



SOUTHEND-ON-SEA BOROUGH COUNCIL
LOCAL WILDLIFE SITE REVIEW
2011
MAIN REPORT



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**LOCAL WILDLIFE SITE REVIEW
2011**

December 2011

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IMPORTANT NOTES

Nomenclature

The terms "Site of Importance for Nature Conservation" (SINC), "Wildlife Sites" and "County Wildlife Site" (CoWS) used in previous reports are here replaced by the currently generally accepted term of "Local Wildlife Site" (LoWS). The term should be viewed in a national context, with "Local" referring to county level significance.

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. The Essex Wildlife Trust and the Local and Unitary Authorities of Essex hope to be able to help landowners retain and enhance this biodiversity for the future. In recent years, the existence of a Local Wildlife Site on a farm has been seen as an advantage when applying for grant-aid from agri-environment schemes, with such grants favouring areas with a proven nature conservation interest.

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 or Public Open Space designation that may exist. The vast majority of the Sites in the county are in private ownership and this should be respected at all times. Those few sites that are described as being appropriate for environmental education already have some public access.

Land Ownership

It has always been the intention of the Essex Wildlife Trust to contact all landowners of LoWS, 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 to administer this suite of sites across the county. 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 LoWS in the wider countryside. Definitive 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.

Sites are mapped onto 1:10 000 scale Ordnance survey raster maps since these are felt to give a better overall impression of the site's location to the general public. More detailed mapping at 1:2500 scale of LoWS is held by Southend-on-Sea Council and the Essex Local Wildlife Sites Project, hosted by the Essex wildlife Trust.

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 each Local Authority. For these reasons, the Essex Wildlife Trust still wishes to be consulted on all planning proposals affecting areas of open countryside, 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.

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Annex Report 1 Local Wildlife Sites Selection Criteria

SOUTHEND-ON-SEA BOROUGH **LOCAL WILDLIFE SITES REVIEW**

1. INTRODUCTION

1.1 General Introduction

This report has been produced by Essex Ecology Services Ltd. (EECOS), the ecological consultancy of the Essex Wildlife Trust, on behalf of Southend-on-Sea Borough Council. It comprises the results of a review of existing and potential new Local Wildlife Sites (LoWS) intended to contribute to the Local Development Framework evidence base or any other subsequent Local Plan documentation. It includes a register of all those sites now considered to be Local Wildlife Sites (LoWS) within Southend-on-Sea Borough, some 9 in total, along with the identification of 3 Potential LoWS for which there is a lack of information or a need to bring about reasonable improvements through active management.

1.2 Background

During the early 1990s, the Essex Wildlife Trust undertook across the entire county a basic land use survey combined an exercise to identify the most important wildlife habitats present within each 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 in individual district volumes. This was an attempt to provide a unified approach to nature conservation across the county, providing a network of sites that would stand up to scrutiny at a county, regional and national level.

In the intervening years these SINC sites have been referred to as County Wildlife Sites and, in some places, Wildlife Sites, but in Essex the term Local Wildlife Sites (LoWS) 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. Notwithstanding this, it should be stressed that Local Wildlife Sites should be viewed as being of county importance, reflecting the natural variation in type and quality of woods, grasslands, water bodies, heaths and other habitats across the county.

1.3 Context

There will remain, of course, many places that are of importance to wildlife at a more “parochial” level, that are not afforded LoWS status. These should still be given due consideration by a Local Authority when determining planning applications, with LoWS

status not being a convenient short-cut to deciding whether or not a planning application has environmental impacts. Many Local Authorities have policies which state that there will be a presumption against granting planning consent for applications which have an affect on LoWS. However, there will be many other sites with implications for wildlife, biodiversity and the environment that will require a preliminary ecological assessment of some sort when determining the impact of a planning application and some of these may be of sufficient merit to refuse planning consent. Wildlife implications on these sites may take the form of the presence of legally protected species (e.g. Badgers, bats, Water Voles and nesting birds), or small fragments of habitats that might, if larger or less ecologically isolated, have qualified for LoWS status.

1.4 Objectives of the Review

The principal objective of this review is to update the LoWS network within Southend-on-Sea Borough. This updated information can contribute to a robust evidence base as required of each Local Authority as part of its Local Development Framework or Local Plan.

1.5 Review Process and Methodology

The basis for this review has been field survey, in conjunction with a desk study and consultation exercise to identify potential new LoWS and to validate or delete existing LoWS. All of these candidate sites were then assessed against the current 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 LoWS selection criteria were published early in 2009, with minor amendments in January 2010, and have been used in this current review. They are reproduced in Annex Report 1, as well as being available via www.localwildlifesites.org.uk 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 focusing 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.

1.5.1 Desk Study

The starting point for the focus of field survey work was the existing suite of LoWS (originally Essex Wildlife Trust SINC's in 1991) to determine whether or not they still satisfied the current selection criteria. Added to these were a number of potential sites that had been brought to the attention of EECOS or Essex Wildlife Trust staff since 1991. Reference was also made to aerial photography, most notably that available via web-sites, to identify other areas of land of potential interest. This last tool is particularly useful for locating areas of semi-natural habitat not visible from public rights of way or other public vantage points that might otherwise have gone un-noticed or required much more labour-intensive field-by-field survey work to discover. Clarification of site boundaries, most notably ancient woods and hedgerow patterns, was assisted by reference to the First Edition 6" Ordnance Survey maps of the early 1880s accessed via the web-site www.old-maps.co.uk. Reference was also made to the 1777 Chapman and André map of Essex, although it is recognised that a good deal of interpretation and caution is needed for this very early map work.

Alongside this, 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 LoWS selection criteria. Some suggested sites, for which insufficient information is currently available, have been identified in this report 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, which were consulted as part of this review process (in alphabetical order):

Roger Payne – Southend Museum

Ken Adams – Essex Field Club

Peter Harvey - Essex Field Club

Opinions were also sought from Natural England and the Essex Amphibian and Reptile Group.

1.5.2 Field Survey Work

The assessment was commissioned in the autumn 2010 and a number of sites (mainly grasslands) were visited towards the end of the year, in order to try and view some of the late flowering species. The woodlands and some other areas of grassland were surveyed during the spring and early summer of 2011 when their flora should be at their most obvious. The majority of Southend sites have some form of public access, but where this was not the case, attempts were made to contact the landowners to gain access. Where this was not forthcoming, such vantage points as could be gained were used to try and assess the current habitat quality.

For each existing Wildlife Site, attempts were made to record their feature(s) of interest that resulted in their original designation, in the hope of confirming the retention of wildlife interest. In some cases, notably for invertebrate populations, the survey work needed to seek out and determine whether or not the species is still present is laborious and time-consuming. In these few instances, continued presence of the appropriate habitat features has been used to re-assess the value of the site for the invertebrate species concerned. If the feature(s) of interest were not apparent, the site was assessed using the full suite of selection criteria to determine whether or not the site should be retained on other grounds. Other sites, not currently identified as Local Wildlife Sites, were evaluated in a similar manner.

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, railway land, MOD ranges and the like, and 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 those people who have actively assisted this survey by orally granting permission to enter onto their land.

Any areas of land judged 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. Given the strong link between UK/Essex Biodiversity Action Plans and the site selection criteria, any site associated with a BAP habitat or species was evaluated as a matter of course. All surveyors engaged on the project have had previous experience of Local Wildlife Site identification in other districts/counties, including the Essex Wildlife Trust’s 1991 assessment, and so had a working knowledge of the district and also the site selection criteria and what might intrinsically qualify for inclusion.

1.6 Limitations of the Survey

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 LoWS monitoring and review more useful than the “once every ten years or so” approach that has been the norm up to now. For Southend-on-Sea Borough, it has been 20 years since the original suite of SINC’s was identified.

The scope of the review limited the process, in many cases, to 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. RESULTS

2.1 Identification of Local Wildlife Sites

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

- Only one site, FW1 Lifstan Way Lake, has been down-graded to a potential LoWS on account of its decreased nature conservation value or failure to satisfactorily meet the revised and now more stringent selection criteria, even though the condition has not deteriorated since original designation.
- 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 3 completely new areas have also been identified whilst SSSIs have been removed from the old SINC system;
- Some sites have been amalgamated where they lie next to each other or are otherwise sufficiently connected.

Probably the greatest single fundamental change within the old SINC system that applied in Essex is that areas designated as Sites of Special Scientific Interest (SSSI) are now no longer included in the LoWS network, in line with national guidance. With regards to Southend-on-Sea Borough this has had less of an impact than in other districts because the SSSIs are virtually all estuarine habitats below Mean High Water Mark except for small areas of terrestrial habitat in the Foulness SSSI at Shoebury and Suttons. However there is a massive loss in terms of area. The SSSIs removed are:

Benfleet and Southend Marshes SSSI

Foulness SSSI

For reference, these SSSIs are identified in Appendix 4. Natural England should be consulted for precise boundary details and detailed descriptions, with the information provided here for convenient reference only.

Site numbering has also been changed in order to bring it in line with the rest of the county. The initial 1991 survey for SINC the sites were roughly grouped into habitat categories of Woodland, Grassland, Mosaic, Freshwater, Coastal or Heathland, with an appropriate letter code and sequential number. A simplified county-wide system has been introduced whereby

each site has a borough/district and number code, with all Southend-on-Sea Sites now being prefixed “So” and ordered by scanning from west to east across the district.

2.2 The New Local Wildlife Site Network

The revised summary list of Southend-on-Sea Local Wildlife Sites is presented in Appendix 1 with the full Register in Appendix 2. 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 under discussion in green, with any other adjacent LoWS shown in pale yellow, along with any potential LoWS (green hatching) and SSSIs (mustard yellow). The citation for each site then describes the characteristic vegetation, identifies key species and habitat qualities. This is followed by an indication of any UK and Essex Biodiversity Action Plan (BAP) habitats and Priority Species that are present. If the Site lies within a Living Landscape Area, this is then identified. The relevant selection criteria codes are then listed (see separate document Annex Report 1 for the interpretation of these codes).

The rationale statement provides guidance on why the site has been selected i.e. the basis on which it has been matched against the previously listed criteria codes. Finally, there are details of when the site was first designated and then reviewed (if applicable).

2.3 Changes to Old LoWS Network

The following table provides a brief summary of the SINC's identified in the 1991 Southend-on-Sea Phase 1 Habitat Survey, noting if they have been deleted or been subject to any other amendments.

C1 Benfleet and Southend Marshes SSSI	SSSI removed from LoWS network
C2 Foulness SSSI	SSSI removed from LoWS network
W1 Belfairs Park Wood	Amalgamated with M3 Belfairs Golf Course
W2 Oak Park Wood	Site modified by minor addition; name amended
G1 Shoebury Common South	Amalgamated with G2 and G3 and modified by addition
G2 Shoebury Common North	Amalgamated with G1 and G3 and modified by addition
G3 Southend Coastguard Station Grounds	Amalgamated with G1 and G2 and modified by addition
G4 Shoebury Old Ranges	Site modified by addition, and deletion of SSSI land
M1 Belton Hills	Site modified by minor additions and deletions
M2 Belfairs Golf Course	Amalgamated with W1 Belfairs Park Wood
M3 Thorpe hall Golf Course	Minor amendments
FW1 Lifstan Way Lake	Downgraded to Potential LoWS

2.4 Additions

Several existing Sites have had new areas added to them, but there are also some completely new Sites that are now added to the LoWS register for Southend-on-Sea Borough. These are:

So1 Two Tree Island West – former landfill site now developing as grassland and scrub

So5 St Clements Church, Leigh-on-Sea – old, species-rich grassland

So6 North Road Burial Ground – old grassland

2.5 Summary of Additions/Deletions

Twelve sites (totalling 250.6 hectares) were identified in the 1991 SINC Review of Southend Borough. This 2011 review has seen a net decrease of 3 sites to give a new total of 9 Local Wildlife Sites, totalling 134.5 hectares. Much of this land area loss is down to the exclusion of terrestrial SSSI habitat.

The one site lost has come from the site being demoted to the level of Potential Local Wildlife Sites (see Section 2.6, below). This site does not currently meet the selection criteria. Three grassland sites have been merged together to form one larger site, whilst a woodland and a grassland site have also been amalgamated (at Belfairs Park).

The additions come from a variety of sources: there are two grassland sites that went undetected or unappreciated during previous reviews which have been surveyed at more favourable times of year than when previously reviewed, and a former landfill site that has over time developed as good wildlife habitat. Recent survey work here has identified a significant assemblage of reptiles, which has allowed LoWS designation under the appropriate criterion.

2.6 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) in order to achieve full LoWS status. 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 3, is restricted to those “near misses” that just failed to make it onto the full LoWS Register. One Potential Site is a former Local Wildlife Site that has deteriorated in quality and needs restorative management in order to be able to re-consider it in the future.

3. DISCUSSION

3.1 Local Wildlife Site Network

The number of Local Wildlife Sites within the district has been revised following changes in policy and the application of new site selection criteria, which are more wide ranging and all-inclusive but at the same time more rigorous in their demands for a site to be adopted as a LoWS. Government guidance issued by Defra and adopted by The Wildlife Trusts movement states that SSSIs should not be considered within LoWS systems and, whilst there are valid arguments against this, the Essex Wildlife Trust now follows this guidance. 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.

Most of the borough has been developed for housing and commerce. Only three main areas of the borough remain relatively free of development. The main area where a rural agricultural landscape still survives is along the northern edge of the borough, bordering Rochford District. The area south of Leigh-on-sea is a combination of grassland and scrub and former coastal grazing marsh habitat, now protected from seasonal inundation by sea wall defences. The majority of woodland is found as part of Belfairs Golf Course on the far western edge of the borough, adjoining Castle Point District. All three of these areas coincide within the Green Belt zones highlighted in the Southend-on-Sea Borough Council Local Plan.

Since the original habitat survey of Southend in 1991, development has been confined to small scale 'infilling' with residential and commercial building, such that relatively few large-scale changes in land use have occurred. An example of a larger scale change of land use is the Garon Park Golf Complex that has been developed on what in 1991 was primarily arable land within the Green Belt to the north of the borough. Other changes include the construction of a balancing pond near Gunners Park, Shoebury on what was open grassland. The western part of Two Tree Island was used as a landfill site up until the late 1970s. With the cessation of tipping the land was capped with imported topsoil and subsequently a rough grassland and scrub developed. A diverse range of plants has now colonised the site which is currently inhabited by three species of reptile and provides important habitat for important Biodiversity Action Plan (BAP) bird and invertebrate species. The addition of the western part of Two Tree Island to the LoWS network provides more valuable wildlife habitat to complement the existing habitat of the Benfleet and Southend Marshes SSSI.

Despite the limited development within the borough, there will inevitably be an increased pressure on the public access open spaces throughout the borough.

Southend-on-Sea Borough LoWs (Fig. 1) are concentrated in two main areas. The far west has the only two recorded ancient woodlands in the borough (Belfairs Park Wood and Oak Wood), along with extensive grassland and scrub habitat at Belton Hills and Two Tree Island. In contrast, the east part of the borough has a series of largely coastal grasslands, including Thorpe Hall golf course. The short grassland turfs along the Shoebury seafront support several species of clover, representing the only areas where these species are to be found within Essex. As such, these unique floral assemblages make them very important, not only in the borough context but also in a county context.

3.2 Living Landscapes

The Essex Wildlife Trust is promoting a suite of significant landscapes for wildlife across the county under the title “Living Landscapes” (see Fig. 2 below). They embrace important landscape features, such as river valleys and estuaries; characteristic landscapes and land uses, such as clusters of hamlets and villages with ancient greens and drove ways and significant clusters of good wildlife habitat such as unusually well wooded areas. These Living Landscape areas are spread right across the county, with three currently covering parts of Southend-on-Sea Borough; these are discussed below with reference to their associated LoWS.

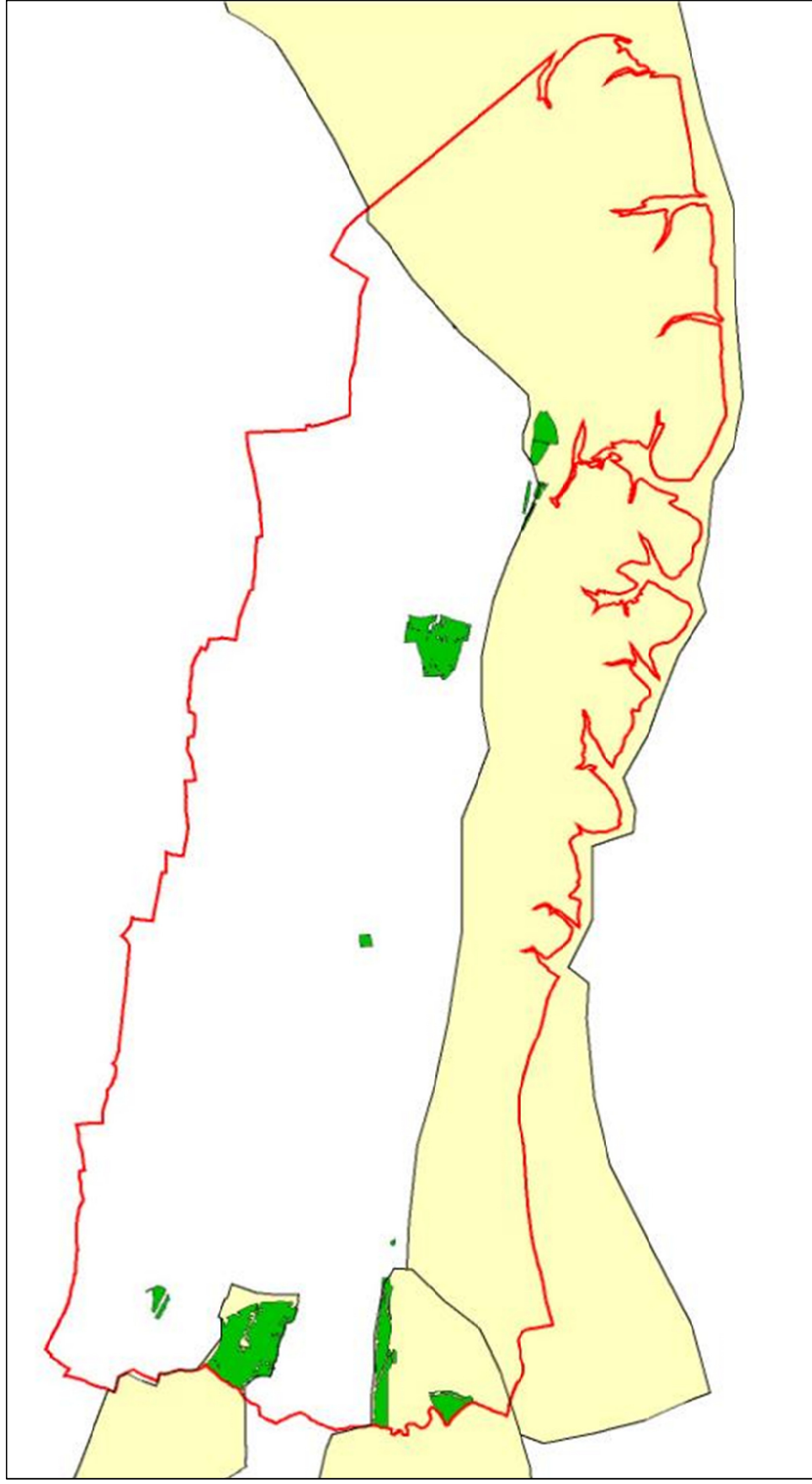
Hadleigh and Daws Heath Complex

This Living Landscape straddles the borough’s boundary with Castle Point District. Belfairs Golf Course (So8) forms the majority of the Living Landscape in the Southend-on-Sea section. Oak Wood lies just outside this boundary, but it should be stressed that these boundaries can be interpreted loosely so there is no reason why the philosophy behind the Living Landscape cannot be extended to this small, isolated wood.

Hadleigh Castle and Marshes

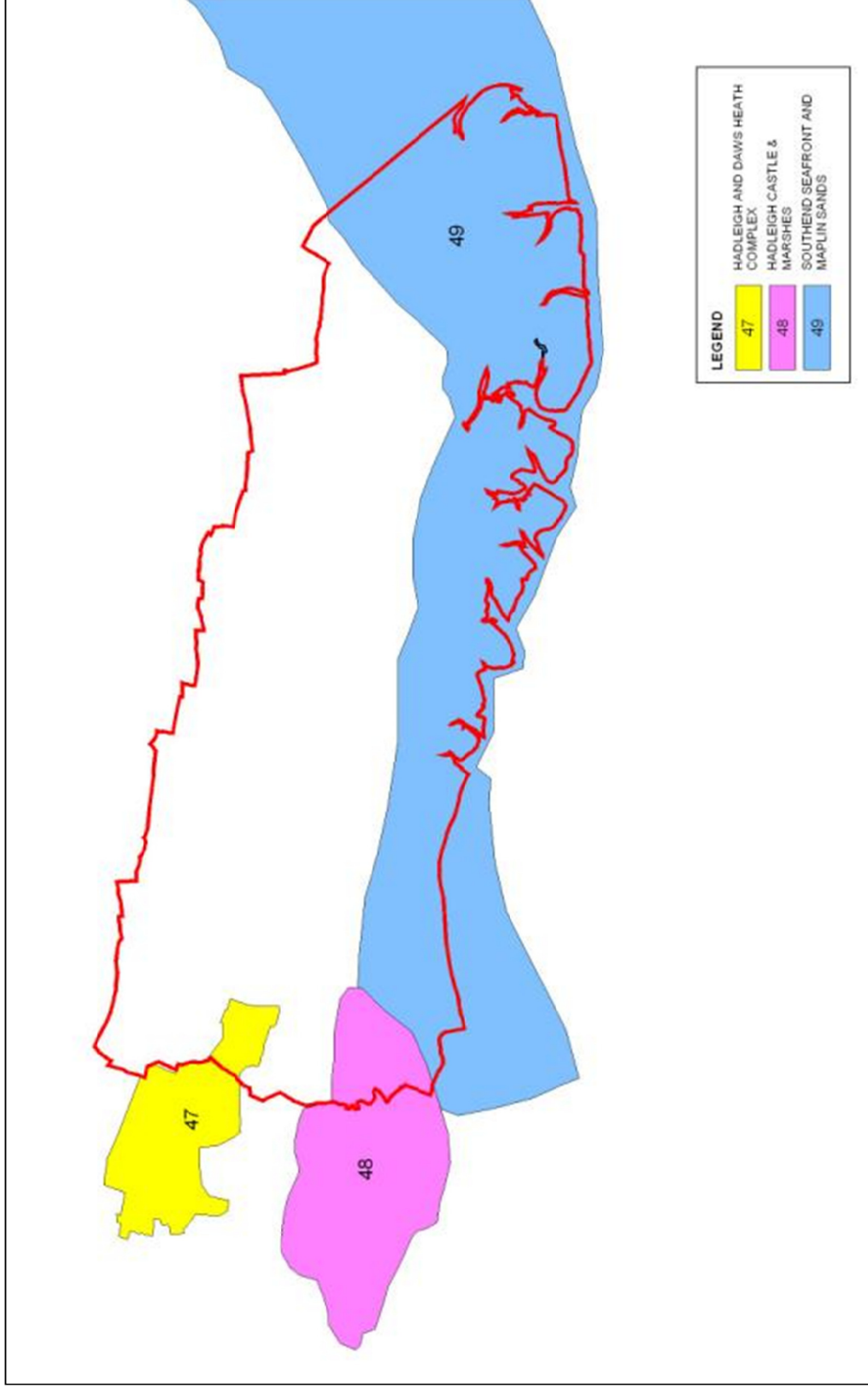
This area includes sites within Southend-on-Sea Borough and Castle Point District. The section in Southend includes some terrestrial and littoral habitat of the Benfleet and Southend Marshes SSSI and also includes Two Tree Island West (So1) and Belton Hills (So2).

Fig 1. Distribution of LoWS. Yellow zones are Living Landscapes areas (see text and figure 2 for explanation).



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Fig 2. Living Landscapes Zones. See text for explanation.



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Southend Seafront and Maplin Sands

This Living Landscape largely comprises Benfleet and Southend Marshes SSSI and Foulness SSSI. These SSSIs mainly cover the estuarine littoral zone, but also included is a small area of terrestrial and aquatic habitat in the Shoeburyness area of the borough where Shoebury Common Grasslands (So8) and Shoebury Lake and Grassland (So9) LoWS are found. Once again, the “fuzzy boundary” notion should allow the Potential LoWS at The Cliffs, Clifftown (including Cliff Gardens) to be considered part of this Living Landscape. Indeed, with its prominent position and public access, it would make an ideal location from which to promote the Living Landscape project.

3.3 UK BAP Priority Habitats

UK Biodiversity Action Plan (BAP) Priority Habitats are 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. The Essex BAP habitats closely mirror definitions within the UK BAP, providing a focus for implementing national goals at a local level.

Both UK BAP and Essex BAP habitats and species have been changed in the past few years. Nationally, some habitats have been added – Ponds and Hedgerows, for example – and others have had their name and/or scope changed – “Ancient or Species-rich Hedgerows” has changed to just “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, most of which correspond to national BAP habitats. At a local level, emphasis has shifted away from work on BAP species to the broader realm of BAP habitats, but at a UK level, much work is still being undertaken at a species level. 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.

3.4 UK BAP Habitats within Southend Borough

The following UK BAP habitats occur within the Borough:

- Coastal Saltmarsh

- Hedgerows
- Intertidal Mudflats
- Lowland Meadows
- Lowland Dry Acid Grassland
- Lowland Mixed Deciduous Woodland
- Ponds (possibly, subject to the presence of significant species being present within the pond)
- Coastal Sand Dunes – in a much modified form, the typical vegetation of this habitat survives at Shoebury, both at Shoeburyness and also East Beach, within the Foulness SSSI.

At first sight, other BAP habitats, such as “Arable Field Margins” and “rivers” might be added to the list, but the definition of these habitat types is quite precise so that not all field margins and stretches of river qualify. There are currently no known examples of these BAP habitats within the borough, but this might change in the future.

Coastal Saltmarsh is present in the borough. It forms part of the Benfleet and Southend marshes SSSI and is found exclusively around the Nature Reserve on the east side of Two Tree Island and LoWS So1 Two Tree Island West.

Intertidal Mudflats is certainly the most significant UK BAP present in the borough. Although it is recognised as very important, as non-terrestrial habitat, it is not dealt with in this report. Implications to this environment are covered under the auspices of the Marine Act 2009. It should also be noted that, in parallel with the “Living Landscapes” project, is “Living Seas” and conservation of the marine environment is an increasingly important topic on the conservation agenda.

Lowland Mixed Deciduous Woodland is primarily represented in the borough by two sites So3 Belfairs Golf Course and So4 Oak Wood, both being found in the far west of the Borough. Although bisected by golf fairways, the western part of Belfairs Golf Course retains the greatest area of the boroughs ancient woodland. This LoWS is contiguous with CP34 Belfairs Park Wood, part of the Castle Point LoWS network. Other, much smaller areas of broadleaved woodland occur in other parts of the borough, but these are considered to be too small, disturbed or isolated to be considered for LoWS status.

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. However, the small and highly urbanised character of Southend means that there are no truly large scale field hedgerow networks remaining. Those that do survive are mainly confined to the rural belt on the north edge of the district. However, remote survey indicates that few survive intact and therefore the borough would likely fall short of the 84% UK estimate. Other relict hedges may though still survive in urban settings. 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.

Lowland Meadows are defined within the UK BAP as conforming to a particular grassland type within the National Vegetation Classification. This is the “traditional old hay meadow” MG5 *Cynosurus cristatus* – *Centaurea nigra* grassland and this sward type still occurs in some grasslands.

One of the best examples of lowland neutral grassland is found in a terrestrial part of the Foulness SSSI. This site also includes characteristic sand dune vegetation and seasonally wet low-lying brackish hollows. The LoWS network in the western part of the borough has some interesting acid grassland, principally between the fairways of So3 Belfairs Golf Course and likely falling into the Lowland Dry Acid Grassland BAP definition. Belfairs Municipal Golf Course was opened in 1926 with much of the course being built on former arable land. Much of the species richness and diversity that survives is found in the north eastern part of the site immediately south of the club house. These species likely survive here because, as can be seen on old maps from the late nineteenth and early twentieth centuries, the land here was not under arable cultivation but still partially wooded. The areas of species richness surviving in

the southern part of the golf course, annexed primarily from arable land, are possibly the remnants of uncultivated headlands within former fields. Remnants of an older neutral grassland flora are also found in So5 St Clements Church, Leigh-on-Sea.

The UK BAP Lowland Mixed Deciduous Woodland is not restricted to ancient woodland, though the best examples of this habitat type invariably are ancient. Ancient woodland is represented within the LoWS register with So3 Belfairs Golf Course and So4 Oak Park Wood. Fragments of secondary woodland also have a role to play in adding habitat diversity to such sites as So2 Belton Hills.

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.

Several ponds have been, by default, included within the LoWS network, such as at Thorpe Hall Golf Course (So7). Although these ponds may not merit inclusion as a LoWS on their own, they are intimately associated with their own LoWS so that they undoubtedly add to the overall habitat interest and biodiversity of the Site.

Coastal Sand Dunes BAP vegetation occurs within the Shoebury Old Ranges and also along East Beach, Shoebury, both within Foulness SSSI. More highly modified vegetation derived from this habitat type remains at Shoebury Common.

3.5 Essex BAP Species and Habitats

The current ESSEX county BAP is tending to emphasise habitats rather than individual species, but it is thought useful to include reference to species formerly considered to be Essex BAP species, since some of these have been adopted by Local Authority BAPs. A number of Essex BAP species have a general applicability across the county and across any given district. These include Brown Hare, bats, Skylark, Song Thrush, Water Vole and Great Crested Newts. Others are rather more site specific.

Black (or Water) Poplar – is one of the scarcest of British trees. Ten specimens are known to occur from six localities within Southend: in Chalkwell Park; Leigh Cliff Gardens; Cliff Gardens Southend; Jones Memorial Recreation Ground, Sutton; Southchurch Hall Gardens and St Clements Court, near the far eastern end of Belton Hills

Shrill Carder Bee – So1 Two Tree Island West, located in the east Thames corridor is important habitat for this Bumblebee.

It should be noted that the Essex Biodiversity Action Plan is currently being re-written, with an emphasis on habitats rather than species and with a re-alignment of habitats to conform with national definitions. Whilst this process is still ongoing, consideration of habitats is in a state of flux. Some Essex BAP habitats also occur throughout the county, such as hedgerows and green lanes, ancient woodland (now more broadly included within lowland mixed deciduous woodland) and, at low density, species-rich grassland. The one old Essex BAP habitat that stands out for Southend is the rather “cross-curricular” Urban Areas HAP. This recognises that woodland, grassland, wetlands and other habitats have a particular value when they are in urban or suburban locations in terms of environmental education, contact with wildlife in many forms and quality of life as part of open spaces for recreation and amenity. All the important wildlife sites of Southend are within easy reach of the population.

3.6 County Context

Essex has 14 Local Authority/Unitary areas, most of which have had a LoWS review within the last 7 years. They range from the very small, highly urbanised Harlow and Southend-on-Sea, and to a lesser extent Castle Point, up to the large, agriculture-dominated expanses of Uttlesford and Braintree districts. These differing landscapes can distort attempts to analyse which areas are particularly rich or poor in terms of their LoWS resource, but the following section is a broad summary of the picture as it stands. This distortion is particularly true for Southend-on-Sea, which is the most urbanised district within Essex.

The following table provides the most up to date data for each of the Local Authority areas in Essex (it should be noted that Brentwood has not been re-assessed since the early 1990s and the number of LoWS shown here is perhaps fewer than might otherwise be the case. It is currently being reviewed during 2011/12. The Local Authority areas have been listed in order of increasing land area and one particular aspect of the data has been plotted as Figure 3.

	No. of LoWS	Area of LoWS (ha)	Local Authority Area (ha)	% land as LoWS
Harlow	42	300.0	3053.6	9.82
Castle Point	32	671.7	6317.8	10.63
Southend	9	138.7	6785.0	2.04
Basildon	54	1068.7	11044.5	9.68
Brentwood	138	1027.1	15311.7	6.71
Thurrock	70	1074.2	18431.9	5.83
Rochford	39	359.6	26341.7	1.37
Epping	222	1680.8	33898.8	4.96
Chelmsford	150	1654.2	34299.8	4.82
Colchester	168	1963.2	34871.8	5.63
Tendring	125	1216.8	36506.8	3.33
Maldon	89	1066.6	42659.7	2.50
Braintree	251	1965	61170.8	3.21
Uttlesford	281	1701	64118.2	2.65

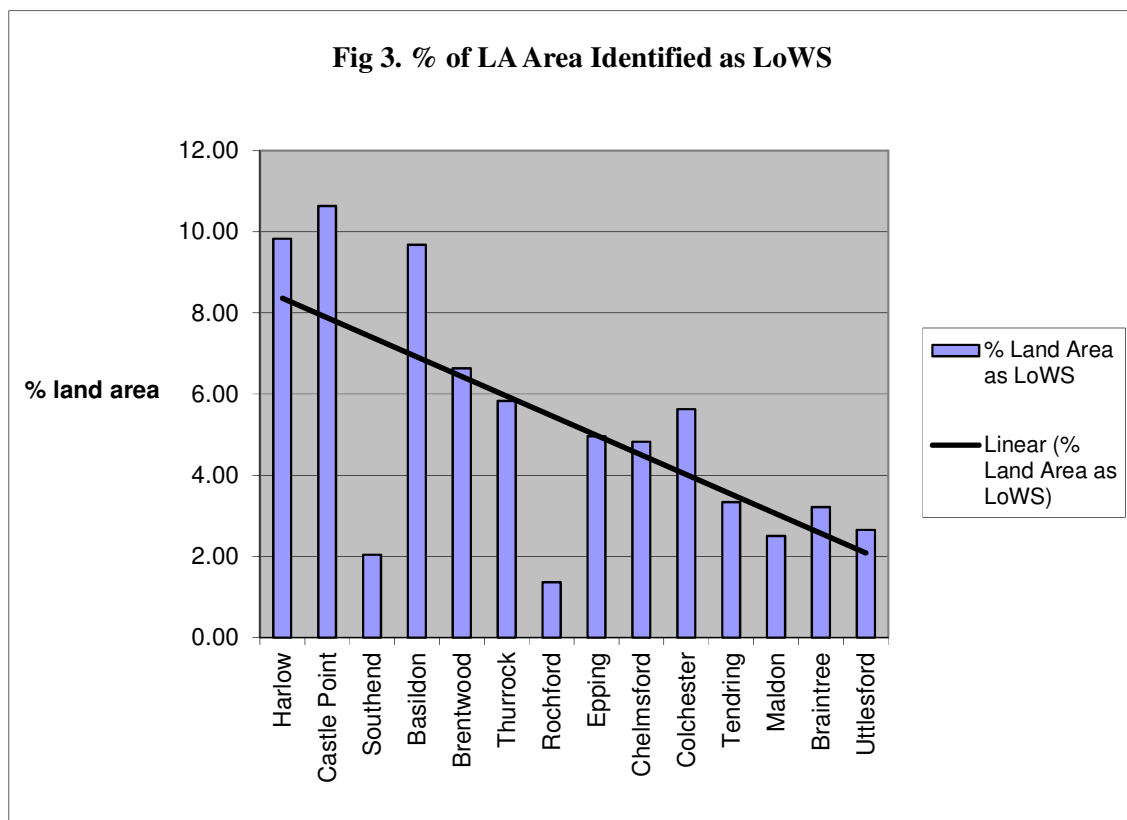


Figure 3, above, is a plot of the % of land identified as LoWS for each district, with a superimposed trend line for illustration. Note that the x-axis is not scaled; the districts are merely arranged in order of increasing size. Southend lies well below the trend line, suggesting a smaller than average area of land identified as LoWS. The rather more extreme fluctuation on the left hand side of the plot is the result of the differing characters and histories of the smaller districts. Southend is a highly urbanised area with little open countryside, and so its %LoWS figure is inevitably low. In contrast, the even smaller Castle Point is unusually rich in LoWS, comprising many ancient woods, coastal grasslands and areas of plotland. Southend scores low in this analysis, but this is distorted by some 33.3 ha of its semi-natural habitat being terrestrial SSSI. These areas are the east part of Two Tree Island, part of the Shoebury Old Ranges, both within the Benfleet and Southend Marshes SSSI and a small part of grassland and scrub of the Foulness SSSI. The remaining 2244.9 ha of SSSI is offshore littoral and saltmarsh habitat outside the sea walls (Benfleet and Southend Marshes SSSI/Foulness SSSI), and therefore now outside the scope of the LoWS system.

It is difficult to analyse these data too finely, but analysis of Figure 1 illustrates the di-pole between east and west in terms of the wildlife interest, with very little significant habitat centrally. It should however be stressed that the borough's LoWS support populations for several plant species of county and national importance including Bithynian Vetch (*Vicia bithynica*), Deptford Pink (*Dianthus armeria*) and Bulbous Meadow-grass (*Poa bulbosa*).

3.7 The Way Ahead

The Local Wildlife Site network should not be a static system, as has tended to be the case in Essex in the past. Until this review, the majority of sites and the information held about them had largely been left static since at least 1991, since when there have been considerable changes in the agricultural environment and the quantity and quality of information regarding the species and habitats present for the county. Local Wildlife Site policy, particularly in respect to site selection criteria, is also likely to evolve further 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.

A vital first step is to make land owners aware that part of the land in their guardianship is a prized nature conservation resource. In this respect, Southend-on-Sea Borough Council is in an unusual position as the landowner of many of the LoWS identified here. For the remaining

individual owners, some will already be aware of this, but for others it may be a chance to look at their land in a new light.

There is a real need to get all LoWS owners “on board” in terms of explaining the LoWS project, its implications and opportunities and organising offers of help in achieving appropriate management for the Sites. In recent years, all Local Authorities have had various aspects of their work monitored through a process called a Local Area Agreement. Within this, a suite of performance indicators were used to determine how well Local Authorities were achieving their objectives. One such indicator is NI (National Indicator) 197 Improved Local Biodiversity. There are a number of ways in which this can be measured and Essex adopted ‘Delivery of Biodiversity through Local Sites’ as an “index” of how well biodiversity is being looked after in the county. Effectively, this means that the LAABI (Local Area Agreement Biodiversity Indicators) Steering Group, acting as the LoWS Partnership and comprising representatives from the Essex Wildlife Trust, the County Council and each Local Authority, will be striving to ensure that a certain percentage of all LoWS will be under appropriate management at key milestone dates. This cannot be done without the co-operation of the relevant land owners.

To that end, the Essex Wildlife Trust’s Wildlife Sites Officer has been working alongside Local Authorities to identify owners, undertake initial meetings to discuss the LoWS project and to encourage the adoption of simple management strategies to achieve “Positive Conservation Management” for each site. This process has been overhauled during 2010 with central and local government withdrawing funding that would have been secured by reaching the chosen targets. There is also no further central monitoring that previously set targets are being met. However, in Essex, the LAABI Steering Group has resolved to continue the work timetable as originally proposed as a matter of good practice.

Monitoring of management outcomes and Site condition is also important. 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.

Nature conservation should not be ignored outside these LoWS. Indeed, with a paucity of sites within the central, highly urbanised section of the borough, the needs of wildlife rest almost exclusively on other areas of land. Here, public parks still have an important role to play in supporting local wildlife and as places where local residents can have regular contact with wildlife. It would be of great value to undertake a more localised audit of the parks within Southend-on-Sea borough to determine how they might be managed to maximise their wildlife value whilst not compromising their primary function as places of recreation and general public access.

Another important feature within the urban environment is Prittle Brook. In many places this has been confined within concrete channels, which severely limits its wildlife value. The brook corridor has good potential for a recreational route through the urban development and thought should also be given as to how its potential as a wildlife corridor might also be enhanced.