## 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. 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. 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. Some 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 1992. 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 1992 and 2009 to development has been very slight. It has taken the form of garden encroachment for properties located next to or already within woodlands, the construction of a church car park and the like. The old Roydon Brickfield SINC has long featured in planning debate within the district and part of the site was ploughed up some years ago. Parts of the remaining site have suffered from neglect and have now been removed. At Epping, a small triangle of grassland to the south of St Margaret's Hospital was due to be included within the LoWS network during this review but during the survey period it was badly damaged by the excavation of a settling pond and the spreading of soil waste associated with an adjacent development.

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. A large area of potentially good brownfield habitat was destroyed during the summer of 2009 at Blunts Farm near Theydon Bois after planning enforcement policy required the levelling and clearance of inert landfill material that had been imported. A remaining section of brownfield habitat has been included within the LoWS register, but its future is unknown.

Geographically, there is a strong concentration of Sites across the centre of the district, just to the north of the M25 (Fig. 1 below). There is probably no one single explanation for this, but rather the combination of geology, geomorphology and land ownership (e.g. existence of several large, private estates). A chain of large sites down the Lee valley signifies the ecological value of brownfield land, with the Sites comprising flooded gravel pits and other ex-industrial land.

To the north-east is a very agricultural landscape, where LoWS generally comprise ancient woodland, hedgerows and lanes or grassland fragments along road verges, surrounded by arable land.

## 3.2 Living Landscapes

The Essex Wildlife Trust is promoting a suite of significant landscapes for wildlife across the county under the title of "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, drove ways and roadside grasslands and significant clusters of good wildlife habitat such as unusually well wooded areas. These Living Landscape areas are spread right across the county, with several within Epping Forest District, and these are discussed below with reference to their associated LoWS.

Stort Valley

Only the southern tip of this area touches Epping Forest District, but it includes a number of small ancient woods, which passed to the district after a county boundary change in the 1990s. The main thrust of this Living Landscape area is the river valley and does include Sawbridgeworth Marsh SSSI here.

Stort Valley: Harlow

The north-eastern limit of this area includes two interesting riverside grassland LoWS: EP101 The Hermitage and Ep 109 Pincey Brook Meadows. This zone also extends down the western side of Harlow, covering a small number of Epping Forest woodland LoWS and providing a buffer between the urban sprawl of Harlow and the ancient, complex landscape of Nazeing.

Lea Valley

In contrast, this is one of the most significant Living Landscape zones in the district, especially in terms of the interactions between wildlife and residents. The valley is an important recreation resource as well as wildlife corridor and striking the right balance between these often conflicting interests will be a key issue. At the same time, there are huge mutual benefits in terms of environmental education and providing worthwhile wildlife experiences to the doorstep of a large, increasingly urban population.

Parndon Woods: Harlow

Despite its name, this area includes sites within Epping Forest District, including Mark Bushes Complex (Ep90) and Epping Long Green East (Ep67). This area also provides a buffer to the urban spread of Harlow town.

Cobbin's Woods

This area comprises a small, high ridge on the northern side of the Cobbin's Brook valley and includes the Galleyhill Wood Complex (Ep16), Deerpark Wood (Ep26), Copy Wood (Ep43) and Epping Long Green West (Ep55).

**Fig 1. Distribution of LoWS across the district. Yellow zones are Living Landscapes areas (see text for explanation).**

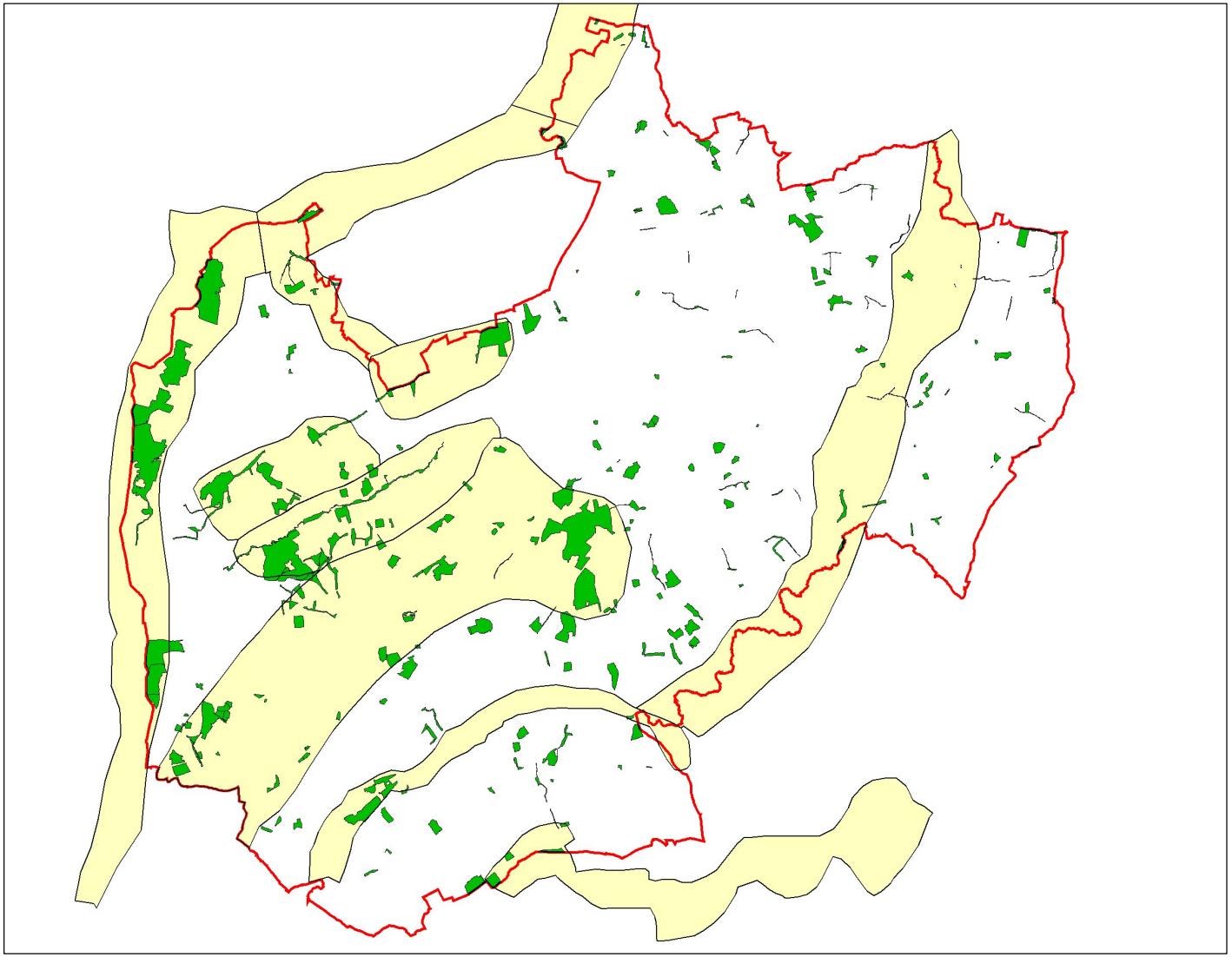
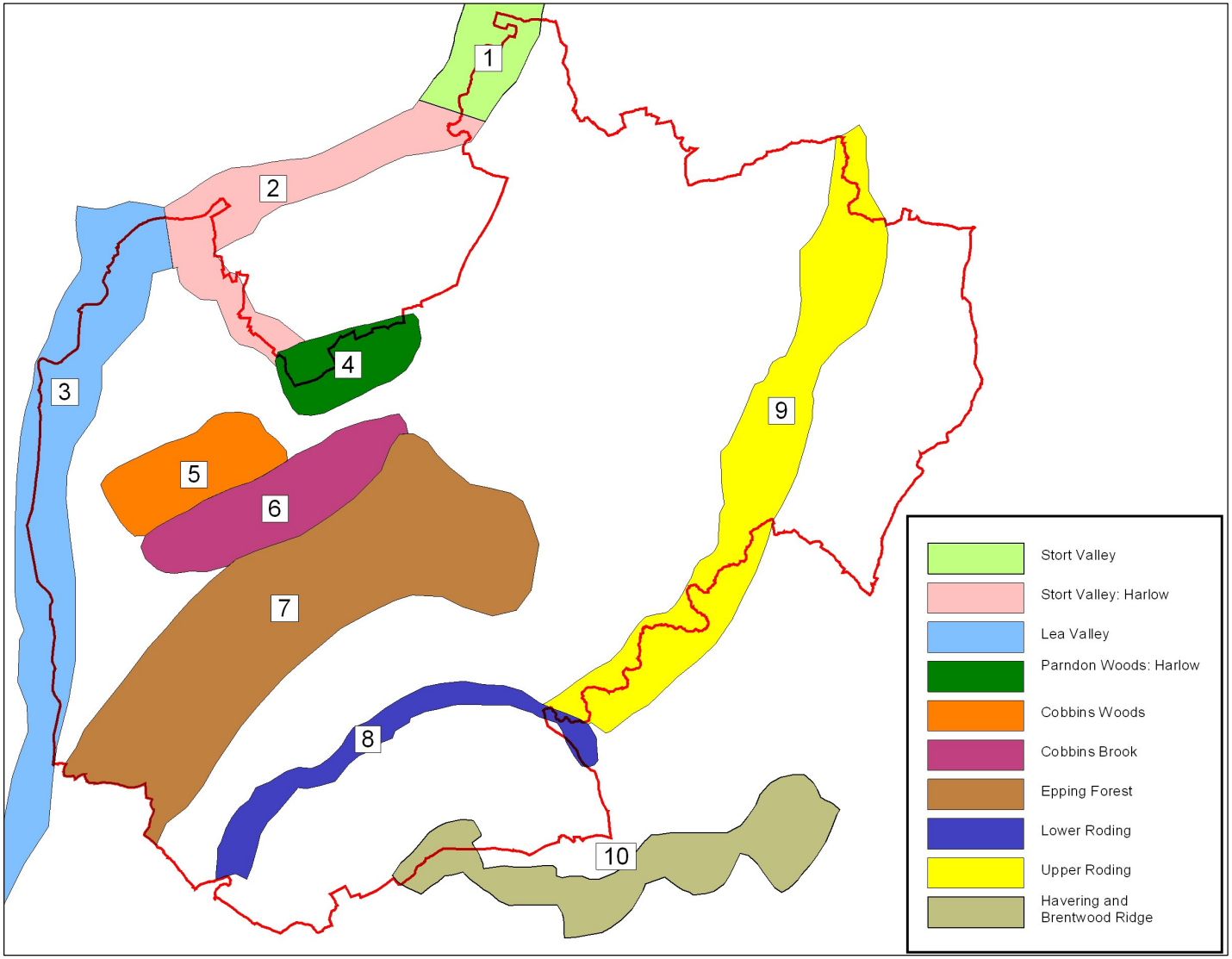


**Fig 2. Living Landscapes Zones. See text for explanation.**



Cobbin's Brook

The importance of this stream valley is emphasised by the inclusion of the stream and closely associated habitat as a LoWS (Ep48). As well as providing important riverine habitat, the stream course and associated habitats provide an important wildlife refuge and corridor, especially towards the eastern (upstream) end, where the stream flows through an intensive arable landscape. The Living Landscapes area also embraces Warlies Park (Ep30) and the numerous woods of the Copped Hall Estate to the east.

Epping Forest

Whilst the Forest is clearly at the core of this area, there is a host of satellite LoWS surrounding it, some of which comprise fragments of habitat that would have formerly connected directly to the Forest or are equally antiquated landscape features in their own right, such as Sewardstone Green (Ep11). Other LoWS in this Living Landscapes area include Gravel Hill, High Beach (Ep22), Ardmore Lane Wood (Ep26), Roebuck Green (Ep29), Loughton Woods (Ep42), Ash Green (Ep50) and Piercing Hill Wood (Ep73).

Also included within this area are the very important woods around Theydon Garnon and Theydon Mount to the east of Epping town. LoWS here include the Birching Coppice Complex (Ep116), Beachet Wood (Ep117) and the remnants of Ongar Park Wood (Ep129).

Lower Roding (M25 to Chigwell)

The key sites within the area are the Roding Valley Meadows SSSI and LoWS of the same name (Ep61). Upstream of these floodplain grasslands is a "blank canvas" with huge opportunity to recreate floodplain grassland and bring about improvements to the quality of the river itself.

Upper Roding (Abbess Roding to M25)

Much the same can be said of this section of river valley until, travelling upstream, one reaches two riverside LoWS: Hallsford Bridge Meadow (Ep190) and Clatterford End Plantation (Ep191), with Fyfield Mill Meadow (Ep199) yet further upstream. A number of road verges and ancient lanes are also here, but of secondary importance to the Living Landscape area which should focus primarily on the river channel and associated floodplain habitats.

Havering and Brentwood Ridge

As its name suggests, this area lies largely outside the district, but it does include Hainault Forest SSSI and several LoWS surrounding it. These include some of the most important heathland flora in the district outside of SSSIs in the Chigwell Heath and Wood (Ep86) LoWS. Also within this Living Landscape area are Hainault Forest Meadow (Ep93), Hainault Forest Golf Course (Ep104), part of Featherbed Lane (Ep102) and Crabtree Hill Paddocks (Ep110).

It could justifiably be argued that there is another zone of significant landscape character, which includes a large number of LoWS, running across the northern-eastern end of the district between Harlow and Berners Roding. Here, many green lanes, flower-rich road verges and ancient woods preserve an important flora and provides a distinctive character to the area.

## 3.3 UK BAP Priority Habitats

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 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 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 Epping Forest District. 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. Hedgerows are, of course, key features in green lanes, of which Epping Forest District has a good number of high quality examples. The inclusion of these hedged lanes reflects their value as wildlife corridors in sometimes bleak arable surroundings, or as important linear grasslands or ancient woodlands in their own right. Furthermore, 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.

With regard to the UK BAP habitats for which Epping Forest District has a particular importance as far as county significance is concerned, the most obvious is probably wood-pasture and parkland. Whilst small parts of Epping Forest itself are subjected to grazing, this practice is a fraction of its former extent. This is also true for a number of small "satellite" woods and greens identified as LoWS here (such as Ep26 Ardmore Lane Wood, Ep29 Roebuck Green, Ep42 Loughton Woods and Ep50 Ash Green). Grazing would not be possible in their modern, suburban surroundings. Parkland, such as at Warlies Park, is of importance for landscape and social history as well as for wildlife habitats. Similar, though smaller, habitats remain at Ep113 Hill Hall Park and Ep137 Albyns Parkland.

Many former parkland trees remain in relative isolation or as hedgerow trees in a modern arable landscape and there is further work required to see if any of these should be incorporated into the LoWS network. Their value is further stressed by the inclusion of Veteran Trees within the Essex BAP.

Other UK BAP habitats present in the district include hedgerows, floodplain grassland, lowland meadows, ponds, reedbeds, wet woodland and brownfield land. The Roding valley is one of the major river valleys of south Essex, but its floodplain grassland is now largely restricted to near Loughton, where excellent remnant sites have either been afforded SSSI status or are covered by LoWS designation. There is great potential, however, to increase the extent of floodplain grassland in the upper reaches of the Roding valley, although here water flow levels are also of major concern.

Wet woodlands are not especially widespread in the district (outside the Forest SSSI), making all such examples of interest. Representative examples have been included within mosaic sites that also support wet fen, damp grassland or other woodland habitat or, rarely, comprise a whole site, such as at Ep132 Passingford Bridge Wood. Similarly, reedbed is largely restricted to sites within the large, new Lea valley mosaics, but small stands occur in mosaic habitats in a few other sites across the district.

### 3.4 Essex BAP Species and Habitats

A number of Essex BAP species have a general applicability across the county and across any one district. These include Brown Hare, bats, Skylark, Song Thrush, Water Vole and Great Crested Newts. Others are rather more site specific. The Lee Valley Park has long been of note for its over-wintering Bitterns and one might aspire to hopes of it staying to breed in the valley, although the extent of reedbed may not yet be to its liking in this respect. Otters are still very uncommon although not unheard of in the south of the county and habitat creation/improvement schemes driven by the Living Landscapes project along the Roding Valley could see this flagship mammal return in greater numbers to the district. Clearly, the Lee valley already represents huge opportunities to wetland wildlife, although the intensive use of the valley may have a negative impact in terms of disturbance levels.

Some Essex BAP habitats also occur throughout the county, such as hedgerows and green lanes, ancient woodland and, at low density, species-rich grassland. However, Epping Forest

District has clear emphases in terms of its Essex BAP resource, some of which have already been discussed since they are also covered by UK BAPS. These include hedgerows (and green lanes by default), woodland pasture and heathland (taken to include unimproved acid grassland communities).

The Essex BAP habitat "Veteran Trees" has overlaps with the BAPs covering wood-pasture and parkland, but a good many such trees also occur in "ordinary" countryside as standards within hedgerows within an otherwise farmed landscape. This is particularly true for Epping Forest district and the council's Countrycare team has made great strides in identifying and cataloguing these trees. There is perhaps more work to be done in understanding the ecological value of these trees and incorporating significant clusters into the LoWS network.

### 3.5 County Context

Essex has 14 Local Authority/Unitary areas, most of which have had a LoWS review within the last 6 years. They range from the very small, highly urbanised Harlow, 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.

The following table provides the most up to date data for each of the Local Authority areas in Essex (it should be noted that Harlow, Southend and Brentwood have not been re-assessed since the early 1990s and the number of LoWS shown here is perhaps fewer than might otherwise be the case. Harlow is being reviewed during 2010). The Local Authority areas have been listed in order of increasing size and two aspects of the data have been plotted in Figures 3 and 4.

| | No. of LoWS | Area of LoWS (ha) | Local Authority Area (ha) | % land as LoWS |
|---|---|---|---|---|
| Harlow | 17 | 135.5 | 3053.8 | 4.44 |
| Castle Point | 32 | 671.7 | 6317.8 | 10.63 |
| Southend | 10 | 121.6 | 6785 | 1.79 |
| 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 |

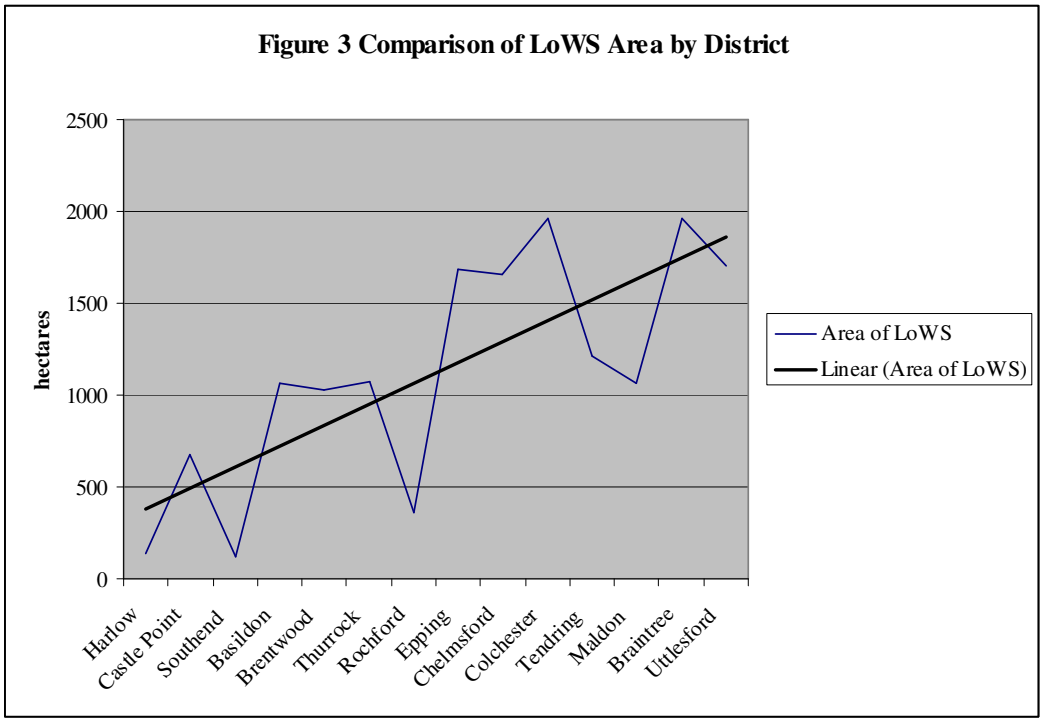
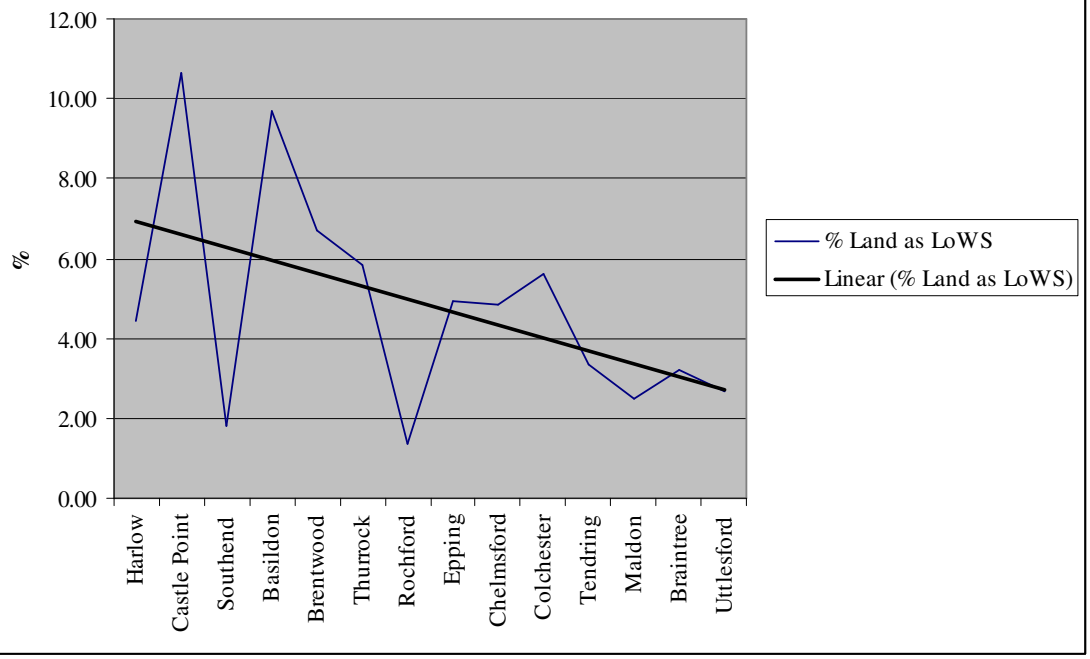



Figure 3, above, is a plot of the area of LoWS for each LA area. Note that the x-axis is not scaled; the districts are merely arranged in order of increasing size. Epping forest lies above the trend line, suggesting a larger than average area of land identified as LoWS.

Perhaps more telling is Figure 4, below, in which the plot is of percentage of each LA area that has been identified as LoWS. The more extreme fluctuation on the left hand side of the plot is the result of the differing characters and histories of the smaller districts. Harlow has not been reviewed since 1991 and is probably under-represented in terms of its LoWS resource as defined by the current criteria. Southend is a highly urbanised area with little open countryside, and so its %LoWS figure is inevitably low. In contrast, the still small Castle Point is unusually rich in LoWS, comprising many ancient woods, coastal grasslands and areas of plotland. Rochford scores badly in this analysis, but this is distorted by much of its semi-natural habitat being SSSI (especially Foulness) and therefore now outside the scope of the LoWS system.

**Fig 4 % of LA Area identified as LoWS**




There then exists a group of Local Authorities with roughly similar land areas. These are Epping Forest, Chelmsford, Colchester, Tendring and Maldon. Epping Forest is the smallest of these but has values in Figs 3 and 4 that are slightly above the overall trend line.

A similar distortion is affecting the statistics for Epping Forest District, with the exclusion of a significant part of its land area within the Epping Forest SSSI. The overall summary of this simple analysis is that the district is at least as rich in LoWS as might be expected for its area.

## 3.6 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 1992 (with only minor modifications in 1996 and 1998), 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. Many will be all too aware of this fact, but for others it may be a chance to look at their land in a new light. Identifying owners is a long and sometimes complex process. Whilst some landowners were encountered during the LoWS survey work, the powers of entry onto land afforded EECOS surveyors by the District Council has meant that many sites have been assessed without that initial contact.

There is, therefore, a real need to get 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. All Local Authorities have various aspects of their work monitored through a process called a Local Area Agreement. Within this, a suite of performance indicators are used to determine how well Local Authorities are 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 has 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 will be 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 is likely to take several years, but Epping Forest Council's Countrycare team has already made significant progress in this respect, even before NI197 was adopted.

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.

There are also related areas of action that perhaps should be explored within Epping Forest District. These include the potential for establishing green corridors to link up existing sites of conservation significance, especially within the "Green Arc" along the London border and also within the Living Landscape areas discussed above. Policies influencing the siting of future development and the detailed implications of the local and national Biodiversity Action Plan reviews, are other examples.