



**COLCHESTER BOROUGH
LOCAL WILDLIFE SITE REVIEW
2015**

February 2016

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

Company Registered No. 2853947
VAT Registered No. 945 7459 77

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Title of Report	Colchester Borough Local Wildlife Site Review 2015
Client	Colchester Borough Council Rowan House Sheepen Road Colchester Essex
Client Representative	Bev McClean, Coast and Countryside Planner
Survey Completed By	Neil Harvey BSc MCIEEM, Consultancy Manager Martin Pugh BSc MCIEEM, Ecologist
Author	Neil Harvey BSc MCIEEM, Consultancy Manager
Approved By	
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COLCHESTER BOROUGH
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1. INTRODUCTION

1.1 General Introduction

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

1.2 Background

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

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

During the 2008 review, 14 sites were deleted because they no longer satisfied selection criteria and eight SSSI were also removed. However, 48 new sites were added because of the broadening of the scope of the selection criteria. The original sites were almost exclusively selected because of their plant communities, whereas the emerging criteria covered all plant and animal species groups. In Colchester Borough, a significant proportion of the new sites

were identified because of their invertebrate interest, reflecting the increased recognition of the value of post-industrial “brownfield” sites for invertebrate conservation.

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

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

1.3 Review Areas

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

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

1.4 Objectives of Survey

The objectives of the survey were as follows:

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

1.5 Survey Methodology

1.5.1 Desk study

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

1.5.2 Site visits

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

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

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

1.6 Competence

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

Essex. He has a good all round knowledge of the invertebrate fauna of the UK, with specialist knowledge of Diptera (particularly hoverflies, soldierflies and allies, Conopidae), molluscs, Orthoptera, Odonata, butterflies, moths and various other lesser orders.

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

1.7 Constraints of Methodology

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

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

2. RESULTS

2.1 Summary of results

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

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

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

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

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

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

2.2 Citations and Site Numbering

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

deleted being retired from use rather than re-applied to newly identified Sites. Appendix 2 contains the revised descriptions of the sites assessed during this survey, but not those Colchester LoWS that lie outside of the survey area.

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

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

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

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

2.3 Changes to LoWS Network

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

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

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

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

CO59 Tye Grove – the eastern boundary has changed to reflect current extent of woodland habitat resulting in a small loss, but the same area is added to Co62.

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

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

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

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

Co68 Iron Latch Woods and Meadow - Loss of section to the south of the railway line to housing development.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Co137 Place Farm – boundary with Co142 re-mapped to reflect habitat origins, resulting in a loss of area, and name changed better to reflect the site’s history.

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

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

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

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

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

2.4 New LoWS

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

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

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

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

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

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

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

2.5 Potential LoWS

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

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

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

PCLoWS5 Gosbeck's Park – selected as Co174.

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

PCLoWS7 Former Ozalid Works – selected as Co170.

PCLoWS8 Black Heath – removal of planted conifers still required; retain as PLoWS.
PCLoWS9 St Botolph’s Sidings – specialist survey work needed; retain as PLoWS.
PCLoWS10 Grant’s Meadow Allotments – now fully utilised; remove from PLoWS list.
PCLoWS11 Donyland Waste – incorporated into Co135.

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

2.6 Tendring LoWS

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

Te1 Ardleigh Reservoir Wood – no change.

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

Te3 Ardleigh Reservoir Grassland – no change.

Te4 Churn Wood Meadow – no change.

Te5 Churn Wood – no change.

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

Te7 Chapel Lane Verge – no change.

Te8 Pyecats Corner Verges – additional verge sections added.

Te12 Villa Farm – no change.

Te15 Palegate Wood – no change.

Te17 Park Wood – no change

Te20 Money Wood – no change.

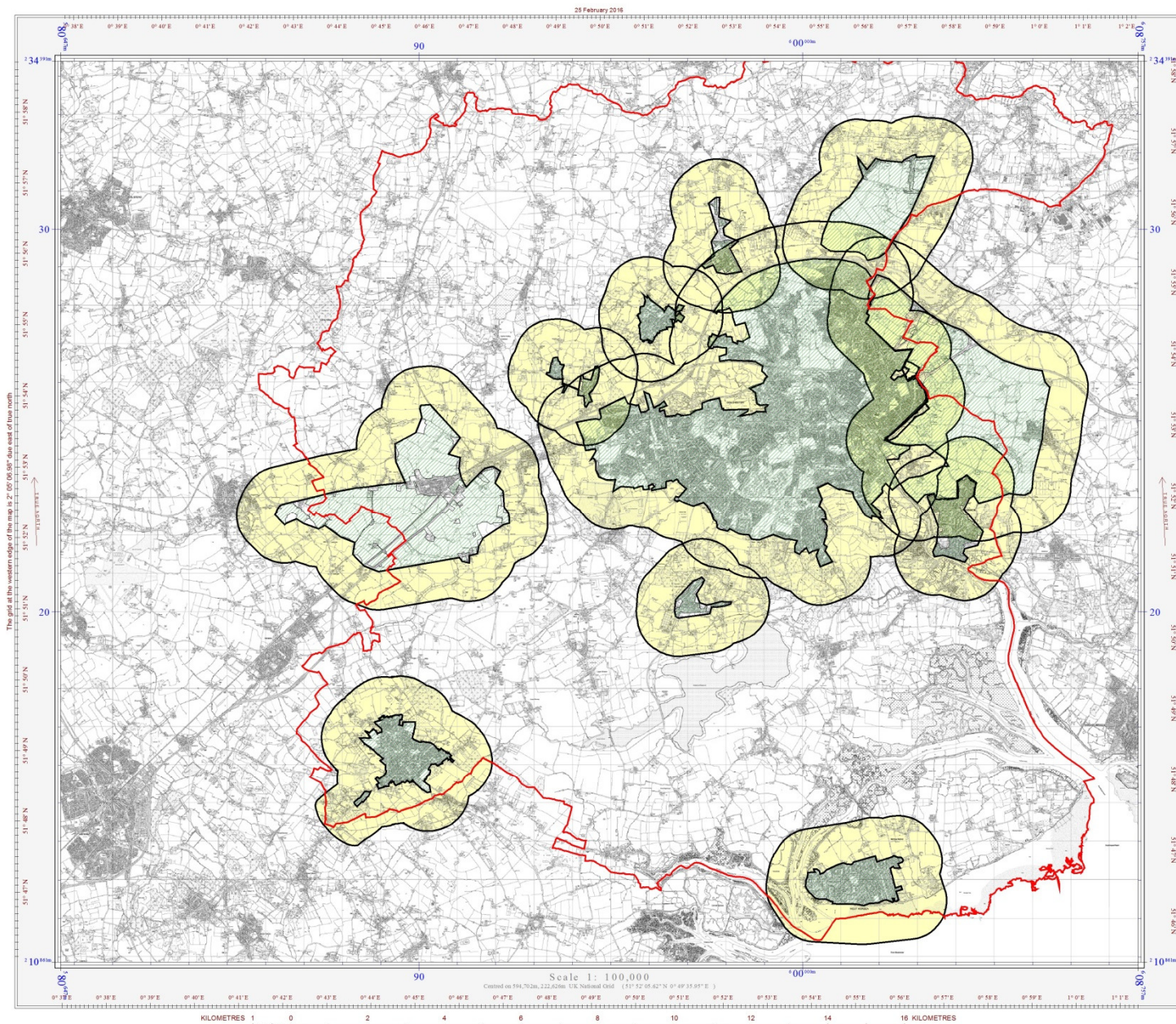
2.7 Braintree LoWS

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



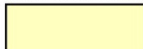
Colchester Borough

Local Wildlife Sites

Map 1 - Survey areas



Key

-  Boundary of Colchester Borough
-  Potential development areas
-  Development area buffers (1km)

Essex Ecology Services Ltd. EECOS
 01621 862986 eecos@essexwt.org.uk
 Registered Office: Abbots Hall Farm,
 Great Wigborough, Colchester, CO5 7RZ
 Company Registered No. 2853947
 VAT Registered No. 945 7459 77



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Appendix 1 - List of Selection Criteria

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

Habitat Criteria

- HC1 Ancient Woodland Sites – by inclusion in the Ancient Woodland Inventory, or as indicated by documentary evidence or the presence of indicator species.
- HC2 Lowland Mixed Deciduous Woodland on Non-ancient Sites – HPIE woodland habitat, which in Essex means Oak-Ash-Maple or Oak-Bracken-Bramble woods.
- HC3 Other Priority Habitat Woodland Types on Non-ancient Sites – in Essex this is restricted to the Wet Woodland HPIE.
- HC4 Wood-pasture and parkland
- HC5 Woody Scrub – stands supporting exceptional diversity, unusual communities or where the scrub is integral to another aspect of the site’s ecology.
- HC6 Veteran Trees – where there is specific associated ecological interest (*e.g.* epiphytes or invertebrates).
- HC7 Old Orchards
- HC8 Hedgerows and Green Lanes – if connecting other significant wildlife habitats, forming an extensive network of valuable hedges or if demonstrating ancient woodland flora.
- HC9 Lowland Meadows – grassland conforming to the National Vegetation Classification MG5 hay meadow community.
- HC10 River Floodplain
- HC11 Other Neutral Grasslands – old grasslands that do not clearly match HC9.
- HC12 Lowland Calcareous Grassland
- HC13 Heathland and Acid grassland – including sites with potential for restoration.
- HC14 Lowland Fen Vegetation
- HC15 Reedbeds
- HC16 Lakes and Reservoirs – a means of designating a whole water body where species selection criteria are applied.
- HC17 Ponds – a means of designating a habitat where species criteria apply, in accordance with the Ponds HPIE.

HC18 Rivers

HC19 Extended Riverine Habitat

HC20 Complex Riverine Habitats

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

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

HC23 Saltmarsh and Mudflats

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

HC25 Sand Dune and Shingle Beach Vegetation

HC26 Maritime Cliffs and Slopes

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

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

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

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

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

Species Criteria

SC1 Vascular Plants

SC2 Bryophytes

SC3 Lichens

SC4 Fungi

SC5 Notable Bird Species

SC6 Exceptional Populations of Common Bird Species

SC7 Dormouse

SC8 Barbastelle (and other Annex II) bats

SC9 Other Bat Breeding Colonies

SC10 Bat Hibernation Sites

- SC11 Protection of Otter Holts
- SC12 Breeding Water Vole Colonies
- SC13 Hotspots for Amphibian Diversity
- SC14 Palmate Newts
- SC15 Great Crested Newts
- SC16 Hotspots for Reptile Diversity
- SC17 White-clawed Crayfish
- SC18 Invertebrate SPIE
- SC19 Important Invertebrate Assemblages
- SC20 Notable 'Flagship' Macro-invertebrates