buildings as a roost site.

Selection criteria: HCr11, SCr15

UK BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: 1991



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Co49 Copfordhall Wood North (0.7 ha) TL 933235

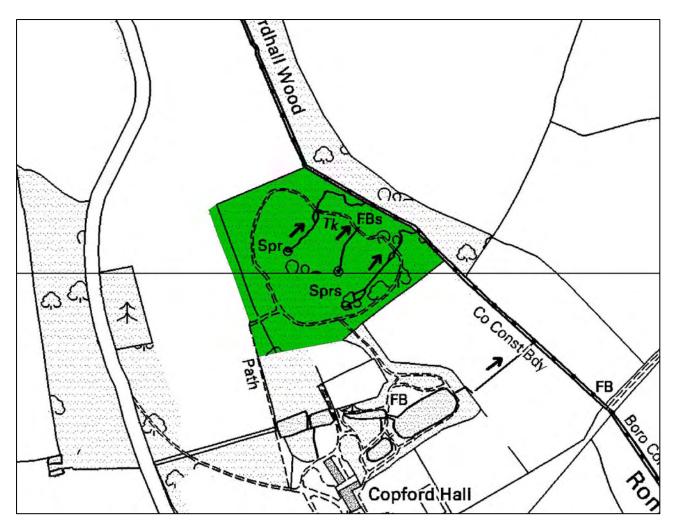
This small wood appears to be an ancient wood remnant on steep, gravelly ground, partially replanted with Larch (*Larix* sp.), Scots Pine (*Pinus sylvestris*) and Ash (*Fraxinus excelsior*). The native canopy is of Pedunculate Oak (*Quercus robur*), Hornbeam (*Carpinus betulus*) and Ash, with some Hazel (*Corylus avellana*), but is now being invaded by Sycamore (*Acer pseudoplatanus*). The ground flora has abundant Bluebell (*Hyacinthoides non-scripta*), along with lesser quantities of Moschatel (*Adoxa moschatellina*), Ramsons (*Allium ursinum*), Wood Anemone (*Anemone nemorosa*), Dog's Mercury (*Mercurialis perennis*) and Red Campion (*Silene dioica*). Meadowsweet (*Filipendula ulmaria*) and Stinging Nettle (*Urtica dioica*) are frequent in the damp, streamside zone.

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: December 2008 Date of l

Date of last revision: -



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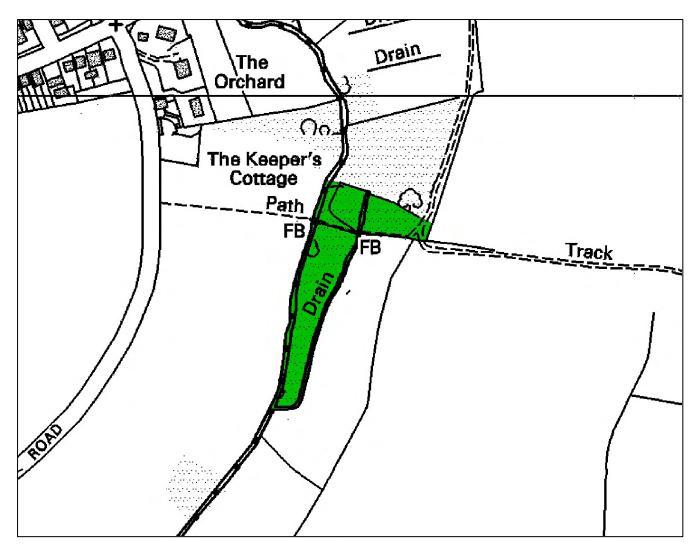
Co50 Copford Hall Wood (3.4 ha) TL 934230

Sycamore (*Acer pseudoplatanus*), Beech (*Fagus sylvatica*), and Pedunculate Oak (*Quercus robur*) dominate the high canopy on the upper drier slopes in the western half of this wood, whilst Ash (*Fraxinus excelsior*) becomes the dominant tree over the easterly sloping part of the wood, from where the springs emanate. Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) form a scattered shrub layer throughout the woodland. Although this wood is not recorded as ancient, the ground flora has abundant Bluebells (*Hyacinthoides non-scripta*) and extensive patches of Dog's Mercury (*Mercurialis perennis*). The additional presence of a range of species including Wood Anemone (*Anemone nemorosa*), Wood Sedge (*Carex sylvatica*), Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), Three-nerved Sandwort (*Moehringia trinervia*), Wood Millet (*Milium effusum*), Ramsons (*Allium ursinum*) and Wood Speedwell (*Veronica montana*) suggests that the site may be derived from ancient woodland, although past management may have significantly altered the native canopy composition.

Selection Criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



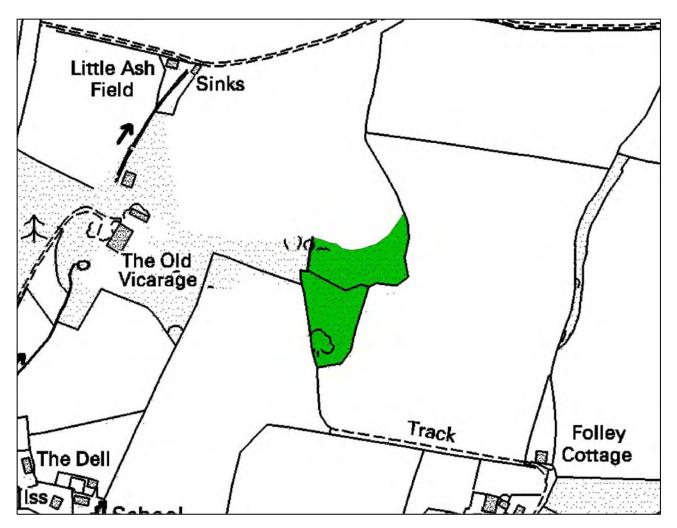
Co51 Keeper's Cottage Wood (1.3 ha) TL 935238

The main body of this wood comprises two close, parallel and undoubtedly 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 (*Festuca gigantea*), Bluebell (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*) and Three-nerved Sandwort (*Moehringia trinervia*).

Selection criteria: HCr2(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK)

Date of original selection: December 2008 Date of last revision: -



Co52 Old Vicarage Grove, Wormingford (0.7 ha) TL 936325

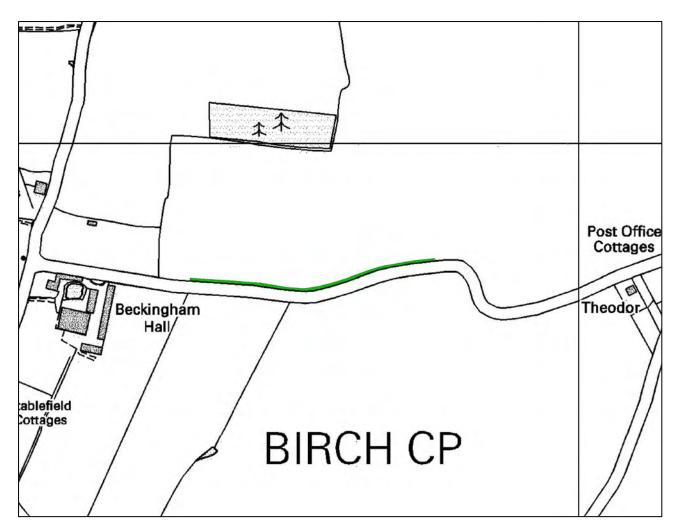
Ash (*Fraxinus excelsior*) dominates the canopy of the southern part of this streamside wood. Scattered Elder (*Sambucus nigra*) and Hazel (*Corylus avellana*) coppice form a shrub layer. To the west of the stream Ramsons (*Allium ursinum*) is abundant on the lower slopes, while patches of Bluebell (*Hyacinthoides non-scripta*) colonise the upper drier slopes. Dog's Mercury (*Mercurialis perennis*) is abundant in much of the wood. Alongside the stream channel, Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), an Essex Red Data List species is found in small isolated patches. However, large quantities of this plant are found on very wet marshy ground beneath tall Alder (*Alnus glutinosa*) that dominates the north section of the wood.

Selection criteria: HCr2(d), SCr15

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Wet Woodland (UK)

Date of selection: December 2008

Date of last revision: -



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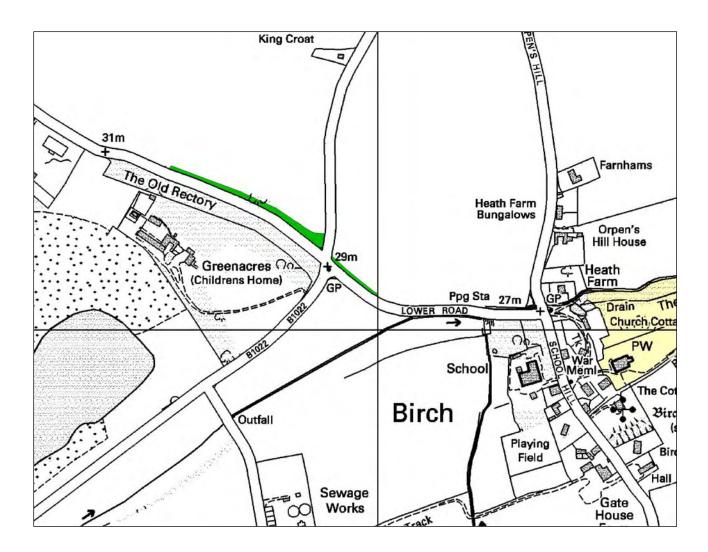
Co53 Beckingham Hall Road Verge (0.1 ha) TL 93622280

This verge habitat is approximately 335 metres in length and is designated due to the presence of Lesser Calamint (*Clinopodium calamintha*), an Essex Red Data List species. This intensely aromatic plant is found scattered in varying quantity along the verge. In Essex this species is now generally confined to a few limited habitats such as dry sunny south facing verges and churchyards.

Selection criteria: SCr15

BAP Priority Habitats:

Date of selection: 1991



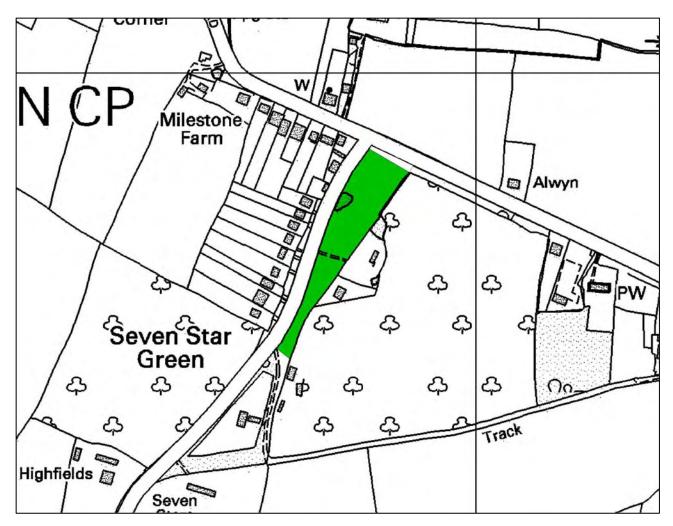
Co54 Lower Road, Birch Verges (0.3 ha) TL938201

This Site comprises a length of verge on the northern side of Lower Road which comprises sections both to the west and east of Maldon Road (B1022) The eastern section is an Essex County Council Special Roadside Verge. The main indicator species along this ancient sunken lane is Lesser Calamint (*Clinopodium calamintha*), an Essex Red Data List species, which occurs in locally abundant patches. The eastern section contains few other herbs of interest and is becoming dominated by Bramble (*Rubus fruticosus* agg.) and Nettles (*Urtica dioica*) in the absence of appropriate management. The steep and high slopes of the western section support a greater variety of plant species being more open, and are characterised by Bluebell (*Hyacinthoides non-scripta*), Wood Sage (*Teucrium scorodonia*), Bracken (*Pteridium aquilinum*), Bramble, Field Pansy (*Viola arvensis*) and Red Campion (*Silene dioica*) as well as Lesser Calamint. Foxglove (*Digitalis purpurea*) and Scarlet Pimpernel (*Anagallis arvensis*) grow on recently disturbed ground following tree clearance. Parts of the slopes are shaded by large Field Maple (*Acer campestre*) as well as Holly (*Ilex aquifolium*), Sycamore (*Acer pseudoplatanus*), Blackthorn (*Prunus spinosa*) and Silver Birch (*Betula pendula*).

Selection criteria: SCr15

BAP Priority Habitats:

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Date of selection: 1991 (in part)
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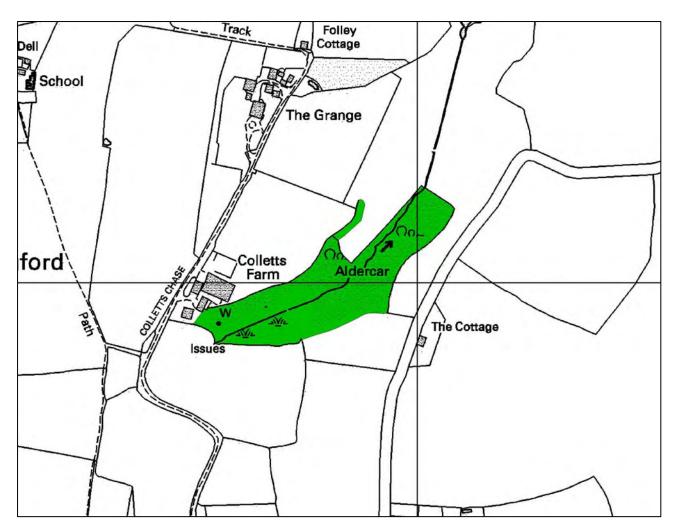
Co55 Seven Star Green (0.8 ha) TL 939258

This green comprises species-rich acidic grassland and a small pond with surrounding scrub. Amongst grasses such as Sweet Vernal-grass (*Anthoxanthum odoratum*), Red Fescue (*Festuca rubra*), Meadow-grasses (*Poa* spp.) and Yorkshire-fog (*Holcus lanatus*) is the diminutive early-flowering herb Field Wood-rush (*Luzula campestris*). Cuckooflower (*Cardamine pratensis*) flourishes in the damp areas near the pond, whilst the main grassland has a rich and diverse species assemblage including Grass Vetchling (*Lathyrus nissolia*), and Zigzag Clover (*Trifolium medium*). Four Essex Red Data List species are found in this site: Sneezewort (*Achillea ptarmica*), Heath-grass (*Danthonia decumbens*), Velvet Bent (*Agrostis canina*) and Tormentil (*Potentilla erecta*). Species-rich, ancient, unimproved turf of this type is now extremely rare in Essex.

Selection criteria: HCr10, SCr15

Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: 1991



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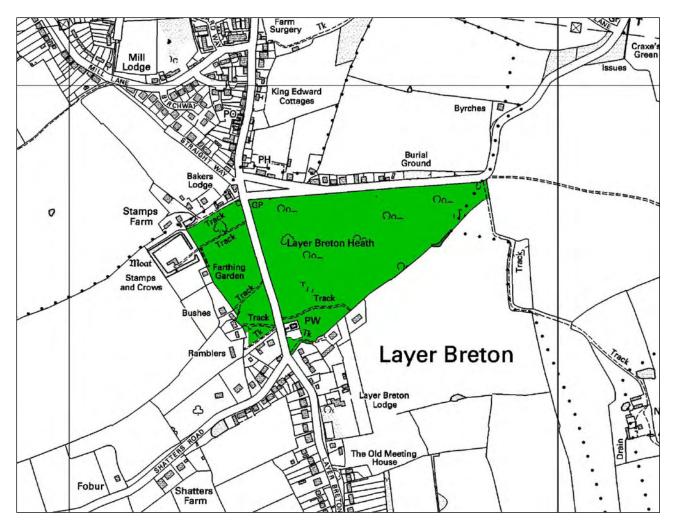
Co56 Aldercar, Wormingford (3.1 ha) TL 939320

Alder (*Alnus glutinosa*) with Pedunculate Oak (*Quercus robur*), Crack Willow (*Salix fragilis*) and old Hazel (*Corylus avellana*) coppice characterise the principal structure of this streamside wood. It can, however, be split into three areas. The west exhibits open areas, particularly on the upper slopes, which are dominated by Common Nettle (*Urtica dioica*), but Bluebell (*Hyacinthoides non-scripta*) is also abundant in localised patches. The central zone of the wood is still open but in the vicinity of the stream it is very boggy. It is in this area that Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*) and Large Bittercress (*Cardamine amara*), both Essex Red Data List species are found. Towards the east end of the wood, tall coppiced Alder provides a mostly shaded habitat where Ramsons (*Allium ursinum*) dominates the ground flora near the stream.

Selection criteria: HCr1(a), HCr2(d), SCr15

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Wet Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co57 Layer Breton Heath (11.6) TL 945187

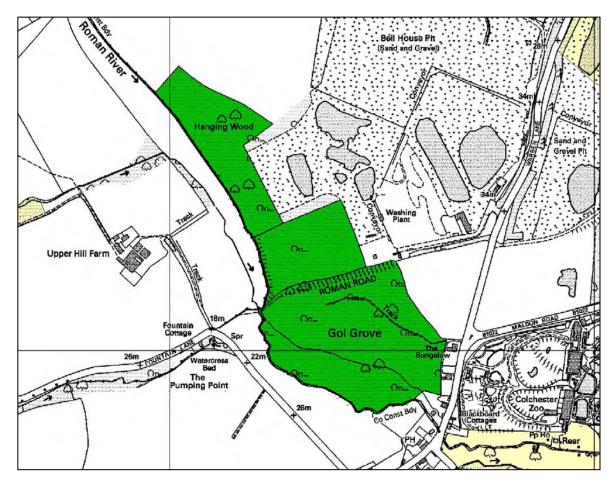
Layer Breton Heath comprises relict acidic grass heath with scrub and secondary wood. The woodland canopy structure is dominated by Pedunculate Oak (*Quercus robur*) and Silver Birch (*Betula pendula*) with scattered willows (*Salix* spp.). Gorse (*Ulex europaeus*) and Bramble (*Rubus fruticosus* agg.) are frequent in the shrub layer, the gorse fringing areas of open grassland. The grassland habitat to the east of the Layer Breton Hill road provides the most interesting habitat with contrasting assemblages. Sweet Vernal-grass (*Anthoxanthum odoratum*), Bent-grasses (*Agrostis* spp.) and Red Fescue (*Festuca rubra*) are characteristic of the drier grassland with herbs including Heath Bedstraw (*Galium saxatile*), Wood Sage (*Teucrium scorodonia*), Common Knapweed (*Centaurea nigra*), Tormentil (*Potentilla erecta*) and Common Bird's-foottrefoil (*Lotus corniculatus*). Recorded from damper acid grassland pockets in the heath are interesting species including three Essex Red Data Listed (ERDL) plants: Mat-grass (*Nardus stricta*), Velvet Bent-grass (*Agrostis canina*) and Oval Sedge (*Carex leporina*). Recent pipeline work along the northern edge of the site has resulted in an open disturbed habitat where Dittander (*Lepidium latifolium*) has established along with Water Purslane (*Lythrum portula*), which has managed to colonise flooded ruts in this area, both species being ERDL plants.

Selection Criteria: HCr18, SCr15

BAP Priority Habitats: Lowland Heathland (UK/Essex)

Date of selection: 1991

Date of last revision: 2008



Co58 Gol Grove/Hanging Wood (18.7 ha) TL 943222

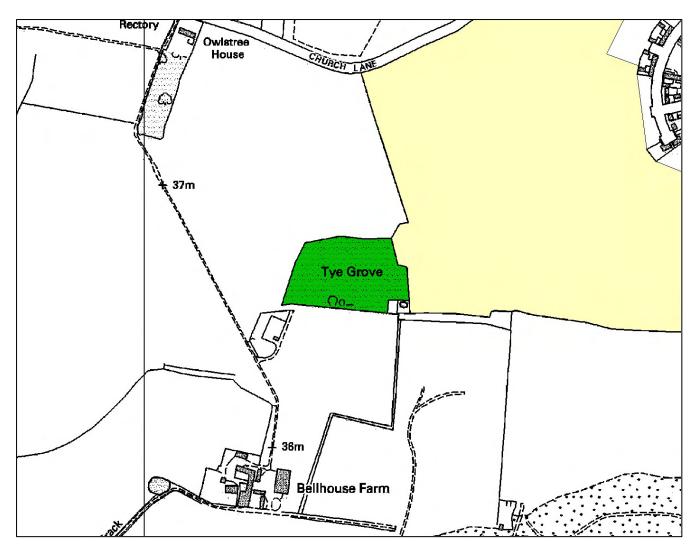
This site comprises the ancient woods of Gol Grove and Hanging Wood, connected by a square of mature but recent oak wood, and also an area of tall swamp and tall willow scrub woodland. The canopy of Hanging Wood is dominated by overgrown Hornbeam (*Carpinus betulus*) coppice, with some Sweet Chestnut (*Castanea sativa*), Ash (*Fraxinus excelsior*), Pedunculate Oak (*Quercus robur*), Alder (*Alnus glutinosa*) and Field Maple (*Acer campestre*). The ground flora is relatively rich in ancient woodland indicator species, including Moschatel (*Adoxa moschatellina*), Ramsons (*Allium ursinum*), Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), Climbing Corydalis (*Ceratocapnos claviculata*) and Primrose (*Primula vulgaris*) amongst abundant Bluebell (*Hyacinthoides non-scripta*). By contrast, Gol Grove is dominated by old Sweet Chestnut coppice, with some Oak, Ash and Holly (*Ilex aquifolium*). The ground flora is, again, dominated by Bluebell.

The area of tall swamp to the west of Gol Grove has extensive beds of Pond-sedge (*Carex riparia* and *C. acutiformis*), along with Marsh Thistle (*Cirsium palustre*), Angelica (*Angelica sylvestris*), Meadowsweet (*Filipendula ulmaria*) and Yellow Flag-iris (*Iris pseudacorus*). It is fringed by stands of Pedunculate Oak and willows (*Salix spp.*) with Elder (*Sambucus nigra*) scrub on drier ground.

Selection criteria: HCr1(a); HCr2(a); HCr23

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: 1991



Co59 Tye Grove (1.9 ha) TL 943234

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*) invasion is, unfortunately, well-advanced and should be controlled. The understorey and ground flora includes Spindle (*Euonymus europaeus*), abundant Bluebell (*Hyacinthoides non-scripta*), Holly (*Ilex aquifolium*), Three-nerved Sandwort (*Moehringia trinervia*), Red Campion (*Silene dioica*) and Lesser Celandine (*Ranunculus ficaria*).

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: December 2008 Date of last revision: -



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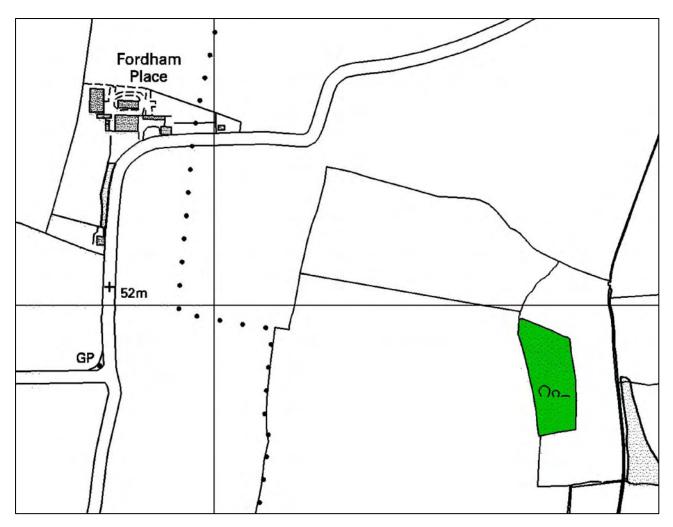
Co60 Fordham Heath (10.7 ha) TL 945264

This site comprises scrubby wood in the northern section and relict acidic grassland and heath to the south. The woodland section is a mix of young trees including Pedunculate Oak (*Quercus robur*) and Silver Birch (*Betula pendula*) with Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) scrub. This is mainly a dry habitat, but small wetter areas exist. The open area of Fordham Heath to the south supports a wide variety of herbs including much Common Knapweed (*Centaurea nigra*) and Lesser Stitchwort (*Stellaria graminea*) with lesser amounts of Heath Bedstraw (*Galium saxatile*) and Tormentil (*Potentilla erecta*). In amongst the diverse herbage are six Essex Red Data List species: Heather (*Calluna vulgaris*), Heath-grass (*Danthonia decumbens*), Oval Sedge (*Carex leporina*), Scaly Male-fern (*Dryopteris affinis*), Sneezewort (*Achillea ptarmica*) and Harebell (*Campanula rotundifolia*). The ponds support other interesting species including Marsh-marigold (*Caltha palustris*) and Lesser Spearwort (*Ranunculus flammula*).

Selection criteria: HCr18, HCr2(c), HCr2(d), SCr15

BAP Priority Habitats: Lowland Heathland (UK); Heathland (Essex)

Date of selection: 1991



Co61 Wood near Fordham Place (0.8 ha) TL 944289

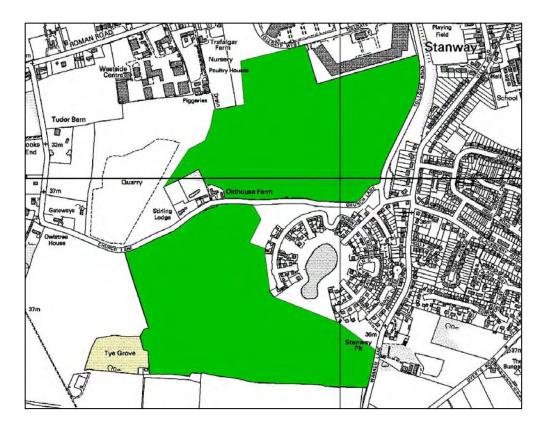
This site is a gently west sloping woodland characterised mainly by coppiced Hazel (*Corylus avellana*) and tall Ash (*Fraxinus excelsior*) coppice. Some Hornbeam (*Carpinus betulus*) coppice is confined to the northwest corner. Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*) form a scattered shrub canopy. The ground flora is dominated by patches of either Bluebell (*Hyacinthoides non-scripta*) or Bramble (*Rubus fruticosus agg*). Amongst this, Yellow Archangel (*Lamiastrum galeobdolon*) is frequent, whilst Wood Anemone (*Anemone nemorosa*), although rare here, is a plant strongly associated with ancient woodland.

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: December 2008

Date of last revision: -



Co62 Stanway Pits (49.2 ha) TL 946239

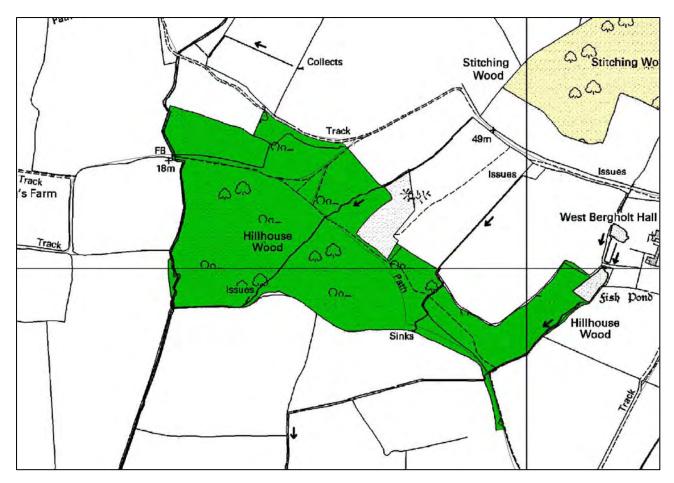
This site comprises an extensive area of brownfield invertebrate habitat to the west of Colchester, formed from two disused sand pits. "Stanway Pit" to the south is structurally the more complex of the two main areas, and includes bare, sparsely vegetated cliffs and other banks, willow scrub, small pools and flower-rich ruderal grassland on more level ground. Four nationally threatened (Red Data Book) bees and wasps have been recorded as nesting here, including the UK BAP digger wasp *Cerceris quinquefasciata* (RDB3) and its brood parasite cuckoo-bee *Hedychrum niemelai* (RDB3), along with the Small Blue Carpenter-bee *Ceratina cyanea* (RDB3). Other invertebrates of interest are the small woodlouse *Armadillidium nasatum*, which is often associated with disturbed brownfield habitats and the Nationally Scarce (Nb) Adonis' Ladybird. The flora includes Yellow-wort (*Blackstonia perfoliata*) and Dark Mullein (*Verbascum nigrum*), both Essex Red Data List plants more normally associated with chalky soils and also Blue Fleabane (*Erigeron acer*) (another Essex Red Data List species).

"Oldhouse Farm Pit" to the north is a broad, shallow basin, with nesting habitat largely confined to its steeper margins, but with an abundance of flower-rich foraging habitat that will be used by species nesting both here and in the Stanway Pit to the south. One species of interest recorded here is the Golden-rod Nomad Bee *Nomada rufipes*. This is a brood parasite of two solitary bees that are normally associated with heathland, thereby demonstrating the ecological substitute niche that such old sand pits can occupy, taking the place of traditional heathland that is now all but lost from this part of the county.

Selection criteria: HCr20; SCr14; SCr15

BAP Priority Habitats: Open Mosaic Habitats on Previously Developed Land (UK); Brownfield Sites (Essex)

Date of original selection: December 2008 Date of last revision: -



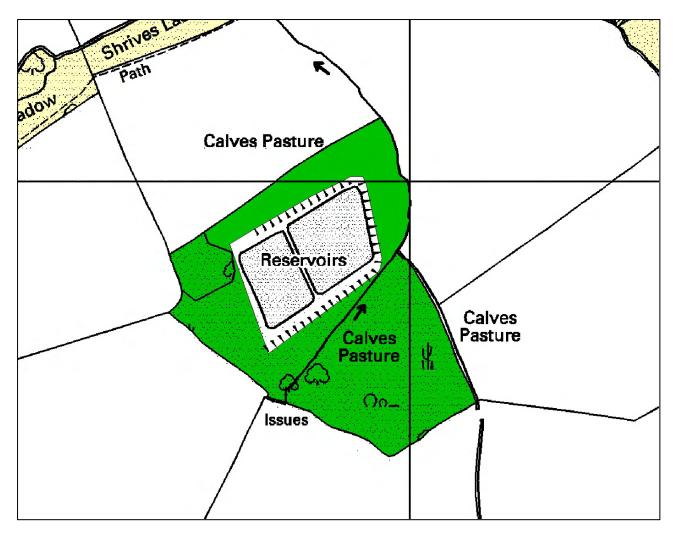
Co63 Hillhouse Wood (15.4 ha) TL 945280

This large ancient wood, owned and managed by The Woodland Trust, is composed predominantly of Hazel (*Corylus avellana*) coppice with Pedunculate Oak (*Quercus robur*) standards and some Ash (*Fraxinus excelsior*), Sweet Chestnut (*Castanea sativa*) and Alder (*Alnus glutinosa*). Both Hawthorn (*Crataegus monogyna*) and Midland Hawthorn (C. *laevigata*) are found in the shrub canopy. The drier slopes beneath the canopy and in the open cleared areas have abundant Bluebell (*Hyacinthoides non-scripta*). The rare Early Purple Orchid (*Orchis mascula*) is confined to a small area on the north edge of the wood. Besides the streams, the marshy habitat supports Opposite-leaved Golden Saxifrage (*Chrysosplenium oppositifolium*) and Marsh Marigold (*Caltha palustris*). Other species of interest in this wood include Yellow Archangel (*Lamiastrum galeobdolon*) and Pignut (*Conopodium majus*).

Selection criteria: HCr1(a), SCr15

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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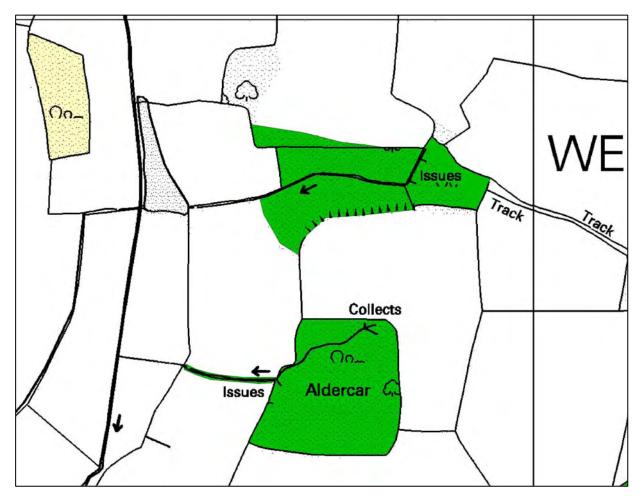
Co64 Calves Pasture (5.5 ha) TL 949198

Very little evidence remains of the character defining Calves Pasture as an ancient woodland site. It has been extensively replanted with Pedunculate Oak (*Quercus robur*), Willow (*Salix* sp.), Hazel (*Corylus avellana*) and Sycamore (*Acer pseudoplatanus*). Much of the site has been cleared and the topography changed with the excavation of two reservoirs located in the northern half of the site. Consequently, the floral composition of the open ground around the reservoirs where willows have been planted does not resemble that of ancient woodland. Marsh Thistle (*Cirsium palustre*) and Soft-rush (*Juncus effusus*) dominate where the wetter soil conditions exist, while Creeping Thistle (*Cirsium arvense*), Common Bird'sfoot-trefoil (*Lotus corniculatus*) and Red Bartsia (*Odontites vernus*) are found in the open grassland that has developed.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



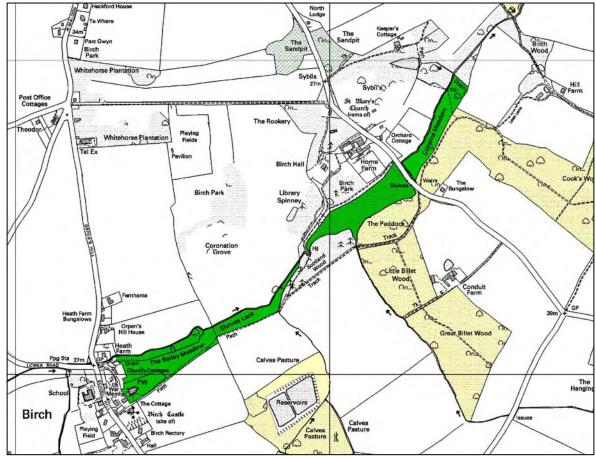
Co65 West Bergholt Wet Woodlands (4.5 ha) TL 948286

These two woods in close proximity to one another are both wet woodlands, but contrast in that Aldercar wood to the south is ancient, whilst the northern block is recent wood less than 130 years old. Tall coppiced Alder (*Alnus glutinosa*) dominates Aldercar with Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*) and Honeysuckle (*Lonicera periclymenum*) occurring in the shrub layer, but generally confined to the drier areas. The ground flora is very rich, with extensive areas of Ramsons (*Allium ursinum*) and three Essex Red Data species: Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), the rarer Alternate-leaved Golden-saxifrage (*C. alternifolium*) and Large Bitter-cress (*Cardamine amara*). The site also includes the Alder lined stream draining west of Aldercar.

In contrast, the northern block of woodland though recent has a good structure and a species diverse ground flora possibly surviving due to the topography of the site being a stream valley with wet boggy areas on the lower slopes near the stream. Alder, Ash (*Fraxinus excelsior*) and plantation Willows (*Salix* spp.), characterise the principal canopy trees, with Elder (*Sambucus nigra*) and Hawthorn (*Crataegus monogyna*) forming a scattered shrub layer. The drier upper slopes are the least interesting with Bracken (*Pteridium aquilinum*) and Bramble (*Rubus fruticosus agg*) dominating the ground flora, however Yellow Archangel (*Lamiastrum galeobdolon*), a species associated with ancient woodland is found throughout the wood. In contrast, the wet areas support colonies of Opposite-leaved Golden-saxifrage, with scattered Cuckooflower (*Cardamine pratensis*).

Selection criteria: HCr1(a), HCr2(b), HCr2(d), SCr15

BAP Priority Habitats: Lowland Mixed deciduous woodland, Wet Woodland (UK); Ancient Woodland (Essex)



Date of selection: 1991 (in part) **Date of last revision:** December 2008

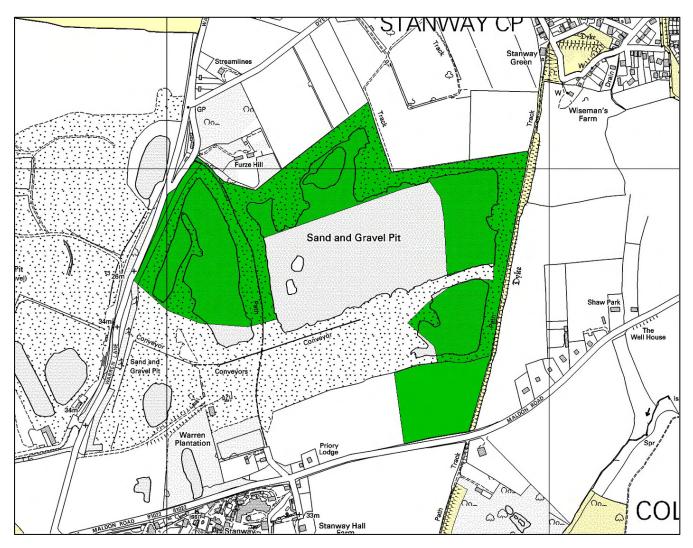
Co66 Birch Valley (9.0 ha) TL 947201

The Churchyard located at the western end of this stream valley site has a freely-draining grass sward typified by Red Fescue (*Festuca rubra*), Sweet Vernal-grass (*Anthoxanthum odoratum*), and Bent-grasses (*Agrostis* spp.) along with the early flowering herb, Field Wood-rush (*Luzula campestris*). The acid soils support a range of herb species including Sheep's Sorrel (*Rumex acetosella*), Mouse-ear-hawkweed (*Pilosella officinarum*) and Lesser Stitchwort (*Stellaria graminea*). Three species of particular interest are found in the churchyard: Harebell (*Campanula rotundifolia*), an Essex Red Data List plant characteristically found on infertile soils; Lesser Calamint (*Clinopodium calamintha*) and Lady's Bedstraw (*Galium verum*), all being indicators species of grasslands that have not been subjected to significant improvement.

The wet stream valley woodland to the east of the church has Willow (*Salix* sp.) plantation with a variety of other tree species including Pedunculate Oak (*Quercus robur*), and Field Maple (*Acer campestre*) with Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*) and Elder (*Sambucus nigra*) in the shrub layer. The marshy stream valley supports a range of herbs such as Bog stitchwort (*Stellaria uliginosa*), Greater Bird's-foot-trefoil (*Lotus pedunculatus*) and Marsh Thistle (*Cirsium palustre*). The stream as a whole is important as one of the very few Essex locations for the Beautiful Demoiselle Damselfly (*Calopteryx virgo*), with the adjacent habitats providing essential foraging habitat for these, and many other, insects.

Selection criteria: HCr2(c), HCr6(b), HCr10, SCr14, SCr15

BAP Priority Habitats: Lowland Grassland (UK/Essex)



Co67 Warren Lane Pit (31.3 ha) TL 954228

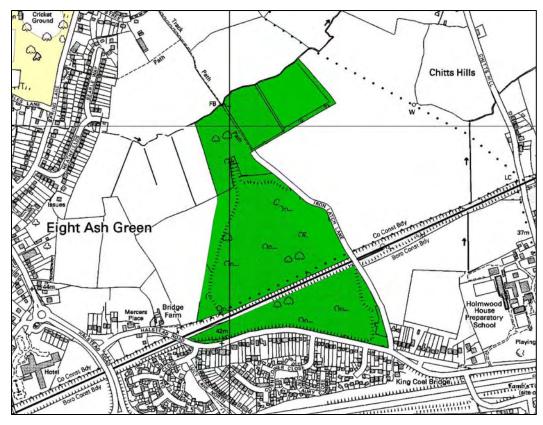
This Site comprises the now inactive parts of this large sand pit, comprising steep, sparsely vegetated cliffs and banks, flower-rich ruderal grasslands, areas of developing scrub and several more or less permanent bodies of water. Such brownfield sites are known to support important and characteristic invertebrate assemblages and survey work undertaken from the accessible parts of this Site has revealed this to also be the case here. This has revealed the presence of 10 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. A biodiversity study carried out by site owners Tarmac has revealed the presence of Smooth Newts, Common Frog and Common Toad (now a UK priority BAP species). The habitat mosaic is also attractive to a variety of birdlife, including Sand Martins, with Little Ringed Plovers also being reported.

Selection criteria: HCr20; SCr3; SCr11; SCr13; SCr14

BAP Priority Habitats: Open Mosaic Habitats on Previously Developed Land (UK); Brownfield Sites (Essex)

Date of original selection: December 2008

Date of last revision: -



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Co68 Iron Latch Lane Woods and Meadow (23.9 ha) TL 956260

This large site can be separated into three main habitat structures. The meadow in the far north-east corner is Iron Latch Meadow, managed by the Essex Wildlife Trust. This old, unimproved grassland supports a diverse flora including Common Spotted-orchid (*Dactylorhiza fuchsii*), Common Knapweed (*Centaurea nigra*), Heath Speedwell (*Veronica officinalis*), Barren Strawberry (*Potentilla sterilis*) and Hairy St. John's-wort (*Hypericum hirsutum*).

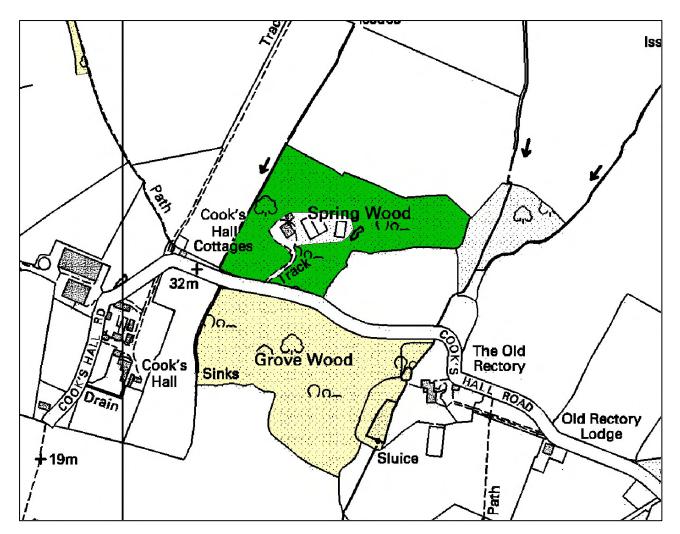
Adjoining to the west of the meadow is a small block of woodland with a composition dominated by Sweet Chestnut (*Castanea sativa*), except for some scattered Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) standards towards the north edge. A poor ground flora includes Bluebell (*Hyacinthoides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

Finally the largest block of habitat split by the railway line has developed on the site of an old pit that had its origins in the late nineteenth century. The structure of both blocks is similar comprising predominantly Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*) and Ash (*Fraxinus excelsior*) wood with Willows (*Salix* spp.) in the wetter areas. Higher free draining ground has Hawthorn (*Crataegus monogyna*), Gorse (*Ulex europaeus*) and Broom (*Cytisus scoparius*) 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*). The wetter valleys have ferns scattered under dense shading canopy, including Male-fern (*Dryopteris filix-mas*) and Broad Buckler-fern (*D. dilatata*).

Selection criteria: HCr2(b), HCr2(d), HCr10

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: 1991 (in part)



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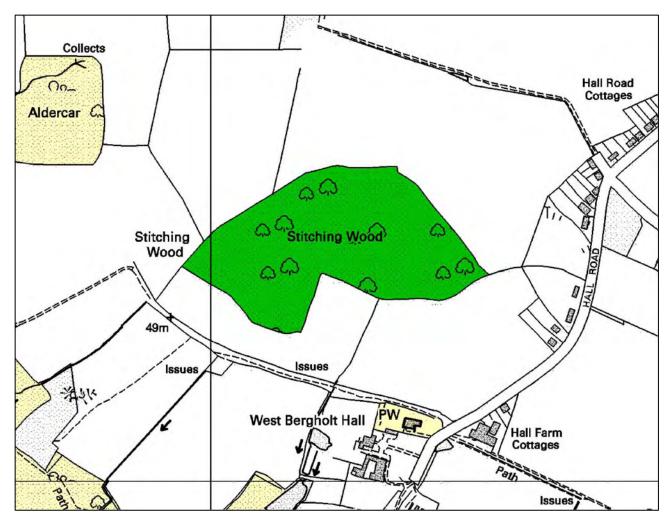
Co69 Spring Wood (2.4 ha) TL 952275

This secluded woodland with many cabins is managed as a recreational area, while several pathways have been created through the woodland Pedunculate Oak (*Quercus robur*) dominates the high canopy, along with Ash (*Fraxinus excelsior*). Field Maple (*Acer campestre*) and Elm (*Ulmus* sp.) form a sub-canopy, whilst Hazel (*Corylus avellana*) forms a shrub layer. A limited ground flora includes patches of Bramble (*Rubus fruticosus* agg) scrub and Dog's Mercury (*Mercurialis perennis*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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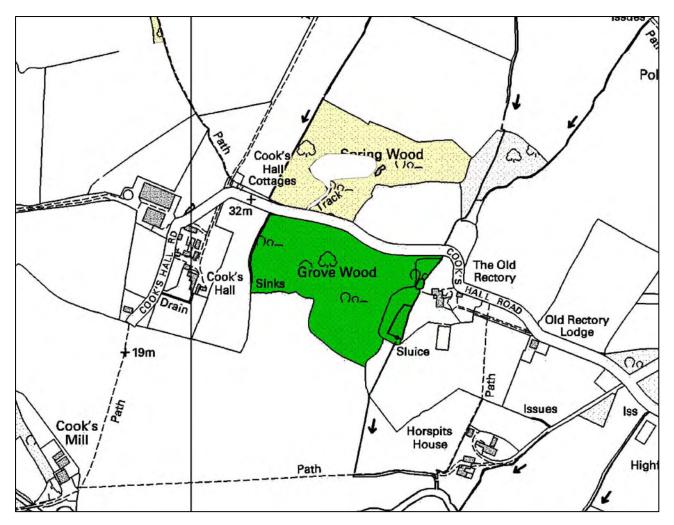
Co70 Stitching Wood (6.7 ha) TL 952284

Stitching Wood has a mixed broadleaved canopy of Pedunculate Oak (*Quercus robur*) standards, 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 the canopy and in the open glades where Bracken (*Pteridium aquilinum*) dominates later in the summer.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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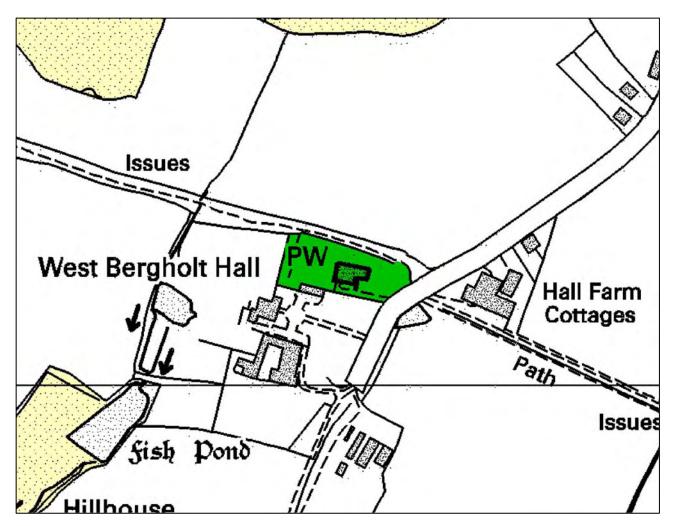
Co71 Grove Wood (3.5 ha) TL 952275

This gently south sloping wood is dominated by Pedunculate Oak (*Quercus robur*), with Wild Cherry (*Prunus avium*) scattered throughout the wood. Coppiced Hazel (*Corylus avellana*) forms a scattered shrub canopy, with patches of Holly (*Ilex aquifolium*) and Honeysuckle (*Lonicera periclymenum*). The upper slopes have abundant Bluebell (*Hyacinthoides non-scripta*), but the lower slopes are devoid of this species. Wood Anemone (*Anemone nemorosa*) is mostly found confined to the north-east corner of the wood.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co72 West Bergholt Hall Church (0.4 ha) TL 953281

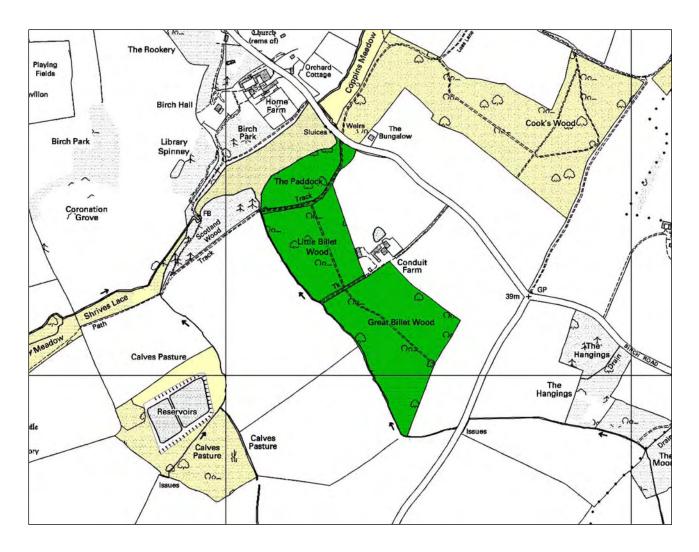
This small churchyard, though kept closely mown, has areas of unimproved grass near the church, where species of interest survive. Pignut (*Conopodium majus*) is found in a localised area to the north side of the churchyard, with Cuckooflower (*Cardamine pratensis*) nearby. Shining Crane's-bill (*Geranium lucidum*), an Essex Red Data List species, is found near tombs and marginal bank habitat.

Selection criteria: HCr10

UK BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: December 2008

Date of last revision: -



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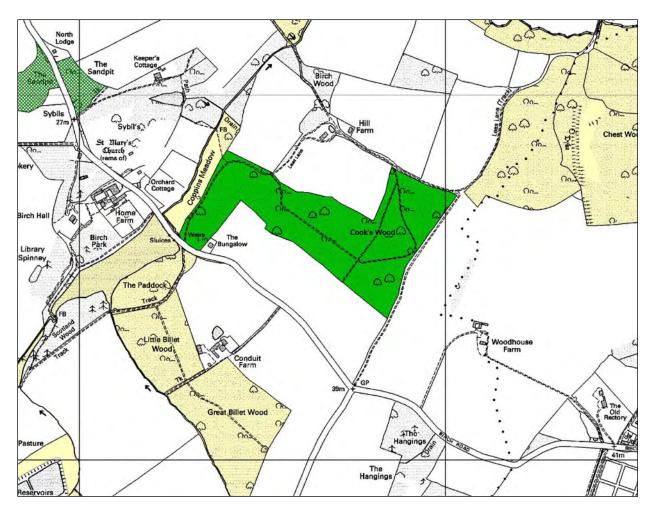
Co73 Billets Woods (13.1 ha) TL 953202

Ash (*Fraxinus excelsior*), Sweet Chestnut (*Castanea sativa*), Pedunculate Oak (*Quercus robur*) and Silver Birch (*Betula pendula*) are the main canopy species of these ancient woods amongst which a variety of broadleaved and coniferous species have been planted. Hazel (*Corylus avellana*) coppice, Field Maple (*Acer campestre*) and Hornbeam (*Carpinus betulus*) are also present. The ground flora includes large areas of Bramble (*Rubus fruticosus* agg.) cover as well as Bluebell (*Hyacinthoides non-scripta*), Red Campion (*Silene dioica*), Three-nerved Sandwort (*Moehringia trinervia*) and Primrose (*Primula vulgaris*). The freely drained soils also support locally abundant Bracken (*Pteridium aquilinum*) alongside Climbing Corydalis (*Ceratocapnos claviculata*), Wood Sage (*Teucrium scorodonia*) and Foxglove (*Digitalis purpurea*). Wood Spurge (*Euphorbia amygdaloides*) has also been recorded in the past. The Paddock has been included as additional woodland habitat. This includes large Pedunculate Oak and Beech (*Fagus sylvatica*) standards with Hazel and Hornbeam coppice, Holly (*Ilex aquifolium*) and planted Lime (*Tilia cordata x platyphyllos*) with relatively few species present amongst the ground flora including Bluebell and Wood Speedwell (*Veronica montana*).

Selection criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co74 Cooks Wood (13.2 ha) TL 956206

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 good range of woodland species, including Dog's Mercury (*Mercurialis perennis*), Bluebell (*Hyacinthoides non-scripta*), Primrose (*Primula vulgaris*), Skullcap (*Scutellaria galericulata*) and Moschatel (*Adoxa moschatellina*). Species indicative of freely draining acidic soils are also present in parts, such as Climbing Corydalis (*Ceratocapnos claviculata*), Wood Sage (*Teucrium scorodonia*) and Bracken (*Pteridium aquilinum*).

An area of sloping woodland adjacent to Coppins Meadow is not certainly ancient, but has been included as an addition to Cook's Wood for its diverse ground flora and structure. The canopy comprises mainly elm (*Ulmus* sp.), Hazel coppice, Pedunculate Oak standards, Field Maple (*Acer campestre*), birch (*Betula* sp.) and willow (*Salix* sp.) under which the notable species include Wood Speedwell (*Veronica montana*), Threenerved 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*), Common Marsh-bedstraw (*Galium palustre*) and Moschatel (*Adoxa moschatellina*).

Selection criteria: HCr1(a), HCr2(a)

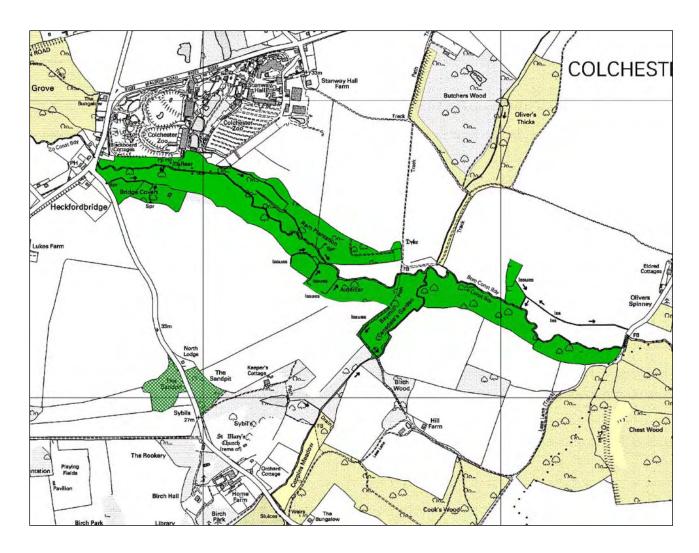
BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991

Date of last revision: December 2008

EECOS, December 2008

Colchester Borough Local Wildlife Sites Review



Co75 Ram Plantation (25.3 ha) TL 955214

This Site includes a series of willow plantations and native wet woodland, comprising a mosaic of seminatural and planted woodlands over a grassy and marshy ground cover, forming a valuable part of the Roman River Valley wildlife corridor.

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*), 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*) and Small Teasel (*Dipsacus pilosus*) is locally abundant along the southern margins of the plantation. A small area of 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. The sloping banks north of the river owned by Colchester Zoo have been subject to recent disturbance associated with the creation of a new wildlife area, which includes ponds, marshy areas and board walks. Ram Plantation itself includes Ash (*Fraxinus excelsior*) and oak standards, which make way for large Sweet Chestnut (*Castanea sativa*) and 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.

Cansdale's Garden and Aldercar

This area of sloping wet woodland contains large areas of aldercar and a diverse flora associated with the combination of marshy and dry woodland habitats. The upper slopes support a canopy of 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*).

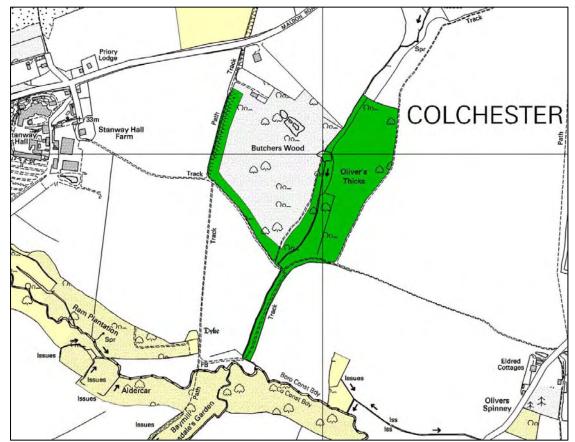
Eastern Woods

Much of this area of wet woodland comprises willow and poplar plantation with extensive stands of sedges and tall ruderals dominating the ground flora, which form a dense thatch and include pond-sedges, willowherbs, 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 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.

Selection criteria: HCr2(b), HCr2(d), SCr15

BAP Priority Habitats: Wet Woodland, Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co76 Oliver's Thicks /Butcher's Wood (8.9 ha) TL 959218

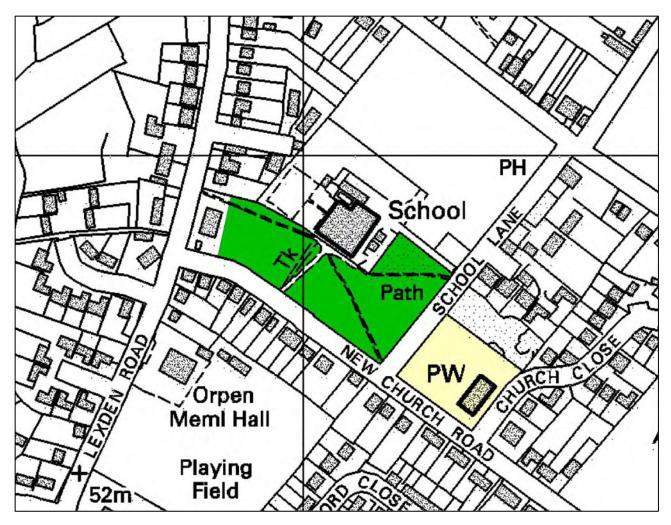
Oliver's Thicks lies on sloping ground and ranges from freely draining Silver Birch (*Betula pendula*) and Pedunculate Oak (*Quercus robur*) wood on the eastern slopes, down to old, coppiced Alder (*Alnus glutinosa*) on wetter ground close to the stream and around spring lines. Other canopy trees include some Hornbeam (*Carpinus betulus*) and Ash (*Fraxinus excelsior*), with some Hazel (*Corylus avellana*) and Holly (*Ilex aquifolium*) in the understorey. The varied ground flora includes Moschatel (*Adoxa moschatellina*), Wood Anemone (*Anemone nemorosa*), Climbing Corydalis (*Ceratocapnos claviculata*), abundant Bluebells (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*), Butcher's Broom (*Ruscus aculeatus*) and Wood Sage (*Teucrium scorodonia*). Butcher's Wood has been extensively cleared, leaving only a narrow belt of possibly ancient wood along its western and southern boundaries. The canopy cover includes some very large coppice stools of Sweet Chestnut (*Castanea sativa*) and standards of Pedunculate Oak, Silver Birch and Ash, with some Holly and Hawthorn (*Crataegus monogyna*). The ground flora is dominated by Bluebells.

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

Selection criteria: HCr1(a), HCr9

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Hedgerows (UK); Ancient Woodland, Ancient/species-rich Hedgerows and Green Lanes (Essex)

Date of original selection: 1991



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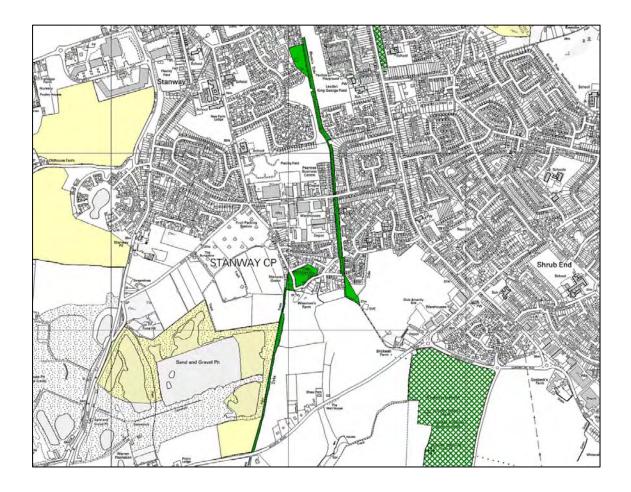
Co77 West Bergholt Heath (1.1 ha) TL 961278

This small species-rich and diverse heath is a relict of Bergholt Heath which covered most of the area of the village now under housing. It is now a 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 acid grassland has small areas dominated by Heath-grass (*Danthonia decumbens*) with Harebell (*Campanula rotundifolia*) and Heather (*Calluna vulgaris*) recorded as other species of note. Damper grassland found towards the east of the site has an area dominated by taller growing tussocks of Purple Moor-grass (*Molinea caerulea*). All four of these plants are scarce within the county and are Essex Red Data List species. Management issues include the spread of scrub woodland from the north-east corner of the site and the slow process of soil enrichment brought about by leaf litter accumulation.

Selection criteria: HCr18, SCr15

BAP Priority Habitats: Lowland Heathland (UK); Heathland (Essex)

Date of selection: 1991



Co78 Gryme's Dyke (7.1 ha) TL 960233

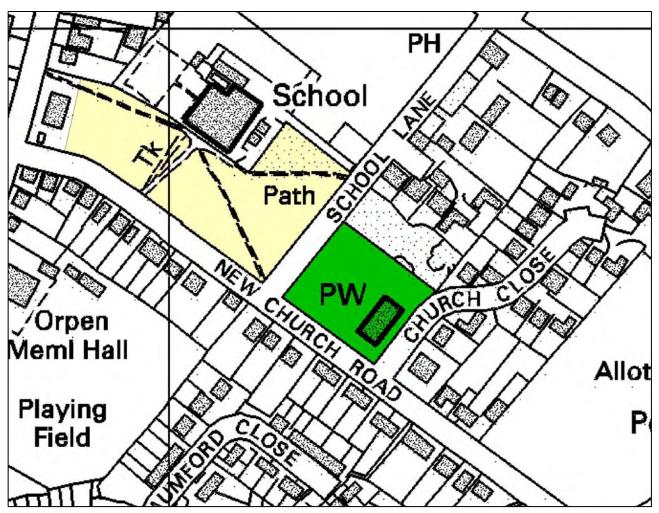
This site comprises the wooded earthworks of Gryme's Dyke plus Stanway Green and an area of acid grassland and scrub at its northern end. The ancient woodland is dominated by Pedunculate Oak (*Quercus robur*), with some Field Maple (*Acer campestre*) and Sycamore (*Acer pseudoplatanus*), and an understorey 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*). Areas of open, sandy ground support an acid grassland of Common Bent-grass (*Agrostis capillaris*), Sheep's Fescue (*Rumex acetosella*), Harebell (*Campanula rotundifolia*) (an Essex Red Data List plant), Sticky Groundsel (*Senecio viscosus*) and Gorse (*Ulex europaeus*). 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 include the

Nationally Scarce (Nb) digger wasp *Ectemnius sexinctus* and the Scarce (Na) mining bee *Andrena labiata*. Spotted Flycatchers have bred in these woods in recent years. Stanway Green is a small remnant of largely unimproved acid grassland, with much Common Bent-grass, Red Fescue (*Festuca rubra*), Common Cat's-ear (*Hypochoeris radicata*), Sheep's Sorrel, Bulbous Buttercup (*Ranunculus bulbosus*) and Buck's-horn Plantain (*Plantago coronopus*) and some Sticky Mouse-ear (*Cerastium glomeratum*), Pignut, Parsley-piert (*Aphanes arvensis* agg.), Field Wood-rush (*Luzula campestris*) and Blinks (*Montia fontana*).

Selection Criteria: HCr1(b); HCr2(b); HCr19; SCr14; SCr15

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Lowland Dry Acid Grassland, Hedgerows (UK); Ancient/Species-rich Hedgerows and Green Lanes, Urban Habitats (Essex)

Date of original selection:December 2008Date of last revision: -



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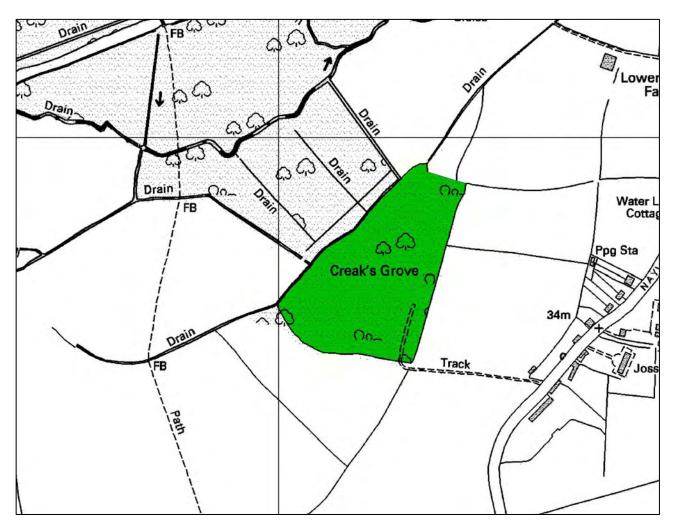
Co79 West Bergholt Church (0.5 ha) TL 961278

This small churchyard exhibits acid/semi-acid grassland with a good mix of species that complements the adjacent heath. Red Fescue (*Festuca rubra*) and Sweet Vernal-grass (*Anthoxanthum odoratum*) are prominent in the sward, as is Field Wood-rush (*Luzula campestris*). Plants indicative of the acidic soil conditions include Sheep's Sorrel (*Rumex acetosella*), Mouse-ear-hawkweed (*Pilosella officinarum*) and heathland characteristics similar to the adjacent West Bergholt Heath site are apparent by the presence of Heather (*Calluna vulgaris*), an Essex Red Data List species. In addition, Cuckooflower (*Cardamine pratensis*) is frequent particularly to the west side of the church.

BAP Priority Habitats: Lowland Dry Acid Grassland, Lowland Heathland (UK); Heathland (Essex)

Date of selection: December 2008

Date of last revision: -



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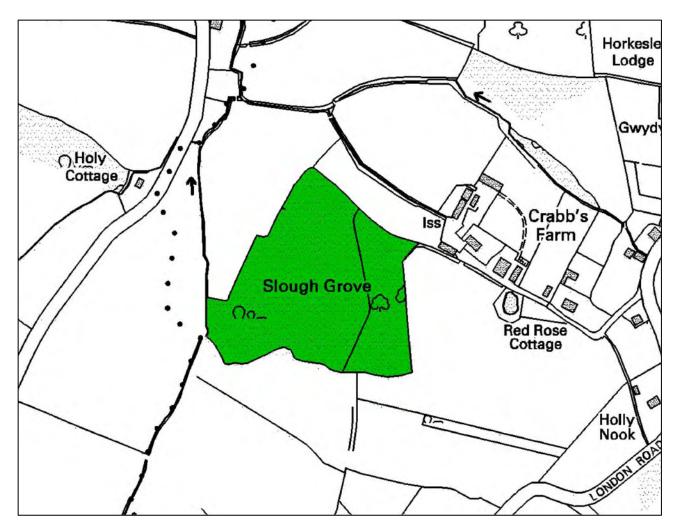
Co80 Creak's Grove (4.4 ha) TL 962328

Creak's Grove has a canopy of Pedunculate Oak (*Quercus robur*), Sycamore (*Acer pseudoplatanus*), Ash (*Fraxinus excelsior*) and Horse Chestnut (*Aesculus hippocastanum*). The understorey layer comprises scattered Elder (*Sambucus nigra*). Midland Hawthorn (*Crataegus laevigata*), a species usually confined to ancient woodland is also present. Bluebell (*Hyacinthoides non-scripta*) and Dog's Mercury (*Mercurialis perennis*) are abundant as ground flora species. The north-east corner of the wood has a wet flush draining northwards. Here, Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), an Essex Red Data List species, is found in very small quantity.

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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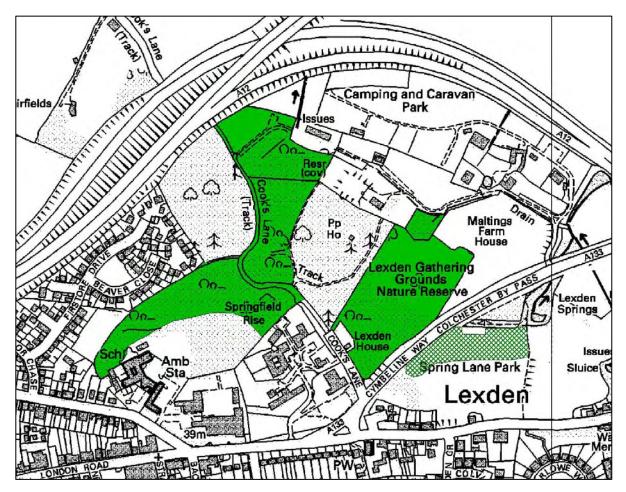
Co81 Slough Grove (3.9 ha) TL 964313

The majority of this wood is ancient, with the area to the east of the internal ditch feature being recent. The ancient section comprises Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Alder (*Alnus glutinosa*) over Hazel (*Corylus avellana*) coppice with scattered Elder (*Sambucus nigra*), Elm (*Ulmus sp.*) and Field Maple (*Acer campestre*). Midland Hawthorn (*Crataegus laevigata*), a shrub associated with ancient woodland, is also found. The flora includes Bluebell (*Hyacinthoides non-scripta*) and Dog's Mercury (*Mercurialis perennis*). Other species present include Moschatel (*Adoxa moschatellina*) and Three-nerved Sandwort (*Moehringia trinervia*). This strip of recent woodland has a composition indistinguishable from the ancient wood on its western border and therefore forms a natural extension to this habitat. A rookery on its northern edge adds to the interest.

Selection criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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Co82 Cook's Lane, Lexden (7.5 ha) TL 965253

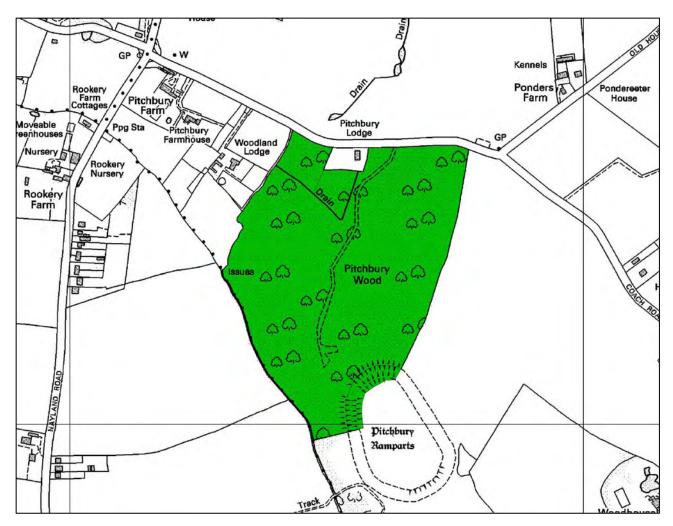
This site comprises a mosaic of acidic grassland and broadleaved wood, and includes part of the Essex Wildlife Trust's Lexden Gathering Grounds nature reserve. The grassland is characterised by Common Bentgrass (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Yorkshire Fog (*Holcus lanatus*) and Sheep's Sorrel (*Rumex acetosella*). Herbs typical of dry acid grassland include Whitlow-grass (*Erophila verna*), Mouseear-hawkweed (*Pilosella officinarum*), Bird's-foot Trefoil (*Lotus corniculatus*) and Bird's-foot (*Ornithopus perpusillus*).

Parts of the wood may be ancient, with large, overgrown Sweet Chestnut (*Castanea sativa*) coppice stools and standards of Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*) and Field Maple (*Acer campestre*). There is a small stand of Alder (*Alnus glutinosa*) within the nature reserve woodland. 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 (*Ranunculus ficaria*), Spindle (*Euonymus europaeus*) and Three-nerved Sandwort (*Moehringia trinervia*).

Selection criteria: HCr1(b), HCr2(a); HCr19

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Lowland Dry Acid Grassland (UK); Lowland Grassland (Essex)

Date of original selection: 1991 (in part)



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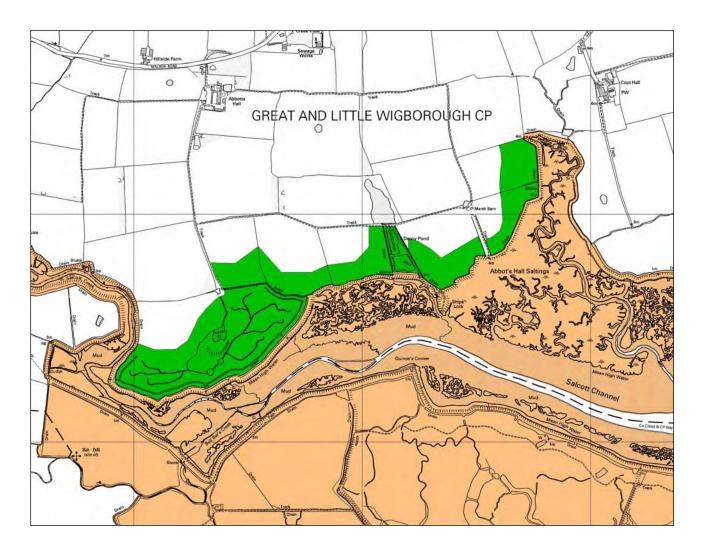
Co83 Pitchbury Wood (18.2ha) TL 966293

Pitchbury Wood has areas with scattered Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) standards over Hazel (*Corylus avellana*) coppice. However, much of the wood has been replanted. Young plantations of Silver Birch (*Betula pendula*), Oak and Sweet Chestnut (*Castanea sativa*) composition give way to extensive Sweet Chestnut coppice with Birch standards. The ground flora is typified by Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus agg*) and Bluebell (*Hyacinthoides non-scripta*). Other species of interest include Wood Spurge (*Euphorbia amygdaloides*), Wood Sorrel (*Oxalis acetosella*) and Wood Sedge (*Carex sylvatica*). 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.

Selection criteria: HCr1(a),HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



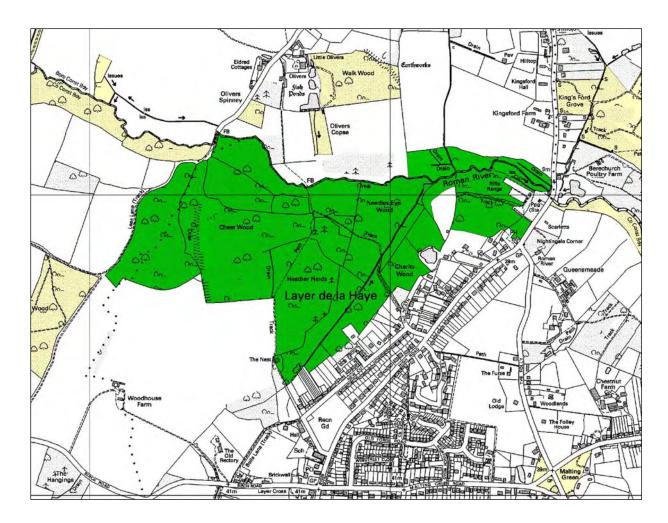
Co84 Abbotts Hall Marshes (41.7 ha) TL 965137

Following the initial coastal realignment project carried out in 2002, a large area of saltmarsh habitat has become established complemented by the associated mudflats and coastal grassland. The pioneer saltmarsh is dominated by Glassworts (*Salicornia* agg.) and Annual Seablite (*Suaeda maritima*), with scattered Perennial Glasswort (*Sarcocornia perennis*), an Essex Red Data List species (ERDL). This habitat grades into upper saltmarsh characterised by Common Saltmarsh-grass (*Puccinellia maritima*), Lesser Sea-spurrey (*Spergularia marina*) and Greater Sea-spurrey (S. *media*). Notable in this area is Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) (ERDL). The sea wall zones support other ERDL species including Golden Samphire (*Inula crithmoides*) and Shrubby Seablite (*Suaeda maritima*). Abbotts Hall Marshes represents an important additional area of saltmarsh which is continuous with the Blackwater Estuary SSSI and provides habitat for a range of marine life and species associated with intertidal areas, notably for populations of wildfowl and wading birds, providing a valuable sheltered high water roost site, feeding grounds and breeding habitat for birds such as Redshank and Lapwing. Additional habitat is provided by an old duck decoy pond which is now tidal and forms a saline lagoon of sorts, a UK and Essex BAP habitat.

Selection criteria: HCr17

BAP Priority Habitats: Coastal Saltmarsh, Saline Lagoons (UK); Saltmarsh, Saline Lagoons (Essex)

Date of selection: December 2008



Co85 Chest Wood and Roman River Complex (55.6 ha) TL 967208

This Site includes the Essex Wildlife Trust's Roman River Reserve, Chest Wood, Heather Fields, Needles Eye Wood South and an eastern additional area of secondary woodland west of High Road.

Roman River Reserve

This site comprises ancient wood, planted wood and fen-like marsh adjacent to the Roman River. This includes the northern part of Needles Eye Wood, the river corridor marsh on the southern side of the river and a section of woodland on the northern side. The Roman River 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 western block contains a large marsh including a sedge bed and wet ride which includes stands of pond sedge (*Carex* sp.) as well as Yellow Pimpernel (*Lysimachia nemorum*), Ragged-Robin (*Lychnis flos-cuculi*), Common Marsh-bedstraw (*Galium palustre*), Bog Stitchwort (*Stellaria uliginosa*), Skullcap (*Scutellaria galericulata*) and Small Teasel (*Dipsacus pilosus*); the latter two being Essex Red Data List (ERDL) species. 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 Roman River wildlife 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*), a vulnerable/threatened ERDL species.

Chest Wood

This large ancient wood comprises mainly Sweet Chestnut, Pedunculate Oak and dense birch over a typical light-soil ground flora dominated by Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*). This includes some recent Sweet Chestnut coppice. The canopy also includes Hazel, Field Maple and Rowan with the understorey shrubs 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 mixed woodland, although the 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 amongst the understorey. The ground flora includes Male Fern (*Dryopteris filix-mas*), Creeping Soft-grass (*Holcus mollis*), Bluebell, Wood Anemone, Heath Speedwell and Wood Sage (*Teucrium scorodonia*). A small patch of Heather (*Calluna vulgaris*) lies 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.

Needles Eye Wood South

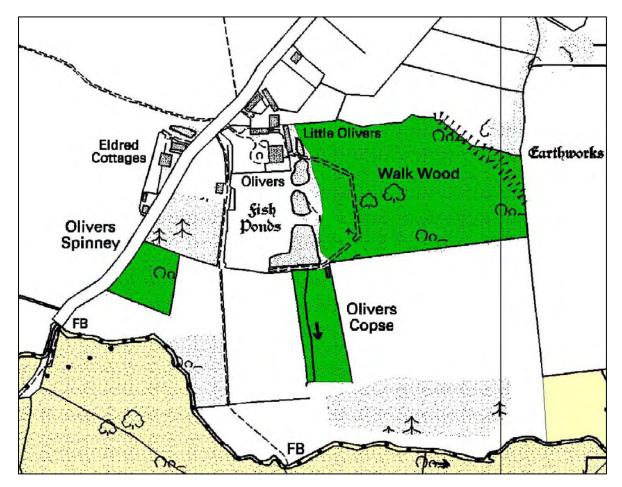
The southern end of Needles Eye Wood comprises open Sweet Chestnut and Pedunculate Oak containing some large standards. There are areas of spindly Birch wood with Hazel and a dense Bramble/Elder understorey, as well as remnant patches of conifers. The ground flora is at its most diverse on the lower slopes by the stream and includes Bugle (*Ajuga reptans*), Wood Anemone, Wood Sedge, Remote Sedge, Moschatel and Common Cow Wheat, an ERDL species. Also recorded are Hairy Wood-rush (*Luzula pilosa*) and Wood Melick (*Melica uniflora*). A 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 exhibits the undulating topography which reflects its former use as quarry 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*), an ERDL species. The vegetation along the damper lower slopes is more lush comprising Red Campion (*Silene dioica*), Dog's Mercury, Bluebell, Three-nerved Sandwort and Scaly Malefern (*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*) and the ERDL species Devil's-bit Scabious (*Succisa pratensis*) persist along the meadow margins.

Selection criteria: HCr1(a), HCr2(a), HCr23, SCr15

BAP Priority Habitats: Wet Woodland, Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)



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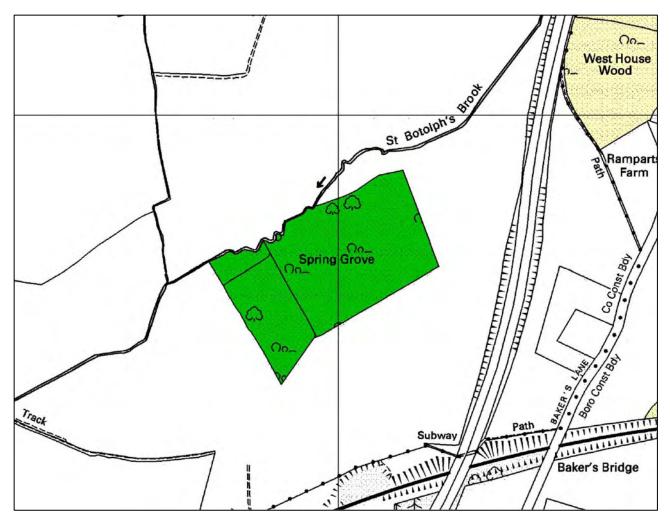
Co86 Olivers Woods (5.5 ha) TL 968213

This site comprises Olivers Spinney, Olivers Copse and Walk Wood, all of which show signs of being 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*). 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*), Stinging Nettle (*Urtica dioica*) and Primrose (*Primula vulgaris*). Olivers Copse has a number of mown grassy paths within the site and some planting of herbs along the central stream, but it retains an essentially natural character. It has a similar composition to Olivers Spinney, with the addition of frequent Wood Anemone (*Anemone nemorosa*) and Lesser Celandine (*Ranunculus ficaria*), with some Pignut (*Conopodium majus*). Wall Wood has suffered bad 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*). The ground flora is, again, dominated by Bluebell.

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: December 2008



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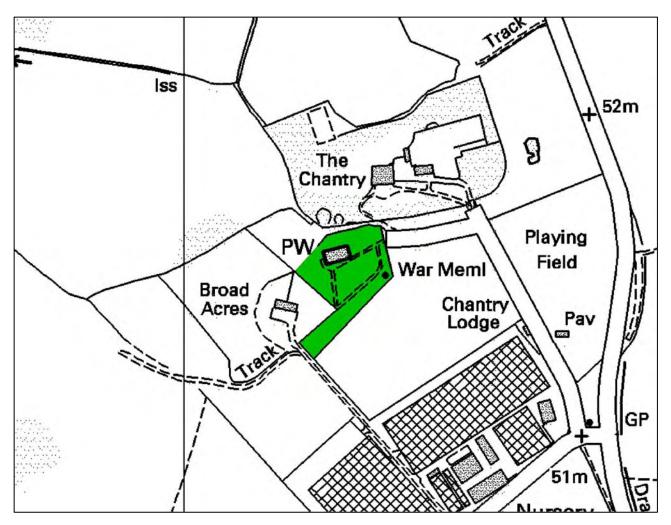
Co87 Spring Grove (6.3 ha) TL 970267

This streamside wood comprises woodland blocks of very different character. To the west, a mixed broadleaved canopy of Pedunculate Oak (*Quercus robur*) standards with Ash (*Fraxinus excelsior*) coppice has 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 species, grows on the banks by St Botolph's Brook. In contrast, the larger eastern block of woodland has a structure of Pedunculate Oak standards with scattered Silver Birch with 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*). Small patches of Moschatel (*Adoxa moschatellina*) and Ramsons (*Allium ursinum*) can be found near the brook.

Selection criteria: HCr1(b), HCr2(a), HCr2(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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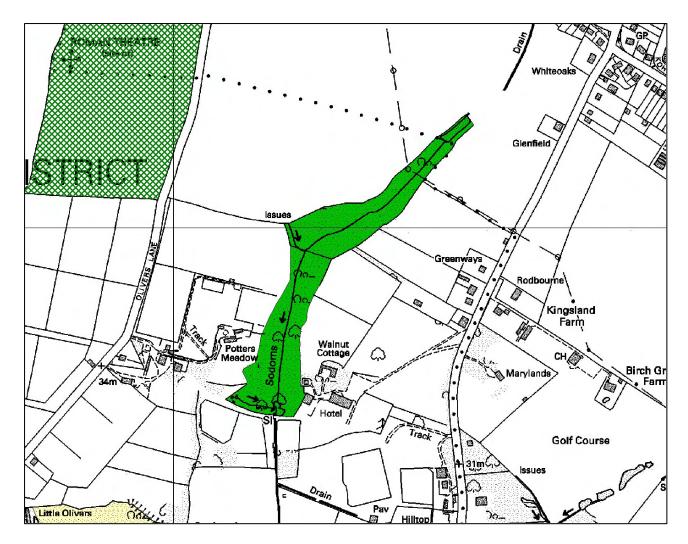
Co88 Great Horkesley Churchyard (0.6 ha) TL 974322

This churchyard retains a relict acidic grassland sward, which has virtually disappeared from the surrounding countryside. Plants such as Sheep's Sorrel (*Rumex acetosella*) and Mouse-ear-hawkweed (*Pilosella officinarum*) are frequent in the drier sandy areas near the older graves south of the church. Species of interest recorded from this site include Harebell (*Campanula rotundifolia*) an Essex Red Data List species, Lady's Bedstraw (*Galium verum*) and Pignut (*Conopodium majus*).

Selection criteria: HCr11, SCr15

BAP Priority Habitats: Lowland Dry Acid Grassland (UK)

Date of selection: 1991



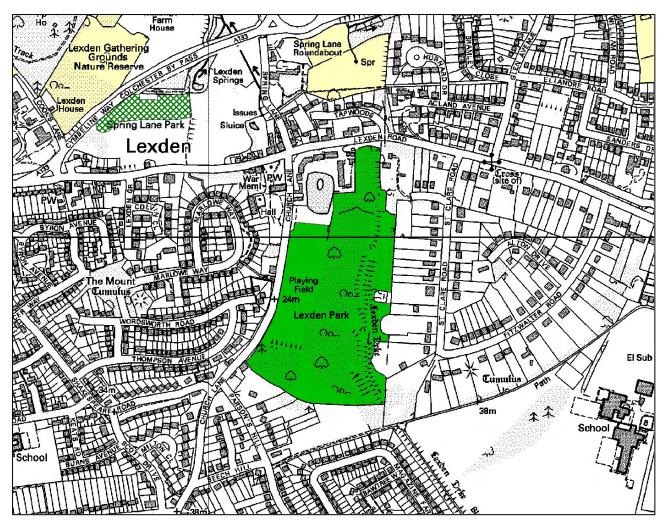
Co89 Sodoms Wood (4.9 ha) TL 972219

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*). The 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 Stinging Nettle (*Urtica dioica*), with Lady Fern (*Athyrium filix-femina*), Climbing Corydalis (*Ceratocapnos claviculata*), Three-nerved Sandwort (*Moehringia trinervia*) and Butcher's Broom (*Ruscus aculeatus*) also present. A spring seepage has allowed the formation of a small *Carex acutiformis* sedgebed. The Essex Red Data List micro-moth *Platyptilia ochrodactyla* has been recorded from this wood.

Selection Criteria: HCr1(b); HCr2(a); SCr14

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: 1991



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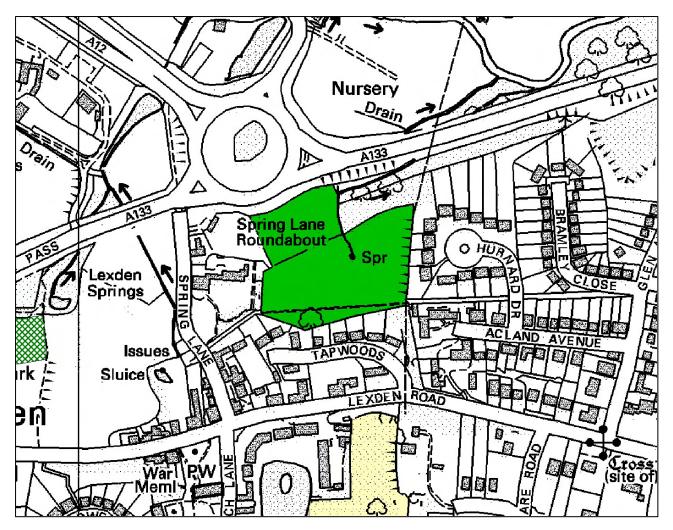
Co90 Lexden Park (9.5 ha) TL 972248

Lexden Park is of significance to the Essex urban HAP, allowing for a diverse wildlife experience within the environs of Colchester town. Much of the site is wooded and, although located largely on man-made earthworks, may nevertheless be technically ancient woodland. The canopy comprises mainly Pedunculate Oak (*Quercus robur*), with some Sweet Chestnut (*Castanea sativa*), Holly (*Ilex aquifolium*) and Birch (*Betula pendula*) over a Bracken (*Pteridium aquilinum*) dominated ground flora. The ground cover also includes abundant Bluebell (*Hyacinthoides non-scripta*) along with Climbing Corydalis (*Ceratocapnos claviculata*) and Wood Sage (*Teucrium scorodonia*). The grassland is typified by Crested Dog's-tail (*Cynosurus cristatus*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Lady's Bedstraw (*Galium verum*) and Oval Sedge (*Carex leporina*).

Selection Criteria: HCr1(b); HCr13

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Lowland Grassland, Veteran Trees, Urban Habitats (Essex)

Date of original selection: 1991



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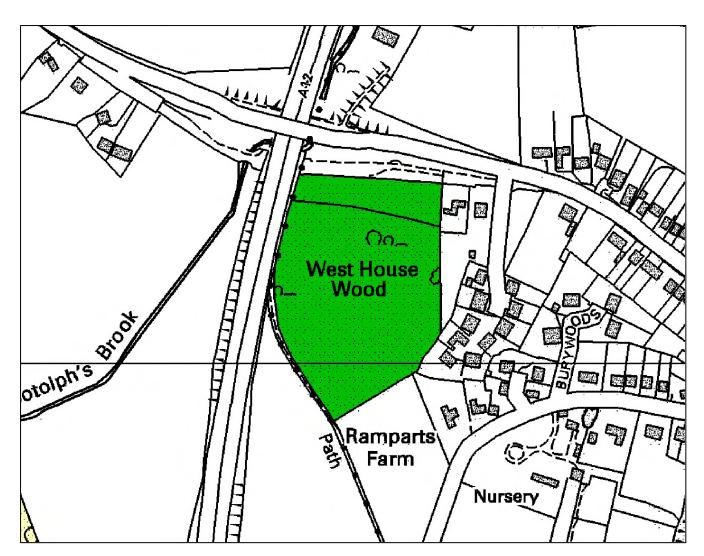
Co91 Lexden Springs LNR (2.0 ha) TL 972253

This sloping meadow shows a transition from freely draining grassland through to marsh, with consequently a rich and diverse flora. The drier upper slopes are typified by Common Bent-grass (*Agrostis capillaris*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Pignut (*Conopodium majus*), Lady's Bedstraw (*Galium verum*) and Harebell (*Campanula rotundifolia*). The lower marshy grassland has a number of scarce Essex species such as Bog Stitchwort (*Stellaria uliginosa*) and Devil's-bit Scabious (*Succisa pratensis*), along with Velvet Bent-grass (*Agrostis canina*), Cuckooflower (*Cardamine pratensis*) and Meadowsweet (*Filipendula ulmaria*). The grassland and scattered trees support a good population of bumblebees and the Minotaur Beetle (*Typhaeus typhoeus*), an uncommon species in Essex, has also been recorded.

Selection Criteria: HCr10; SCr15

BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland, Urban Habitats (Essex)

Date of original selection: 1991



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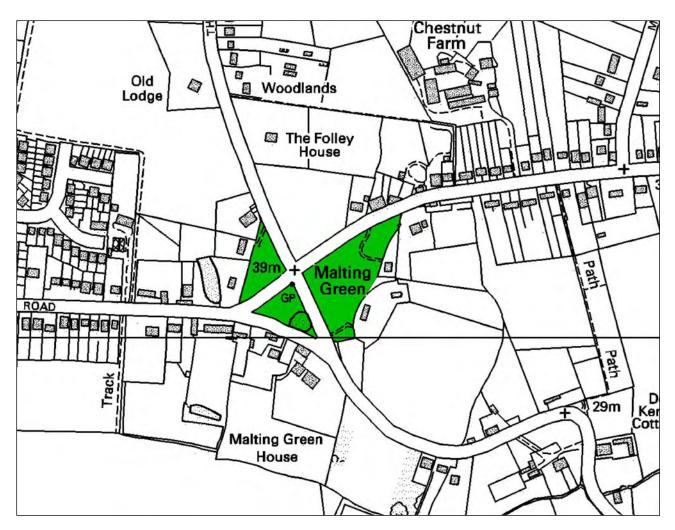
Co92. West House Wood (3.2 ha) TL 975270

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*), Holly (*Ilex aquifolium*) and Blackthorn (*Prunus spinosa*) scrub. 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*), with Pignut (*Conopodium majus*), Gooseberry (*Ribes uva-crispa*) and Barren Strawberry (*Potentilla sterilis*) also present.

Selection criteria: HCr1(b), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: 1991



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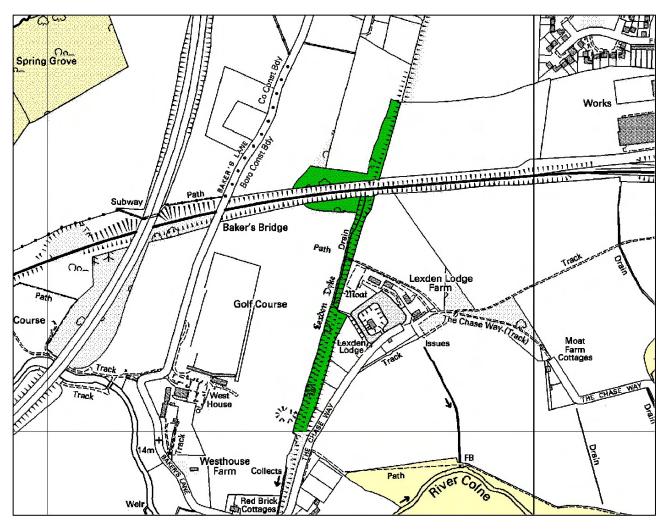
Co93 Malting Green (1.3 ha) TL 976200

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 circular area of rank vegetation appears to mark the site of the annual bonfire and an additional source of enrichment is leaf debris from planted Horse-chestnut (*Aesculus hippocastanum*) and Turkey Oaks (*Quercus cerris*) adjacent to the pond.

Selection criteria: HCr11

BAP Priority Habitats: Lowland Dry Acid Grassland (UK)

Date of selection: 1991



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Co94 Lexden Dyke (2.3 ha) TL 976263

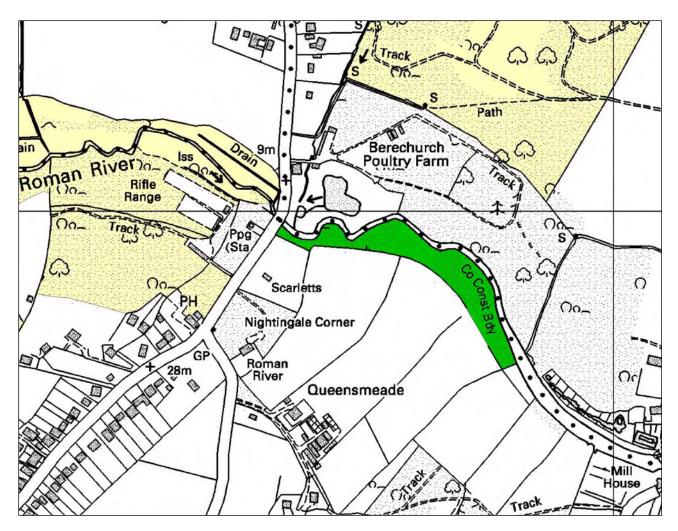
This site comprises as small block of clearly ancient Small-leaved Lime (*Tilia cordata*) woodland, strips of possibly ancient woodland along the Lexden Dyke earthwork and a small extent of relict acidic grassland with scattered tree and scrub cover, where Harebell (*Campanula rotundifolia*) (an Essex Red Data List plant) is notable.

The broadleaved wood comprises standards of Pedunculate Oak (*Quercus robur*) and 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 (*Ranunculus ficaria*).

Selection Criteria: HCr1(b); HCr2(a); SCr15

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: 1991



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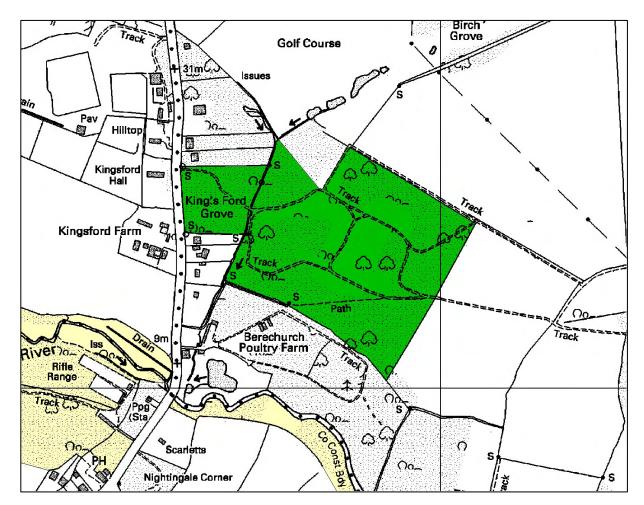
Co95 Roman River Willow/Aldercar (1.3 ha) TL 978208

This 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*) (east) to dense areas of Alder (*Alnus glutinosa*) and Crack Willow (*Salix fragilis*) (west), which becomes increasingly scrubby and impenetrable. Some of the large fallen Crack Willows provide good habitat for invertebrates. Much of the ground layer is dominated by a dense tangle of sedges and tall herbs, where the main species are pond-sedges (*Carex* sp.), Reed Sweet-grass (*Glyceria maxima*), 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*), Water Chickweed (*Myosoton aquaticum*), Purpleloosestrife (*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*) and polypody (*Polypodium* sp.).

Selection criteria: HCr2(b), HCr2(d)

BAP Priority Habitats: Wet Woodland, Lowland Mixed Deciduous Woodland (UK)

Date of selection: December 2008



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Co96 King's Ford Grove (11.2 ha) TL 977212

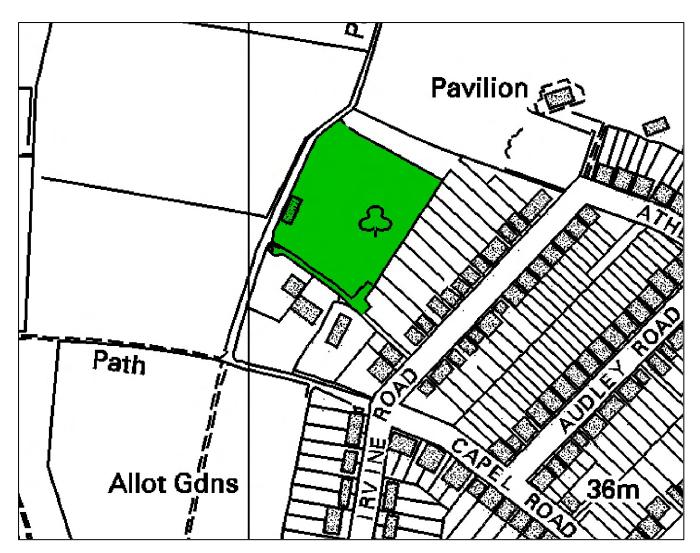
King's Ford Grove itself is a small area of possibly ancient woodland lying adjacent to Layer Road. It comprises old Hornbeam (*Carpinus betulus*) coppice with standards of oak (*Quercus* spp.). The wood canopy also includes Silver Birch (*Betula pendula*) over a ground flora dominated by Bluebell (*Hyacinthoides non-scripta*) and Creeping Soft-grass (*Holcus mollis*). Wood Anemone (*Anemone nemorosa*), Lady Fern (*Athyrium filix-femina*), Wood Sage (*Teucrium scorodonia*), and Wood Sorrel (*Oxalis acetosella*) also occur in the ground layer.

The remainder of this site comprises relict 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.

Selection criteria: HCr1(b); HCr2(a); HCr19

BAP Priority Habitats: Lowland Mixed Deciduous Woodland, Lowland Dry Acid Grassland (UK); Ancient Woodland, Heathland (Essex)

Date of original selection: 1991



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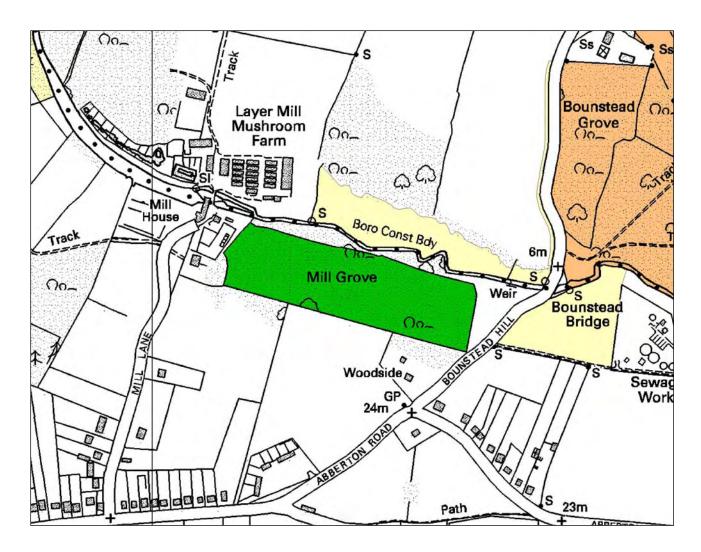
Co97 Irvine Road Orchard (0.8 ha) TL 980243

This small abandoned urban orchard comprises an attractive mosaic of old fruit trees (including standing dead wood forming an important invertebrate habitat), tall rough grassland and thick hedgerows. The site supports an important population of the Rose Chafer beetle (*Cetonia aurata*) and other dead wood beetles, such as the Stag Beetle may also be present. Standing dead wood, especially fruit trees, is one of the key habitat requirements for this UK BAP beetle and management of the site should aim to promote Stag Beetle conservation, with Colchester being a key area for this species in Essex. A number of dead-wood specialist solitary bees and wasps have also been recorded. The flora includes the rather curious presence of Subterranean Clover (*Trifolium subterraneum*) in an area of dry sandy ground.

Selection criteria: HCr7

BAP Priority Habitats: Traditional Orchards (UK); Old Orchards, Urban Habitats (Essex)

Date of original selection: December 2008 Date



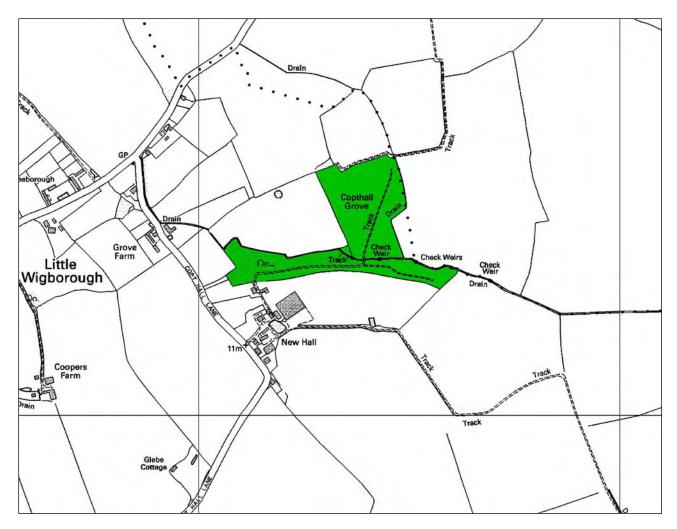
Co98 Mill Grove (3.2 ha) TL 982205

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*). The invasive plant Indian Balsam (*Impatiens glandulifera*) grows along parts of the Roman River banks.

Selection criteria: HCr2(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK)

Date of selection: December 2008



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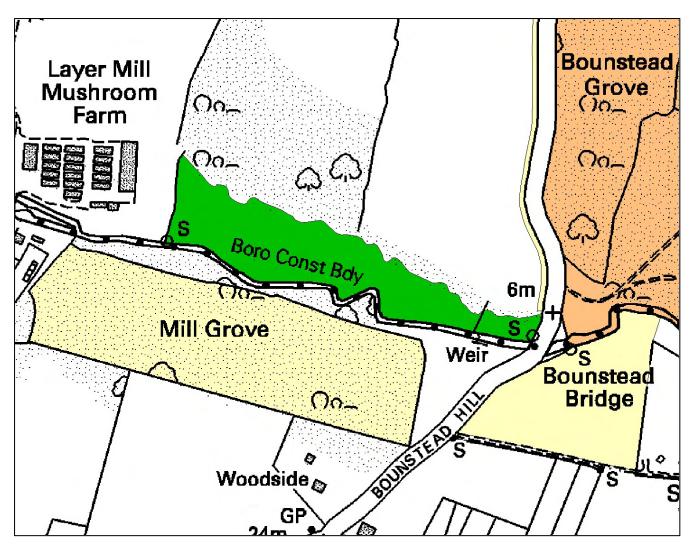
Co99 Copthall Grove (6.4 ha) TL 983154

Copthall Grove is an ancient wood comprising a mixed canopy of Ash (*Fraxinus excelsior*), Pedunculate Oak (*Quercus robur*) and Field Maple (*Acer campestre*), including some large Field Maple coppice. Midland Hawthorn (*Crataegus laevigata*) is a notable shrub amongst the understorey, which also includes Elder (*Sambucus nigra*), Hawthorn (*Crataegus monogyna*) and Bramble (*Rubus fruticosus agg.*). The ground flora is dominated by a dense carpet of Bluebell (*Hyacinthoides non-scripta*) and includes Primrose (*Primula vulgaris*) and Greater Stitchwort (*Stellaria holostea*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



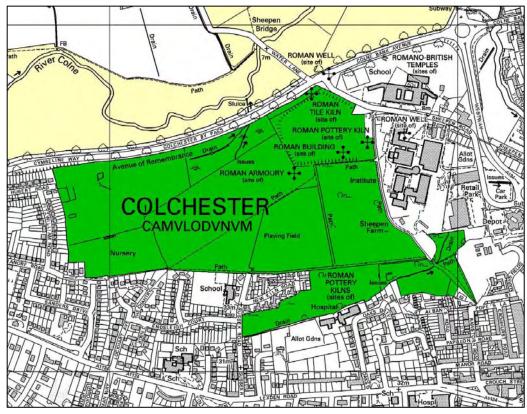
Co100 Bounstead Bridge West (1.5 ha) TL 983206

This streamside, wet meadow within the Roman River valley has a flora that includes both Common Agrimony (*Agrimonia eupatoria*) and the scarce Fragrant Agrimony (A. *procera*), Red Bartsia (*Odontites vernus*) and Angelica (*Angelica sylvestris*). Such damp, unimproved grasslands are becoming increasingly scarce in Essex. Some future scrub control may be necessary to maintain the floristic diversity of the site. This site forms part of an important chain of good quality wildlife habitats along the Roman River valley.

Selection criteria: HCr10

BAP Priority Habitats: Lowland Grassland (Essex)

Date of original selection: 1991



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Co101 Hilly Fields (43.9 ha) TL 984254

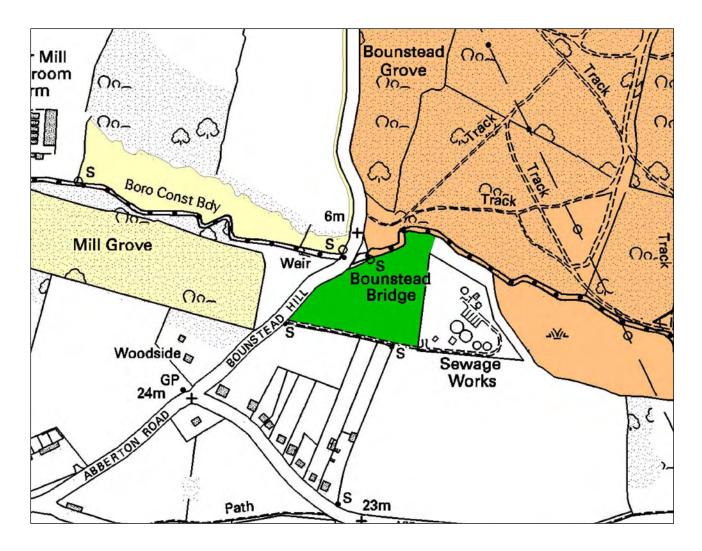
Hilly Fields displays a transition from freely draining acidic grassland near the summit, through a neutral soil sward with scattered scrub to wet inundation grassland and swamp to the north. The southern extension comprises mature woodland, providing contrasting habitat conditions to the more open and exposed hillslope. The complex of grassland types, along with a variety of scrub species forms a site of high wildlife value within suburban Colchester. Species of interest in the diverse flora include Cuckooflower (*Cardamine pratensis*), Pendulous Sedge (*Carex pendula*), Marsh Thistle (*Cirsium palustre*), Tufted Hair-grass (*Deschampsia cespitosa*) and Meadowsweet (*Filipendula ulmaria*) from the damper areas, and Spring Vetch (*Vicia lathyroides*), Bird's-foot (*Ornithopus perpusillus*), Mouse-ear-hawkweed (*Pilosella officinarum*), Squirrel-tail Fescue (*Vulpia bromoides*), Common Bent-grass (*Agrostis capillaris*) and Sheep's Sorrel (*Rumex acetosella*) in the upper, drier grasslands.

The invertebrate fauna includes 11 species of bumblebee (over half the Essex total for this group), including the UK BAP species *Bombus ruderarius*, the Nationally Scarce (Nb) *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 (Na) digger wasp *Crossocerus distinguendus*. Notable amongst the diverse butterfly fauna are Green Hairstreak (*Callophrys rubi*) and Purple Hairstreak (*Quercusia quercus*).

Selection criteria: HCr2(c), HCr5, HCr6(b), HCr11, HCr12, SCr14

BAP Priority Habitats: Lowland Dry Acid Grassland (UK); Lowland Grassland (Essex)

Date of original selection: 1991



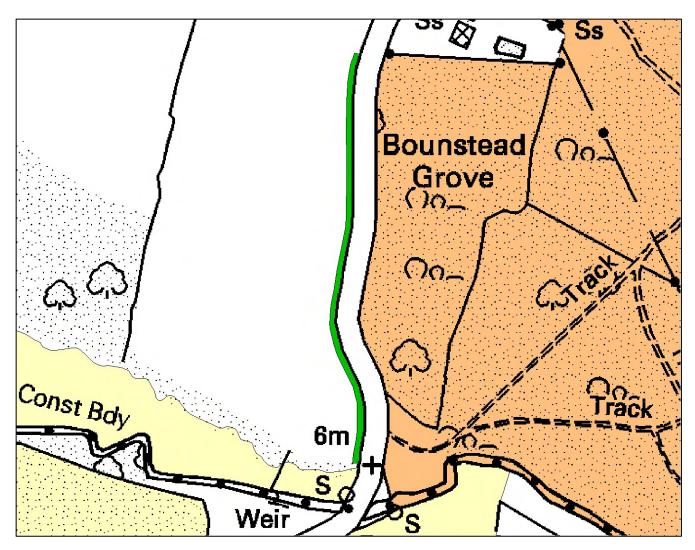
Co102 Bounstead Bridge (1.4 ha) TL 985204

This site comprises a sloping area of rough grassland with a good range of grasses amongst dominant coarser species. Grasses include Yellow Oat-grass (*Trisetum flavescens*), Common Bent (*Agrostis capillaris*), Meadow Foxtail (*Alopecurus pratensis*) and Sweet Vernal-grass (*Anthoxanthum odoratum*). Herbs are present in moderate numbers throughout but are most abundant along the lower slopes, and include Meadow Buttercup (*Ranunculus acris*), Agrimony (*Agrimonia eupatoria*), Black Knapweed (*Centaurea nigra*), Creeping Cinquefoil (*Potentilla reptans*), Perforate St John's-wort (*Hypericum perforatum*) and Grass Vetchling (*Lathyrus nissolia*). Bramble (*Rubus fruticosus* agg.) is becoming established throughout parts of the grassland, in particular along the western hedge margins.

Selection criteria: HCr11

BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: December 2008



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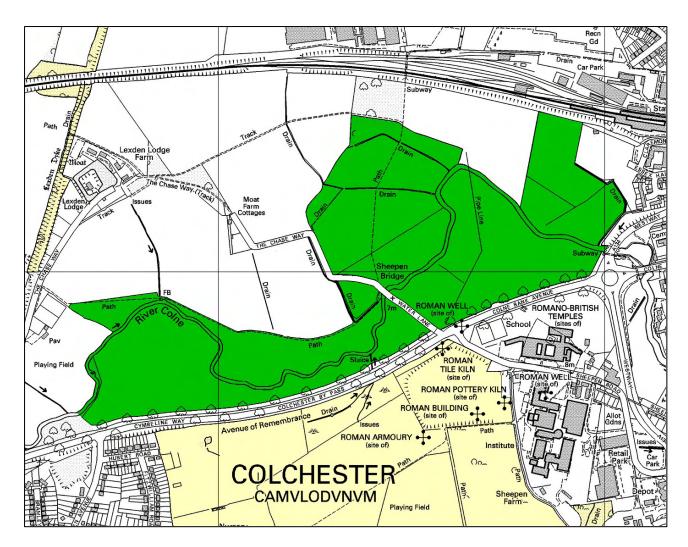
Co103 Bounstead Strip (0.1 ha) TL 986207

This site is effectively a westerly extension of the ancient Bounstead Grove (separated by the Bounstead Road), which lies within the adjacent Roman River SSSI. This steep bank retains a diverse mix of woody species such as Pedunculate Oak (*Quercus robur*), Spindle (*Euonymus europaeus*), Hazel (*Corylus avellana*), Blackthorn (*Prunus spinosa*) and Gorse (*Ulex europaeus*), whilst the bank has an interesting acidic grassland flora. This Site is effectively considered to be part of ancient wood, separated from the main body by road development, rather than as a hedgerow.

Selection criteria: HCr1(b)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of original selection: 1991



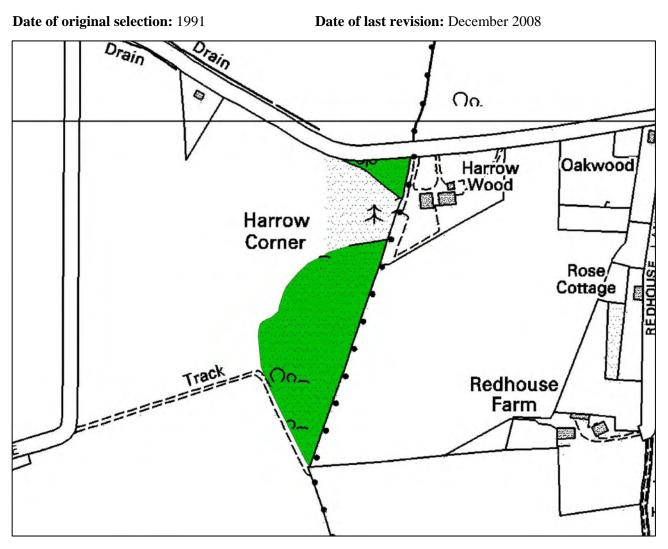
Co104 Cymbeline Meadows (46.7 ha) TL 983258

This site comprises a series of pastures within the River Colne floodplain. There are also areas of marshland, numerous hedgerows and aquatic vegetation within the river Colne. Such extensive river flood plain sites are becoming an increasingly scarce habitat. A wide range of grass species occur including Reed Canary-grass (*Phalaris arundinacea*), Meadow Foxtail (*Alopecurus pratensis*), Red Fescue (*Festuca rubra*), Common Bent-grass (*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), Brown Sedge (*Carex disticha*), Tufted Hair-grass (*Deschampsia cespitosa*), Marsh Bedstraw (*Galium palustre*), Reed Sweet-grass (*Glyceria maxima*), Sharp-flowered Rush (*Juncus acutiflorus*), Marsh Thistle (*Cirsium palustre*) and Lesser Pond-sedge (*Carex acutiformis*). Invertebrates recorded include Short-winged Conehead Bush-cricket (*Conocephalus dorsalis*) and a good range of hunting dragonflies and damselflies, breeding in the adjacent river.

The banks of the river Colne have a good riverside flora, which includes Marsh Woundwort (*Stachys palustris*), Common Water-plantain (*Alisma plantago-aquatica*), Water Figwort (*Scrophularia auriculata*) and Brooklime (*Veronica beccabunga*).

Selection Criteria: HCr14

BAP Priority Habitats: Coastal and Floodplain Grazing Marsh, Lowland Fens (UK); Lowland Grassland (Essex)



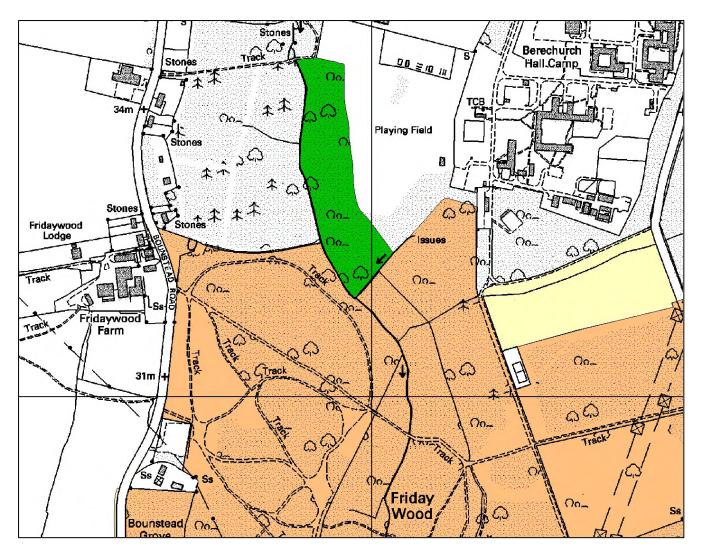
Co105 Harrow Wood (1.7 ha) TL 986307

This small wood is predominantly Hazel (*Corylus avellana*) and Sweet Chestnut (*Castanea sativa*) coppice with Silver Birch (*Betula pendula*) and Pedunculate Oak (*Quercus robur*) standards. Sycamore (*Acer pseudoplatanus*) is also found throughout. Elder (*Sambucus nigra*) forms a scattered shrub canopy. 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*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



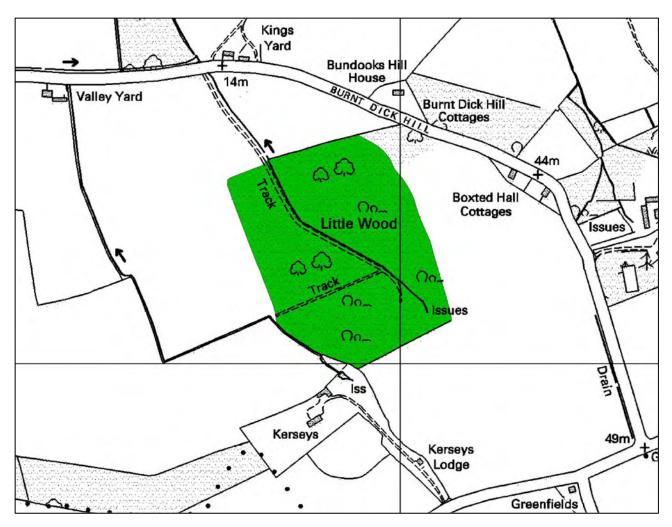
Co106 Friday Wood North (3.5 ha) TL 989214

This site comprises that part of the ancient Friday Wood not included within the Roman River SSSI. The rather open canopy is largely Pedunculate Oak (*Quercus robur*) and Downy Birch (*Betula pubescens*), with some Sweet Chestnut (*Castanea sativa*), Ash (*Fraxinus excelsior*) and Hazel (*Corylus avellana*). The ground flora is being suppressed in places by large stands of exotic Laurel (*Prunus laurocerasus*), but in more open areas Wood Sage (*Teucrium scorodonia*), Bracken (*Pteridium aquilinum*), Bluebell (*Hyacinthoides non-scripta*) and Bramble (*Rubus fruticosus* agg.) proliferate. The ground flora also includes Remote Sedge (*Carex remota*), Honeysuckle (*Lonicera periclymenum*), Three-nerved Sandwort (*Moehringia trinervia*), Primrose (*Primula vulgaris*), Lesser Celandine (*Ranunculus ficaria*) and Stinging Nettle (*Urtica dioica*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient woodland (Essex)

Date of original selection: 1991



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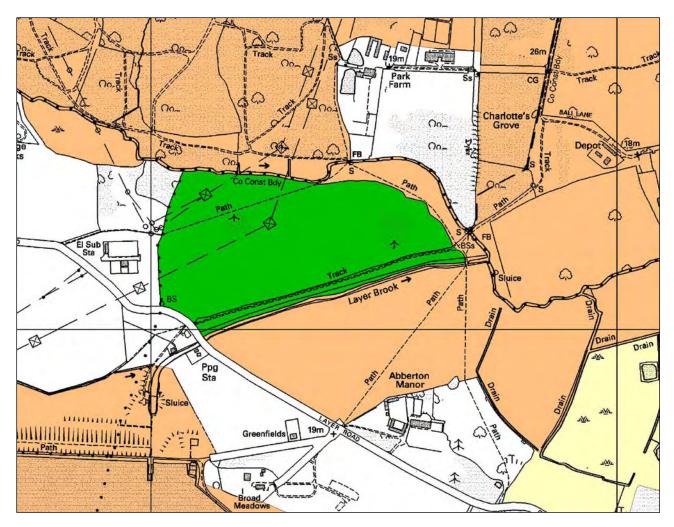
Co107 Little Wood (6.6 ha) TL 989332

Little Wood comprises an ancient section to the east and a non-ancient part to the west. The boundary between these is not marked by any clear internal boundary feature. The ancient wood has a varied mix including Sweet Chestnut (*Castanea sativa*) and Hazel (*Corylus avellana*) coppice with Pedunculate Oak (*Quercus robur*) and some Field Maple (*Acer campestre*). There is only a very scattered shrub layer beneath the canopy. Bluebell (*Hyacinthoides non-scripta*) is abundant throughout the ground flora, and there are frequent patches of Climbing Corydalis (*Ceratocapnos claviculata*). The stream issuing from the south eastern corner of the wood has Alder (*Alnus glutinosa*) over an associated marshy flora including Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*) which decreases as slightly drier conditions are found upslope. Here Moschatel (*Adoxa moschatellina*) is found. The non-ancient woodland is generally by characterised by younger, spindly Sweet Chestnut coppice. The Climbing Corydalis has not readily colonised this area, and Bluebells are not found in the profusion they occur in the ancient block.

Selection Criteria: HCr1(a), HCr2(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991



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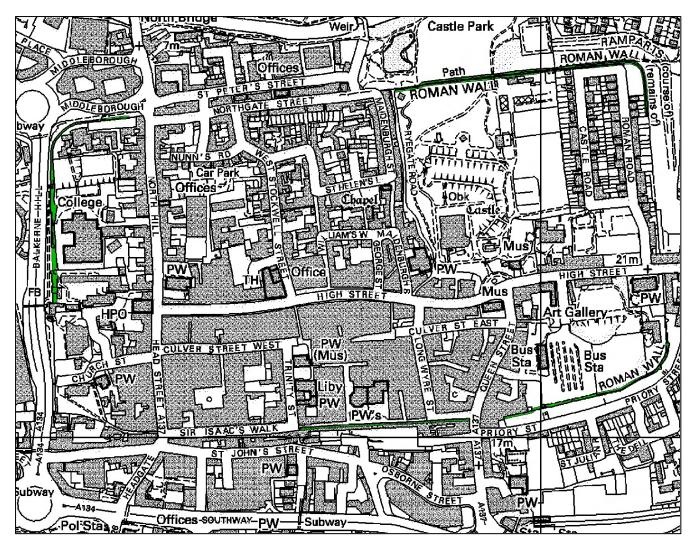
Co108 Layer Brook Pasture (15.2 ha) TL 992201

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*). 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 meadow is kept short by rabbits and periodic cattle grazing.

Selection criteria: HCr11

BAP Priority Habitats: Lowland Meadows (UK); Lowland Grassland (Essex)

Date of selection: December 2008



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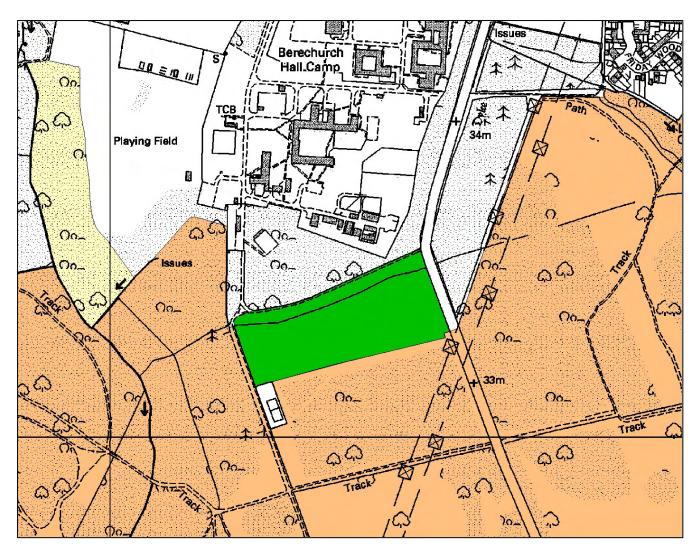
Co109 Colchester Roman Walls (0.5 ha) TL 997253

The Roman town walls around Colchester are unique in the county and have developed a very specialised flora, which includes several scarce species. Rue-leaved Saxifrage (*Saxifraga tridactylites*) is of particular note (an Essex Red Data List plant), with other characteristic species including Whitlow-grass (*Erophila verna*), Thale Cress (*Arabidopsis thaliana*) and Pellitory-of-the-wall (*Parietaria diffusa*). 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. It is recognised that some of the nature conservation value of this site may conflict with archaeological conservation work, but it is hoped that a combined conservation strategy for the walls might lead to a long-term solution for this valuable site.

Selection criteria: SCr15

BAP Priority Habitats: Urban Habitats (Essex)

Date of original selection: 1991



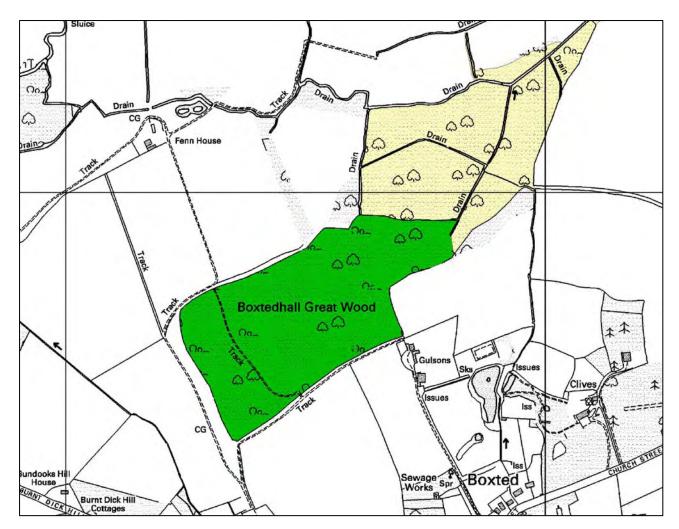
Co110 Berechurch Grassland (4.0 ha) TL 993211

This site comprises an area of regenerating acid grassland that is developing following the clearance of a conifer plantation. It forms an extension to this uncommon grassland habitat that lies within the adjacent Roman River SSSI. The rare Essex orthopteran Mottled Grasshopper (*Myrmeleotettix maculatus*) has recently been recorded from this adjacent SSSI and the current site should form an important habitat extension, into which this insect should be able to spread. The sward is dominated by Common Bent-grass (*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 with an important population centred on the acid grasslands to the south of Essex.

Selection criteria: HCr19

BAP Priority Habitats: Lowland Dry Acid Grassland (UK); Heathland (Essex)

Date of original selection: 1991



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Co111 Boxtedhall Great Wood (13.5 ha) TL 996339

This large ancient wood has a very rich mix of woody species, predominantly Pedunculate Oak (*Quercus robur*), Sweet Chestnut (*Castanea sativa*), Hornbeam (*Carpinus betulus*), Silver Birch (*Betula pendula*), Alder (*Alnus glutinosa*) and Ash (*Fraxinus excelsior*). Hazel (*Corylus avellana*) and Elder (*Sambucus nigra*) are the main shrub canopy species along with scattered Hawthorn (*Crataegus monogyna*) and Holly (*Ilex aquifolium*). Bluebell (*Hyacinthoides non-scripta*) is abundant in the ground flora, which also includes Climbing Corydalis (*Ceratocapnos claviculata*), Dog's Mercury (*Mercurialis perennis*), Three-veined Sandwort (*Moehringia trinervia*) and Violets (*Viola spp.*).

Selection criteria: HCr1(a)

BAP Priority Habitats: Lowland Mixed Deciduous Woodland (UK); Ancient Woodland (Essex)

Date of selection: 1991