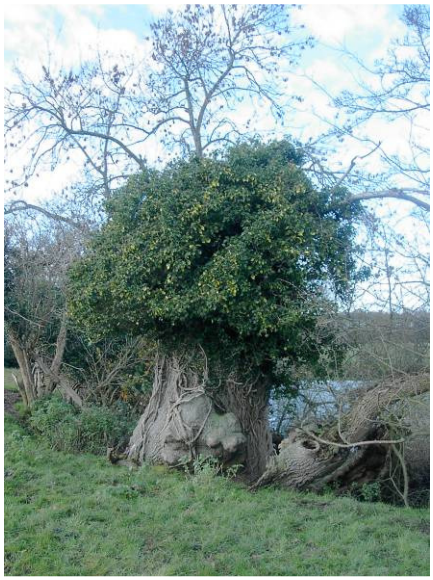
Local Wildlife Sites in Kent

(Sites of Nature Conservation Interest)

Criteria for Selection and Delineation

Version 1.3

February 2006



Kent Wildlife Trust
on behalf of the Kent Biodiversity Partnership

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Adopted by Kent Biodiversity Partnership
9 February 2006

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(Incorporates corrected figures on extent of key habitats and modified criteria for neutral grassland)

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Local Wildlife Sites in Kent: Criteria for Selection and Delineation [1]

Contents

Introduction

1) In the UK, those sites and areas considered to be of the greatest importance for nature conservation are protected in law as Sites of Special Scientific Interest (SSSIs). SSSIs which are of international significance are in many cases given additional protection as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar Sites.

2) However, it is recognised that features and sites of significant nature conservation interest exist outside the network of statutorily protected wildlife areas. It is also recognised that the protection and conservation of this wider nature conservation interest is essential to the maintenance of the UK's natural heritage, to the achievement of national and local biodiversity targets, and to making sure everyone has access to wild places and natural countryside. One established method for the conservation of wildlife outside of statutory sites is the identification and designation of local wildlife sites, sometimes called Sites of Nature Conservation Interest (SNCIs) or Sites of Importance for Nature Conservation (SINCs).

3) The current Planning Policy Guidance Note on Nature Conservation (PPG9) sets out the importance of local wildlife sites to the conservation of UK biodiversity, and places a duty on local planning authorities to recognise and protect such places. In addition, DEFRA is currently preparing guidance on the creation and management of systems for identifying and protecting local wildlife sites. The DEFRA guidance states that local wildlife sites 'can play a vital role in delivering local, regional and national biodiversity … targets, which contribute to public enjoyment of nature and quality of life.'

4) In Kent, local wildlife sites have been identified and designated by Kent Wildlife Trust since 1985. There is now a network of nearly 500 sites in the current administrative areas of Kent, Medway, Bromley and Bexley. The sites cover a total of around 35 000 hectares, or roughly 9% of the county's land area. The current system of identification of sites is recognised and supported by English Nature, the Environment Agency, Kent County Council, Medway Unitary Authority, and the various district councils.

Purpose of this document

5) This document presents an updated procedure for the identification of wildlife sites in Kent. In doing so, it draws on current best practice, as set out in the emerging DEFRA guidance, and recognises the need for a robust system which is able to withstand rigorous scrutiny. The document sets out:
   a) The purpose of local wildlife sites;
   b) A set of clear criteria for identifying sites of local wildlife importance on the basis of the habitats and species present;
   c) A new and more accountable process for consulting on the designation of local wildlife sites; and
   d) How information on the boundaries and special features of local wildlife sites is to be presented and disseminated.

Terminology

6) In line with the emerging DEFRA guidance, the term 'Local Wildlife Site' will be used where the term 'Site of Nature Conservation Interest' was used previously.

Purpose of Local Wildlife Sites

7) In April 2000, the Local Sites Review Group of the then DETR (now Department of Environment, Food and Rural Affairs) defined the overall objective of a Local Sites system as follows:
"The series of non-statutory Local Sites seeks to ensure, in the public interest, the conservation, maintenance and enhancement of species, habitats, geological and geomorphological features of substantive nature conservation value. Local Site systems should select all areas of substantive value including both the most important and the most distinctive species, habitats, geological and geomorphological features within a national, regional and local context. Sites within the series may also have an important role in contributing to the public enjoyment of nature conservation."

8) The emerging DEFRA guidance makes it clear that the 'conservation, maintenance and enhancement' of species and habitats should be achieved
   a) By local wildlife sites systems having regard to the targets and priorities set out in national and local Biodiversity Action Plans (BAPs); and
   b) Through the identification of sites and provision of protective policies in Local Development Plans, and, where appropriate, through policies in Structure Plans or in Regional Planning Guidance.

9) The primary purposes of the Local Wildlife Sites system are therefore:
   a) To help secure the protection of nationally and locally threatened habitats and species, particularly where these are identified in the UK and Kent Biodiversity Action Plans.
   b) To clearly identify sites of substantive nature conservation value which should be protected from damaging development.

10) The reference in the DEFRA guidance to 'maintenance and enhancement' indicates a third purpose, which is
   a) To provide a framework for the targeting of management work, advice, grant aid and other activities in order to secure the effective conservation of the most important features of Kent's biodiversity.

11) There is a fourth purpose implicit in any system for the identification of Local Wildlife Sites. Such a system relies on a clear understanding of the county's biodiversity, and how it is changing. The fourth purpose could therefore be expressed as
   a) To provide a clearer understanding of the nature and importance of Kent's wildlife habitats, and the ways in which these change over time.

Criteria for selection of Local Wildlife Sites

12) The emerging DEFRA guidance states:
'A Local Site system should be seen as an information tool for identifying the suite of sites within a local area that contribute significantly to the natural capital of the area. This implies that all sites which meet the local criteria should be selected as Local Sites … Whether a site is selected as a Local Site should depend primarily on its nature conservation interest (present or potential), not on any specific intended use of the site.

'All Local Sites should have substantive ecological or geological quality otherwise the Local Site system as a whole may be devalued. If a site is not of natural or semi-natural interest but primarily of recreational use, then it should be protected under recreational and open space planning policies and not policies that relate to nature conservation.'

13) In judging whether a site is of 'substantive ecological value', it is considered appropriate to use the so-called Ratcliffe Criteria which were developed as part of the Nature Conservation Review which initially established the UK's network of SSSIs. These criteria are as follows:

a) Primary criteria
   i) The **Naturalness** of a site.
   ii) The **Size** of a site or of a population of a particular species.
   iii) The **Rarity** of habitats or species, or of a particular assemblage or community of species, present on a site.
   iv) The **Diversity** of a site in terms of species or habitats present.
   v) The **Fragility** of a site or of a population of a particular species, that is, its vulnerability to damage.
   vi) The **Typicalness** of a particular site or habitat, that is, how well it represents a particular type.

b) Secondary criteria
   i) The **Recorded History** of a site, which can add considerable scientific value.
   ii) The site's **Position in an Ecological Unit**, that is, how it contributes to the wildlife interest of a wider area.
   iii) The **Potential Value** of a site, that is, whether its value to nature conservation could be readily enhanced.
   iv) The **Intrinsic Appeal** of a site, that is, its wider social and cultural meaning.

Naturalness

14) The most important sites are those showing relatively natural assemblages of plants or animals. However, in applying this criterion it must be recognised that, with the possible exception of some coastal habitats, no part of Kent can be considered as more than semi-natural, because of the long history of economic land management in Britain.

15) Nonetheless, it is normally easy to recognise the difference between a semi-natural habitat and an entirely artificial one. In a semi-natural habitat, the species composition is the result of a natural response to human management practices. In an artificial habitat, the most or all of the species present will have been deliberately introduced, or deliberately favoured through highly intensive management.

16) As might be expected, the most important habitats for wildlife are those which are most natural. Thus a high value is placed upon:
a) Semi-natural woodland;

b) Water courses and wetlands which have not been heavily modified; and
c) Unmanaged or unprotected coastal habitats.

Within anthropogenic habitats, it is the more natural types which have the highest value, so that all the following are important:

d) Grassland which has not been agriculturally improved;
e) Artificial ponds and lakes which have been naturally colonised by wild plants and/or animals.

17) It must, however, be recognised that artificial habitats may also be of high value for wildlife. This is perhaps a more exceptional occurrence than with semi-natural habitats. Nonetheless there are a number of very rare plant species which are largely or entirely associated with arable cultivation. In addition, there is growing recognition of the importance for biodiversity of some post-industrial ('brownfield') sites: for some groups, including aculeate hymenoptera, brownfield sites may be substantially more important than many, more natural sites.

Size

18) It is a good general rule that larger areas of habitat (and larger populations of important species) are more important for biodiversity than smaller areas of the same habitat. However, the emerging DEFRA guidance is that all sites of substantive nature conservation value should be protected as Local Wildlife Sites, suggesting that size is not a consideration in itself, and that even very small areas of very important habitats (or small populations of rare species) may be protected.

19) In practice, there is likely to be a lower size limit for a Local Wildlife Site, although this will vary with habitat type. The lower limit will be determined by:
    a) The viability of the habitat unit (or population). A Local Wildlife Site should not be so small that its important features could not be maintained, even with appropriate management.
    b) The size distribution of habitat parcels (or discrete species populations) in the county. Where a large number of small patches (or discrete populations) constitute only a small proportion of the total area of a particular habitat (or total population of a species), designation of all those patches would place a disproportionate administrative burden on the system. In this case, a minimum practical size may be set as a compromise between protecting as much as possible of the habitat (or population) while minimising the use of administrative resources. In making such a decision, consideration would need to be given to the value of the habitat type (or species) concerned: where a habitat (or species) was particularly rare, it might be desirable to designate all remaining parcels (or populations).

Rarity

20) Habitat or species rarity is a key factor in determining whether or not a particular area should be designated as a Local Wildlife Site. Consideration should be given to rarity at a number of scales, including:
    a) International: i.e. species or habitats considered of European significance.
    b) National: i.e. UK Biodiversity Action Plan priority species or habitats; or habitats with a total area in Britain of less than 10 000 hectares; or species considered nationally rare (UK Red Data Book Species or Red List Birds of Conservation Concern).
    c) County: i.e. species with a Species Action Plan in the Kent BAP; or habitats of limited extent within Kent; or species included in the Kent Red Data Book; or plants recorded as occurring in fifty or fewer 2km grid squares (DINTY tetrads) in Kent; or species or habitats otherwise understood to be rare, scarce or atypical within the county.
    d) Natural Area: i.e. species or habitats not qualifying under the above, but which are considered particularly rare within the Natural Area concerned.

Diversity

21) Sites of higher diversity are generally considered more important than sites of lower diversity, and it is reasonable to expect sites to reach a minimum 'diversity threshold' if they are to be considered as Local Wildlife Sites. However, care needs to be used in applying this criterion:
    a) Some habitat types tend to be more diverse than others, with habitats on acid substrates being generally less diverse than those on calcareous substrates (for instance, a high quality acid grassland site may support fewer species than a chalk grassland site of lower quality). Any threshold level for species richness must there be appropriate to the habitat type concerned.
    b) Larger sites would be expected to be more diverse than smaller sites.
    c) The diversity must be appropriate. For instance, the diversity of a chalk grassland site could potentially be increased by ploughing up part of it so that ruderal species become established, yet this would decrease its value. Therefore, consideration of species-richness should be limited to those species which are normally associated with the relevant habitat.

22) As well as the diversity of species, some consideration should be given to habitat diversity, so that, for example, a site with a range of NVC habitat types (for instance a woodland which grades from W10 oak- bracken-bramble woodland on acid soils into W8 ash-maple-mercury woodland on a chalk slope and thence to W6 alder-nettle woodland in wet valley bottom) might be considered of greater importance than an equivalent area of a single NVC type. Likewise, a site with a diversity of soil types or underlying geology, might be considered of greater importance that a site with uniform geology and soils.

23) The physical diversity of vegetation is also important, and can significantly influence the diversity of animal species supported by a site. For example:
    a) In grassland, a certain proportion of scrub, variation in sward height, variety of slope and aspect, and a certain proportion of bare ground may be important.
    b) On heathland, variety of shrub height, a mosaic of grassland and dwarf shrubs, and a proportion of bare ground are all likely to be important.
    c) In woodlands, the presence of open spaces, a complex, layered structure, and a range of tree ages are all likely to be important.

Fragility

24) This is best thought of as vulnerability to change or to damaging influences. Certain habitats are intrinsically more fragile than others, and for that reason are more worthy of designation as Local Wildlife Sites. For example
    a) Woodland are relatively stable and resistant to damage, although in certain situations, for example where visitor pressure is high, they may be more susceptible to trampling damage than grasslands.
    b) Grasslands are vulnerable to changes in management, particularly where grazing pressure is altered. Relaxation, and especially cessation, of grazing can lead to vegetation changes which may be very difficult to reverse. Overgrazing may be equally damaging.
    c) Heathland can be susceptible to visitor pressure, and can rapidly lose its interest if not appropriately managed. Conversely, it can be a relatively easy habitat to restore, at least from the point of view of its vegetation.
    d) Wetland habitats can be very vulnerable to reductions in water supply or groundwater levels.

25) Fragility also needs to take into account the ease with which a habitat may be recreated. Relatively stable habitats, such as ancient woodland, may be relatively resistant to damage, but once lost are difficult or impossible to replace.

26) The fragility of any populations of important species is also a consideration. Most rare species are rare precisely because of their vulnerability to recent and on-going changes in the natural environment, and, where possible, consideration should be given to how the designation of a Local Wildlife Site will compensate for this vulnerability.

27) The fragility of a habitat or particular species population is a consideration in the setting of the boundary of an SNCI. It may be appropriate to include land which is not itself of Local Wildlife Site quality if this
   a) Buffers the important features from damaging influences, for example by including a strip of bankside vegetation along a water course; or
   b) Provides some control over factors influencing the site, for the example by including a spring or water course which feeds a wetland habitat.

Typicalness

28) The maintenance of biodiversity is not just served by the protection of the rare or the vulnerable. It is important that a Local Sites network includes good examples of the habitats typical of an area, and helps maintain viable populations of the species typical of an area. In considering what is typical, consideration should be given to:
   a) Habitats typical of the county;
   b) Habitats typical of the relevant Natural Area; and
   c) Habitats typical of each of the county's geological areas.

Recorded History

29) A site may be important if it has been subject to past survey or biological recording to a sufficient extent that it is able, or potentially able, to yield useful scientific data about habitats, species or the effects of site management.

30) A site may also be important if it is known as an historical location for a scarce or otherwise important species or habitat and (a) either that species or habitat is still present or (b) that species or habitat might be restored to the site with appropriate management.

Position in an Ecological Unit

31) Consideration should be given to the way in which a site functions to support the biodiversity interest of other important sites or the wider countryside. Thus an area of otherwise unsuitable habitat might be identified as a Local Wildlife Site if
   a) It acts as a key link between other important areas (for example a narrow strip of woodland connecting two larger sites known to support dormice);
   b) It complements other important habitats (for example, scrub or woodland which might provide cover or refugia for amphibians in an adjacent pond; or
   c) It is a key local breeding site for a species which exploits a wider area, such as a main breeding pond for a meta-population of great crested newts.

32) Value is also to be placed upon sites where two or more habitats occur adjacent to each other, as the interactions and interfaces between the different habitats will, in almost all cases, add to the biodiversity interest of an area. In this case, a site (or part of a site) which otherwise might not qualify for identification as a Local Wildlife Site may be designated if
   a) The area of each of the constituent habitats is above the lower size limit for designation; or
   b) Small areas of non-qualifying habitat occur within a matrix of qualifying habitat.

Potential Value

33) Consideration may be given to the potential, rather than actual value of a site, but only where
   a) The potential of the site can be realised through a scheme of management which is practically possible;

b) There is a real possibility that an appropriate system of management can be implemented in the short to medium term; and
c) The site would qualify as a Local Wildlife Site under other criteria once its potential was realised.

Intrinsic Appeal

34) This is a difficult criterion to assess properly. While it can be argued that the cultural and/or social significance of a site might constitute part of its nature conservation value, this is, in most cases, likely to be a largely subjective assessment. In addition, the planning system provides other mechanisms for the protection of land for its local cultural or social value. It therefore seems appropriate to avoid the use of this criterion.

Applying the criteria

35) It is possible, and may in some cases be desirable, to apply the Ratcliffe Criteria individually to a site. However, there is considerable value, particularly from the points of view of clarity and consistency, in using the criteria to derive a set of clearer guidance relating to habitats and species. This is set out below.

Selection of Wildlife Sites based on habitat features

Broadleaved woodland

36) Without human interference, woodland would be the natural vegetation cover over most of the British Isles. After the last ice-age, and prior to the arrival of settled farming communities, woodland may have covered 80 to 90% of the British land surface. As a result of human activity, almost all this woodland disappeared, so that, by the end of the 19th century, woodland covered little over 4% of the British Isles. This area increased over the 20th, primarily through planting but also as a result of natural regeneration as marginally productive pastures have been abandoned.

37) Britain now has around 10% woodland cover. However, much of the wildlife interest of our woodlands resides in those fragments of previously existing woodlands which survived the centuries of clearance. A distinction is therefore made between ancient woodland, defined as woodland known to have been in existence since at least 1600, and woodland of more recent origin.

38) Ancient woodland normally has a more natural complement of species, and a greater diversity of species, than more recent woodland.

39) By combining data from the 2003 Kent Habitat Survey and English Nature's Provisional Inventory of Ancient Woodlands, we find that
   a) There are approximately 24842 hectares of ancient woodland in Kent and Medway, representing around 7% of the land surface;
   b) This area consists of some 3560 individual blocks of woodland, although some of these blocks are only separated from others by minor roads;
   c) The 991 woodland blocks of over 5 ha in extent make up 89% of the total area of ancient woodland in Kent;
   d) The 1421 woodland blocks of over 2.5 ha in extent make up over 95% of the total area of ancient woodland in Kent;
   e) The 1921 woodland blocks of over 1 ha in extent make up 99% of the total area of ancient woodland in Kent

40) Woodland is probably the commonest type of semi-natural habitat found in Kent: there is, for example, fifteen times as much ancient woodland as acid grassland in the county. Nevertheless, ancient woodland covers only around 7.5% of Kent's land surface, and continues to be lost despite strongly protective planning policies. The low capacity for dispersion of many plant and invertebrate species associated with ancient woodland means that it is a particularly difficult habitat to recreate.

41) Wet Woodland and Lowland Beech and Yew Woodland are priority habitats in the UK BAP. The BAP includes targets to maintain the current extent of both these habitats. In Kent, only 231 ha of Wet Woodland and 557 ha of Lowland Beech and Yew Woodland were identified by the 2003 Kent Habitat Survey. It should be noted that woodland need not be ancient to be considered as Wet Woodland or Lowland Beech and Yew Woodland for the purposes of the UK BAP.

42) The UK BAP give the following description of Wet Woodland:
Wet woodland occurs on poorly drained or seasonally wet soils, usually with alder, birch and willows as the predominant tree species, but sometimes including ash, oak, pine and beech on the drier riparian areas. It is found on floodplains, as successional habitat on fens, mires and bogs, along streams and hill-side flushes, and in peaty hollows. These woodlands occur on a

range of soil types including nutrient-rich mineral and acid, nutrient-poor organic ones. The boundaries with dryland woodland may be sharp or gradual and may (but not always) change with time through succession, depending on the hydrological conditions and the treatment of the wood and its surrounding land. Therefore wet woods frequently occur in mosaic with other woodland key habitat types (e.g. with upland mixed ash or oakwoods) and with open key habitats such as fens.

43) The UK BAP includes the following descriptions of Lowland Beech and Yew Woodland: *Calcareous beech and yew woodland forms perhaps 40% of the total amount of lowland beech and yew habitat type … The canopy can include mixtures of beech, ash, sycamore (non-native), yew and whitebeam. Oak is less common than in the other beechwoods, and pure stands of yew occur in places. Promotion of high quality beech for silviculture has often led to an artificial dominance of beech. Characteristic uncommon or rare plants can include box* Buxus sempervirens*, red helleborine* Cephalanthara rubra*, coralroot bitter-cress* Cardamine bulbifera*, and bird`s nest orchid* Neottia nidus-avis*. In some areas, this woodland type occurs as intricate mosaics with lowland mixed deciduous woods. The majority of stands have a high forest structure. This type occurs on the limestone and chalk outcrops in southern Britain e.g. chalk scarps of the North and South Downs …*

Beech woodland on neutral-slightly acidic soils comprises about 45% of the habitat. It is found on heavier soils (pH 7 to 4) and often where the drainage is poor or impeded. The boundary with the other beech types is often defined by pH, drainage and soil texture; thus it is common to find this type grading into one of the others. Again stands tend to be dominated by beech, but oak Quercus robur *and sometimes* Q. petrea *is a common associate. Bramble* Rubus fruticosus *forms a characteristic ground layer. Often a shrub layer is lacking, although holly can form a second tier of trees, occasionally with yew. Violet helleborine* Epipactis purpurata *is a rare plant found in this community. Mosaics with oak/ bracken/ bramble woodland are common, and in some areas beech can be found colonising western oakwoods. This type tends to occur as high forest or relict wood-pasture (with pollards), less often abandoned coppice. It is common in (but not confined to) the High and Low Weald.*

44) Woodland is not generally considered to be a particularly fragile habitat. However, many of the important features of woodland are fragile:
   a) Rides and glades quickly lose their interest if appropriate management ceases;
   b) Many important woodland species, such as dormouse, are vulnerable to fragmentation and isolation; and
   c) Woodland ground flora can be severely damaged by excessive trampling or grazing pressure.

45) Ancient woodland is a relatively natural habitat, is generally rich in species (certainly when compared to more recent woodland) and is very difficult to recreate effectively. It is therefore appropriate to consider all ancient woodland to be of substantive nature conservation value, unless it has become significantly damaged or degraded. However, for practical purposes, it is considered appropriate to set a size threshold for sites to be considered for SNCI status. This has been set at 5 hectares in order to reduce to a reasonable level the number of woodland blocks which will need to be considered for Wildlife Site status while still capturing the majority of the resource. Because this size threshold has been set purely for practical purposes, it may be reasonable to revise it downwards at a future review of these criteria.

WO1

Ancient woodland in Kent should be identified by reference to the provisional inventory produced by English Nature. Where a wood is not indicated as ancient in the provisional inventory, it may nonetheless be considered as ancient if

- **It holds at least ten ancient woodland indicator species drawn from the list in Appendix 1;**
  OR
- **It holds at least five ancient woodland indicator species and includes other features associated with ancient woodland, such as a sinuous outline or marginal woodbank;**
  OR
- **There is other clear, specified evidence that the woodland should be considered as ancient.**

WO2

All blocks of ancient woodland of 5 ha or more in continuous extent should be designated as Wildlife Sites, unless

- **The tree and/or shrub element has been substantially modified by replanting;**
  OR
- **There are other clear and obvious reasons to believe that the wildlife interest of the site has been lost or substantially damaged.**

WO3

Blocks of ancient woodland which have been substantially modified by replanting should only be designated as Wildlife Sites where

- **They provide a link between blocks of otherwise isolated ancient woodland with a total area of more than 5ha;**
  OR
  Where they are EITHER over 5 ha in continuous extent OR are part of a larger ancient woodland which qualifies as a Wildlife Site AND
  - **They retain a typical woodland ground flora with at least ten ancient woodland indicator species drawn from the list in Appendix 1,**
    OR
  - **They support an important species or assemblages of species, such as woodland orchids,**
    OR
  - **They form the matrix for an important network of woodland rides and/or glades.**

WO4

Blocks of ancient woodland under 5 ha in continuous extent may be designated as Wildlife Sites where

- **They are only narrowly separated from other ancient woodlands, for example, by a minor road of no more than two lanes, so that the joint area of these woodlands would be 5 ha or more;**
  OR
- **They are linked to another woodland by a hedgerow or area of scrub or secondary woodland, so that the joint area of these woodlands would be more than 5 ha, in which case the connecting feature must be included within the Wildlife Site boundary;**
  OR
- **There is a clear potential for linking the blocks through the restoration of hedges, scrub or woodland;**
  OR

- **They form part of a complex of separate but closely spaced (i.e. 200m or less apart at their closest point) woodlands of similar character, at least one of which is 5 hectares or more in extent;**
  OR
- **They form part of a matrix of semi-natural habitats where the woodland contributes to the overall nature conservation of the site, and where the matrix as a whole is considered worthy of identification as a Wildlife Site;**
  OR
- **They consist of the UK BAP priority habitats of Wet Woodland or Lowland Beech and Yew Woodland;**
  OR
- **Where the site is considered particularly important for its recorded history.**

WO5
Where the primary interest of a woodland is the network of rides and glades within the woodland matrix, for simplicity the boundary should be drawn around the woodland as a whole. However, it should be made clear on the Wildlife Site schedule where the particular interest of the site lies.

WO6
All blocks of Wet Woodland or Lowland Beech and Yew Woodland which are not ancient woodland should normally be designated as Wildlife Sites providing that they are 5 ha or more in continuous extent, or form part of a larger Wildlife Site which is 5 ha or more in continuous extent.

WO7
Where a Wildlife Site has been selected on the basis of its Wet Woodland, the boundary of the site should, where appropriate, be drawn to encompass the water courses or water bodies which support the habitat.

WO8
The boundaries of a Wildlife Site designated for its ancient woodland may include areas of secondary or replanted woodland or scrub where these are contiguous with the ancient woodland AND

- **They provide a connection with other blocks of ancient woodland or UK BAP priority woodland habitats;**
  OR
- **They have the potential for colonisation by species associated with ancient woodland;**
  OR
- **They provide a link between the woodland and another habitat which qualifies for Wildlife Site status;**
  OR
- **They are used by UK or Kent BAP Priority species, Nationally Rare species, Nationally Scarce species, Kent Red Data Book species, or other, specified, important species associated with the woodland.**

Wood-pasture and parkland

46) Kent has some 2700 ha of land managed as pasture woodland, according to the Kent Habitat Survey. The associated grassland or ground vegetation varies, as shown below, but 2457 ha (99%) of the total area is on agriculturally improved grassland.

Heathland	2.4 ha
Bracken	33 ha
Improved grassland	2665 ha

47) Wood pasture is a semi-natural habitat formed by long-term grazing on previously wooded land (though, in the case of parkland, this may have been mimicked by deliberate planting of trees on previously unwooded land). As a habitat, it may replicate conditions in natural woodlands where large herbivores are present.

48) The combination of large, often old trees, and open habitats often favours the development of good lichen communities and may support assemblages of specialised invertebrates associated with dead wood. Rot holes in trees may be used by bats and hole-nesting birds.

49) The most important sites are those on heathland or on unimproved grassland, where there are sufficient nectar-producing plants to support the adult stages of wood-boring beetles. Large, old trees are also important, particularly veteran trees (i.e. trees that are of large size for their species, with a large amount of dead wood in the canopy, rot holes, crevices, etc.).

50) Wood pasture is vulnerable to a range of factors, including
   a) Loss of grazing, leading to scrub and woodland development;
   b) Agricultural improvement or over-grazing;
   c) 'Tidying up' of dead wood or senescent trees; and
   d) An absence of younger trees to replace those that die.

51) Historically, wood pasture is likely to have been a typical, though perhaps uncommon, habitat in Kent. Some currently wooded commons were almost certainly Wood Pasture in the past. Wood Pasture also provides an intrinsically appealing landscape, associated with large country estates.

52) There is a UK Habitat Action Plan for Lowland Wood-pasture and Parkland, which includes
   - *Lowland wood-pastures and parklands derived from medieval forests and emparkments, wooded commons, parks and pastures with trees in them. Some have subsequently had a designed landscape superimposed in the 16th to 19th centuries. A range of native species usually predominates amongst the old trees but there may be non-native species which have been planted or regenerated naturally.*
   - *Parklands with their origins in the 19th century or later where they contain much older trees derived from an earlier landscape.*
   - *Under-managed and unmanaged wood-pastures with veteran trees, in a matrix of secondary woodland or scrub that has developed by regeneration and/or planting.*
   - *Parkland or wood-pasture that has been converted to other land uses such as arable fields, forestry and amenity land, but where surviving veteran trees are of nature conservation interest. Some of the characteristic wood-pasture and parkland species may have survived this change in state.*

53) The UK BAP sets a target to maintain the current extent and distribution of the total resource of wood-pasture and parkland. In the Kent BAP, there is a target to retain the best examples of wood pasture in the county. The following policies are therefore appropriate to wood pasture

and parkland habitats. Assessment of the importance of a wood pasture or parkland site for groups of plants and animals, as specified in WP2, below, should be based on appropriate expert opinion.

WP1
All wood pastures and parklands on heathland or unimproved grassland should be selected as Wildlife Sites.

WP2
Wood pasture or parkland on improved or semi-improved grassland, or underused wood pasture with veteran trees in a matrix of secondary woodland or scrub, or parkland or wood pasture which has been converted to another use should be selected as a Wildlife Site where

- **A substantial number of trees, or a substantial proportion of the trees present, are old and have an abundance of dead wood and/or rot holes;**
  OR
- **The trees support an important fungal or lichen flora;**
  OR
- **The trees support an important invertebrate fauna;**
  OR
- **The site supports an important bat roost or feeding habitat;**
  OR
- **The site is important for birds;**
  OR
- **It is the best example of wood pasture in the relevant Natural Area.**

Orchards

54) The Kent Biodiversity Action Plan suggests that at the time of the Kent Wildlife Habitat Survey in the early 1990s there were around 4000 ha of traditionally managed orchards in Kent. Traditional orchards are generally composed of fruit trees on non-dwarfing rootstocks, standing in grassland which is often grazed by sheep. Individual trees may be of considerable age, and the orchard may be enclosed by hedgerows.

55) It is estimated that some 90% of Kent's traditional orchards have been lost since the 1950s. The relative costliness of managing and harvesting traditional orchards makes them vulnerable to agricultural improvement (including grubbing and replanting, or conversion to another use) or to abandonment. The use of orchards for grazing horses may also be damaging, as horses may browse the trees and strip bark.

56) The Kent Biodiversity Action Plan recognises that traditionally managed orchards may be of considerable importance for nature conservation, supporting fungi, lichens, and a range of common farmland bird species.

57) The Kent BAP has a target of halting the continuing loss of old orchards. The following policy is therefore appropriate.

OR1
All traditionally managed orchards should be designated as Wildlife Sites where a substantial number of trees, or a substantial proportion of the trees present, are old and have an abundance of dead wood and/or rot holes AND

- **The trees support an important fungal or lichen flora;**
  OR

- **The site includes or supports other features of substantive nature conservation value, such as unimproved grassland or wide hedges.**

Acid grassland

58) The Kent Habitat Survey has identified a total of 375 ha of Lowland Dry Acid Grassland. This is distributed in scattered blocks along the Greensand Ridge, in the High Weald and on Dungeness, with a few areas on acid substrates on the North Downs. The 2003 Kent Habitat Survey indicates that there are 186 blocks of acid grassland over 0.001 ha in extent. The following statistics have been derived concerning these blocks:

Block size	Total area	% of total resource
> 2 ha	280 ha	75
> 1 ha	336	90
> 0.5 ha	360	96
>0.001 ha	375	100

59) Some 282 ha of acid grassland in Kent lies within existing Sites of Special Scientific Interest.

60) Acid grassland is a semi-natural habitat formed by grazing over base-poor, freely draining substrates. Its low productivity makes it vulnerable to agricultural improvement, forestry, or abandonment, resulting a rapid loss of biodiversity interest.

61) Lowland Dry Acid Grassland currently occupies just under 0.1% of the county land surface, making it one of the county's rarest habitat types.

62) Acid grassland, like heathland, was undoubtedly once a much more common habitat on suitable substrates in Kent, and should be considered as a typical habitat of the Wealden Greensand, and as a typical component of heathland in the High Weald and North Downs.

63) The sparse vegetation and loosely consolidated substrates of many acid grasslands mean that they are vulnerable to physical disturbance. Although an element of bare ground is often important for associated invertebrates, excessive disturbance can destroy vegetation and render the ground unsuitable for burrowing insects.

64) Acid grasslands tend not to be especially diverse in terms of their flora, but rather support an assemblage typical of the habitat type. A list of plant species associated with high-quality acid grassland in Kent is given in Appendix 2.

65) Structural diversity is likely to be important in acid grasslands, with scattered trees and shrubs providing additional food sources or nesting/roosting sites for associated fauna.

66) Acid grassland can succeed quickly to scrub of gorse or birch, or may be rapidly colonised by rosebay willowherb following a fire. However, acid grassland is relatively easy to restore (it has been suggested that some U1 *Festuca-Agrostis-Rumex* grassland has been periodically cultivated), and it is therefore appropriate to include within acid grassland Wildlife Sites areas scrub, willowherb and bare ground which have the potential for restoration.

67) The UK Habitat Action Plan for Lowland Dry Acid Grassland has a target for the arrest of depletion of this grassland type in the UK. Because of this, and because of the rarity of acid grassland in Kent, the following policies are considered appropriate.

GA1
All areas of Lowland Dry Acid Grassland over 0.5 ha in extent should be designated as Wildlife Sites. Areas designated as Wildlife Sites would normally be expected to support a suite of species from the list in Appendix 2.

GA2
All areas of Lowland Dry Acid Grassland up to 0.5 ha in extent should be included as parts of larger Wildlife Sites where they are contiguous with other habitats which qualify for designation.

GA3
Site boundaries should include any areas of bare ground, scrub, or other vegetation which could potentially be restored to acid grassland or which might contribute to the biodiversity interest of the acid grassland habitat.

GA4
On acid grassland sites managed as wood pasture and with mature, native trees, the trees should be considered an important element of the biodiversity interest of the site.

Lowland Calcareous Grassland

68) The Kent Habitat Survey has identified a total of 1658 ha of Lowland Calcareous Grassland (chalk grassland) larger than 0.001 ha in extent, distributed between over nearly individual blocks. This total area represents around 5% of all existing Lowland Calcareous Grassland in the UK. The UK BAP identifies fragmentation and reduction in size of sites as being a key factor negatively affecting this habitat. Statistics on a range of size classes of blocks of chalk grassland in Kent are presented below; it is notable that only 3% of all sites are 10 ha or more in extent.

Block size	Number of sites	% of all sites	Total area	% of total resource
>/= 10 ha	23	3	447 ha	27
>/= 5 ha	80	12	843 ha	61
>/= 2 ha	222	32	1290 ha	78
>/= 1 ha	374	55	1510 ha	91
>/= 0.5 ha	506	74	1608 ha	97
>/= 0.001 ha	684	100	1658 ha	100

69) Some 567 ha of chalk grassland in Kent lies within existing Sites of Special Scientific Interest. This represents about 34% of the total resource in the county.

70) Chalk grassland is has undergone a rapid decline in extent over recent decades. One study quoted in the UK Habitat Action Plan, showed a reduction in area of 20% on sampled sites in the fourteen years between 1966 and 1980. Chalk grassland can be entirely destroyed by conversion to arable (although this is now cover by the EIA regulations) or built development. However, much recent loss is due to neglect. Removal of grazing from chalk grassland results in changes in the sward, which may be difficult to reverse, and eventually to encroachment by scrub, although it may be some decades before all interest is lost from the site.

71) Analysis of changes to existing Wildlife Sites surveyed during the period 1996 to 2002 shows that around 102 ha of chalk grassland was noted as having been damaged or lost since the sites

were first designated. Of this area, 46% was lost to agricultural improvement or conversion to arable, and 13% was lost to built development. Only 4% was noted as having degraded due to lack of management.

72) The development of scrub may lead to deeper soils developing, so that scrub clearance may not immediately restore the habitat conditions which favour typical chalk grassland plant species. In addition, most of these species fail to persist in the seed bank, so that restoration of a badly degraded site may be a very long term process.

73) Chalk grassland is typically rich in herbaceous plant species. Typical chalk grassland which has not been improved agriculturally would probably be expected to hold at least ten of the indicator species listed in Appendix 3. There is probably a positive relationship between the number of indicator species and the size of a site, so that a large site, of, say, 10 ha or more, might be expected to support fifteen or more indicator species.

74) The structural diversity provided by scrub may add to the biodiversity interest of chalk grassland sites. The scrub which typically develops on chalk grassland sites is typically species-rich in itself, although species-poor hawthorn scrub can eventually come to dominate. Species-rich scrub is of nature conservation interest in its own right, providing habitat for a range of insect species. However, even species-poor scrub can be of value, particularly as cover for herpetofauna (the grass/scrub interface provides important basking habitat for lizards and snakes), and by protecting grazing-intolerant species (such as man orchid) from grazing animals.

75) The UK Habitat Action Plan for Lowland Calcareous Grassland has a target for the arrest of depletion of this grassland type in the UK. The Kent Biodiversity Action Plan currently includes a target to protect as Wildlife Sites all unimproved chalk grassland sites over 2ha in extent, although this would only result in protection of about 83% of the total resource in Kent (including all chalk grassland in existing SSSIs). In order to maximise the amount of chalk grassland protected, and to ensure that which is protected is of sufficient quality, the following policies are appropriate.

GC1
All areas of contiguous Lowland Calcareous Grassland of 10 ha or greater in extent should be designated as Wildlife Sites in order to prevent further fragmentation of the largest sites.

GC2
Areas of Lowland Calcareous Grassland over 2.0 ha in extent should be designated as Wildlife Sites if they support ten or more of the chalk grassland indicator species listed in Appendix 3.

GC3
All areas of Lowland Calcareous Grassland up to 2.0 ha in extent should be included as parts of larger Wildlife Sites if

- **They are contiguous with other habitats which qualify for designation;**
  AND
- **They support five or more of the chalk grassland indicator species listed in Appendix 3.**

GC4

A chalk grassland site dominated by scrub, or with a substantial proportion of scrub, may be designated as Wildlife Site, providing that the scrub is of the species-rich type associated calcareous substrates and

- **There is potential for restoration to increase the area of chalk grassland present; OR**
- **The scrub is important for supporting an identifiable element of the biodiversity interest of the site.**

GC5

A Wildlife Site designated for its chalk grassland may include species-poor scrub providing that

- **There is potential for restoration to increase the area of chalk grassland present; OR**
- **The species-poor scrub does not constitute more than one-quarter of the overall area of the site; OR**
- **The scrub is important for supporting an identifiable element of the biodiversity interest of the site.**

Neutral grassland

76) The Kent Habitat Survey has identified a total of 12991 ha of neutral grassland. However, of this only around 71 ha (0.5%) consists of the priority habitat type, Lowland Meadows. A further 587 ha (4.5%) of the total has been identified as species-rich neutral grassland.

77) It is therefore clear that high-quality neutral grassland is actually a very rare habitat. This suggests that consideration should be given to designating semi-improved neutral grassland (i.e. grassland that has been modified by the use of fertilizers, herbicides, reseeding or intensive grazing). The Integrated Habitat Survey, upon which the most recent Kent Habitat Survey was based, does not classify grassland as 'semi-improved', unlike the Phase One methodology which underpinned the previous Habitat Survey. However, it is possible to determine that some 6269 ha of grassland currently identified as neutral grassland was, in the previous Habitat Survey, identified as semi-improved. Of this some 2300 ha appears to be coastal grazing marsh, leaving some 3942 ha of other semi-improved neutral grassland. This other semi-improved neutral grassland is distributed over more than 2000 blocks, nearly three-quarters of which are less than 2 ha in extent. The distribution of size classes is given in the following table.

Block size	Number of sites	% of all sites	Total area	% of total resource
>/= 50 ha	1	< 1	67 ha	2
>/= 25 ha	5	< 1	205 ha	5
>/= 10 ha	64	3	1123 ha	28
>/= 5 ha	175	8	1867 ha	47
>/= 2 ha	563	27	3085 ha	78

78) It is therefore clear that if the all the unimproved and species-rich neutral grassland, and all blocks of semi-improved neutral grassland over 5 ha, was covered by a protective designation, this would still represent only the best 20% of the county's neutral grassland resource.

79) Neutral grassland is particularly susceptible to agricultural improvement, as it responds well to fertilizers and, unlike, for example, chalk grassland, is usually on ground accessible to the plough. As a result, loss of unimproved neutral grassland has been substantial: the Kent Biodiversity Action Plan quotes a 97% decrease in area in the UK between the 1930s and the 1990s. The special interest of grazing marsh is dependent on the local water regime, and can be severely affected by improved drainage. Figures from the 1995 Kent Wildlife Habitat Survey show less than 500 ha of unimproved neutral grassland in the county, although differences in survey techniques make this figure difficult to check against the 2003 survey data. Nonetheless, this does suggest that high quality neutral grassland should be treated as a rare habitat, and that consideration should be given to protecting the most important examples of semi-improved neutral grassland.

80) It is considered that when selecting neutral grassland Wildlife Sites, the emphasis should be on selection of sites which would normally be considered as unimproved, that is,
   a) Where there is evidence that the site has a long history of being managed unintensively and without reseeding, the addition of artificial fertilizers or use of herbicides;
   b) Where the grassland does not appear to have been altered, or has only been slightly altered, by artificial drainage, or by the application of pesticides or fertilisers;
   c) Where the sward is generally species-rich and includes suite of species from the list in Appendix 4;
   d) Where perennial rye grass *Lolium perenne* and/or white clover *Trifolium repens* are infrequent or rare;
   e) Where ant-hills are frequent; and/or
   f) Where several species of wax caps, fairy clubs or gastromycetes are present.

81) If neutral grassland which does not meet the above criteria is to be considered for Local Wildlife Site status, then some care does need to be taken to ensure that sites are of sufficiently high value before the designation is confirmed. Sites should
   a) Where the grassland does not appear to have been very substantially altered by artificial drainage, or by the application of pesticides or fertilisers;
   b) Be reasonably floristically diverse, with a range of grass and forb species (ideally including species from the list in Appendix 4); and
   c) Not have abundant perennial rye grass *Lolium perenne* or white clover *Trifolium repens*.

82) The UK Habitat Action Plan for Lowland Meadow has a target for the arrest of depletion of this grassland type in the UK, while a target of the Kent BAP is to prevent the further loss of species-rich neutral grassland. Both the UK and Kent BAPs have targets to maintain the existing extent of coastal grazing marsh. The following policies are considered appropriate for the selection of neutral grassland Wildlife Sites.

GN1
All areas of unimproved neutral grassland should be designated as Wildlife Sites.

GN2
Other areas of neutral grassland should be considered for selection as Wildlife Sites where they are contiguous with larger areas of unimproved grassland, where forbs are well represented within the grassland (especially where these are species listed in Appendix 4) and where

- **The grassland area under consideration contributes to the nature conservation value of the unimproved grassland (for example, where it provides additional habitat for key species found on the unimproved grassland);**

OR

- **Where it is reasonable to believe that there is potential for enhancement of the biodiversity interest of the grassland;**
  OR
- **Where the grassland is contiguous with ancient woodland, standing water or running water which qualifies as a Wildlife Site in its own right.**

GN3

Neutral grassland sites which do not meet the criteria for unimproved grassland may be selected as Wildlife Sites where they form all or part of an extensive area of grazing marsh important for breeding or wintering birds, OR where the grassland does not consist of sown grassland AND it supports

- **One or more scarce species of terrestrial or aquatic invertebrates;**
  OR
- **An important network of wet dykes.**

Where a Wildlife Site is selected for its wet dykes, the dykes should qualify as Wildlife Sites in their own right.

GN4

Where the primary interest of an area of neutral grassland is the network of dykes within the grassland matrix, for simplicity the boundary should be drawn around the site as a whole. However, it should be made clear on the Wildlife Site schedule where the particular interest of the site lies.

GN5

A neutral grassland site dominated by scrub, or with a substantial proportion of scrub, may be designated as Wildlife Site, providing that

- **There is potential for restoration to increase the area of neutral grassland present;**
  OR
- **The scrub is important for supporting an identifiable element of the biodiversity interest of the site.**

Heathland

83) The Kent Wildlife Habitat Survey shows only 53 ha of Lowland Heathland. This is characterised in the Integrated Habitat Survey as vegetation with a greater than 25% cover of ericoid shrubs and/or dwarf gorse *Ulex minor*. The heathland is spread between 26 blocks, of which only 15 blocks are larger than 0.5 ha. The largest contiguous area of heathland in Kent is Dartford Heath, at 26 ha.

84) Heathland is a semi-natural habitat which develops on poor, acid soils under a low level of grazing. It is vulnerable to some extent to agricultural improvement, and areas have been lost to planting for forestry. However, a more serious threat is the abandonment of grazing, which results in rapid succession to woodland.

85) Heathland is a rare and threatened habitat in the UK, and is listed in Annex 1 of the European Habitats Directive. The UK Habitat Action Plan notes that the total area of Lowland Heathland in the UK has declined by five-sixths since 1800. In Kent, the rate of loss appears to have been even higher: the area of heathland in the county in 1798 is estimated at 1910 ha, giving a loss of over 97%.

86) Heathland can probably be considered a typical habitat of the Greensand, on sands and gravels in the High Weald, on Thames Terrace gravels and sands, and on surface deposits of sand and gravel on the North Downs. It was probably once a major component of many commons in the west of the county, and might therefore be considered a significant part of the county's cultural history.

87) The UK Habitat Action Plan for Lowland Heathland includes a target to maintain the existing extent of this habitat. In the Kent BAP there is a target to protect and enhance all existing heathland. The following policies are therefore considered appropriate.

HE1
All areas of Lowland Heathland should be selected as Wildlife Sites.

HE2
The boundaries of heathland Wildlife Sites should be drawn to include

- **Any contiguous areas of acid grassland;**
  AND
- **Any contiguous stands of common gorse *Ulex europaeus* on acidic substrates.**

HE3
Site boundaries should include any areas of scrub, conifer plantation, secondary birch woodland or other vegetation which could potentially be restored to heathland or which might contribute to the biodiversity interest of the heathland habitat.

Fen, marsh and swamp

88) The Kent Habitat Survey shows a total of 962 ha of fen, marsh and swamp habitats. This area includes
   a) 471 ha of Reedbed (a UK BAP priority habitat), equivalent to 0.1% of the county area;
   b) 210 ha of other tall swamp vegetation, equivalent to 0.02% of the county area;
   c) 35 ha of Fen (a UK BAP priority habitat), equivalent to 0.02% of the county area; and
   d) 13 ha of rush pasture, equivalent to 0.003% of the county area.

89) The Kent Habitat Survey includes nearly 985 blocks of Reedbed, of which more than one-third are less than 0.01 ha (i.e. 100m2) in extent. This is presumably due to the abundance of reed as an emergent species on the margins of water courses, ponds and lakes. There are only around 120 blocks of reed over 1 ha in extent, but these make up over 70% of all the Reedbed habitat in the county. Blocks of more than 2 ha make up 50% of the all Kent's Reedbed area.

90) The Kent Habitat Survey includes over 700 blocks of tall swamp vegetation, though more than three-quarters of these are less than 0.5 ha in extent. There are only 77 blocks of more than 1 ha in extent, though these make up nearly 70% of the total resource in Kent.

91) The Kent Habitat Survey shows 115 blocks of Fen vegetation, of which only 10 are over 1 ha in extent. However, these 10 blocks make up over 70% of the total resource in Kent.

92) These are semi-natural forms of vegetation which occur as stages in the hydroseral succession from open water to dry woodland. The species composition of these habitats is generally relatively natural.

93) Reedbed and other tall swamp vegetation often consists of more-or-less single species stands. However, these stands are characteristic in themselves, particularly in the case of reed, very

large stands of which are important for a range of important bird species. More characteristically, fen, marsh and swamp habitats occur as part of a wider wetland matrix which includes open water, wet woodland and/or grazing marsh, and where there are likely to be synergistic effects between the different habitat types.

94) Fen habitats are often, by contrast, species rich, supporting a large number of wetland plant species on often rich in invertebrates.

95) Fen, marsh and swamp habitats tend to be rather fragile, as they
   a) Rapidly succeed towards scrub and woodland in the absence of appropriate management;
   b) Are vulnerable to land drainage and water abstraction; and
   c) Are vulnerable to nutrient enrichment.

96) Relevant targets in the Kent BAP are
   a) To prevent the further loss of species-rich marshy grassland; and
   b) To maintain the existing area of reedbed.

97) Relevant targets in the UK BAP are
   a) Ensure that development schemes do not affect the integrity or the conservation interest of fens;
   b) Ensure that development schemes do not affect the integrity or the conservation interest of reedbeds; and
   c) Rehabilitate by the year 2000 the priority areas of existing reedbed (targeting those of 2ha or more).

98) Given the very great rarity in the county of these habitats, their fragility and their conservation importance, the following policies are therefore considered appropriate for fen, marsh and swamp habitats.

FE1
All areas of reedbed, tall swamp vegetation, or fen habitat of 1 ha of more in extent should be selected as Wildlife Sites unless the habitats have been substantially damaged.

FE2
All areas of reedbed, tall swamp vegetation, or fen habitat up to 1.0 ha in extent, and which have not been substantially damaged, should be included as parts of larger Wildlife Sites where they are contiguous with other habitats which qualify for designation.

FE3
Where possible, fen, marsh and swamp habitats should be selected as parts of larger Wildlife Sites which include other qualifying habitats. Examples would be

- **Reedbed and tall swamp vegetation around water bodies in areas of grazing marsh;**
  OR
- **Areas of flood plain including rivers or streams, wet woodland and scrub, ponds as well as swamp and fen habitats;**
  OR
- **Fen, marsh and swamp habitats around springs and headwaters.**

Standing open water

99) Standing open water occurs in Kent in ponds, lakes (including former quarries), reservoirs, wet dykes and ditches, and short lengths of former canals. The Kent BAP indicates that Kent holds

a) Around 370 lakes;
b) Some 5000 ponds;
c) 2368 km of wet ditches and dykes; and
d) 265 ha of saline lagoons.

100) Lakes and reservoirs can be botanically rather poor, especially lakes that have developed in deep quarries. Where the water is very deep, submerged vegetation does not generally establish well, although deep water bodies can be important for Charophytes. However, large water bodies may be important breeding and wintering sites for wetland birds.

101) Ponds and wet dykes can be species rich, with a range of submerged, emergent and marginal plant species. English Nature's criteria for the selection of Sites of Special Scientific Interest note that an exceptionally diverse freshwater ditch would be expected to hold at least 15 submerged, floating, emergent and/or wet bank plant species in a typical 20m stretch. A count of 10 to 14 species in 20m is considered 'good' (for brackish ditches, the corresponding figures are 10 species and 6 to 9 species).

102) Ponds and ditches are vulnerable to eutrophication and heavy shading, both of which can result in a substantial loss of species-richness. However, even species-poor ponds can support important species provided that habitat conditions are correct. For example, water voles will make use of species-poor dykes on grazing marshes. Heavily shaded ponds may also not be without interest, and can support specialised animal species. Woodland ponds, for example, may be used by palmate newts.

103) Bodies of standing water are typically found in the Low Weald and High Weald, where ponds are frequent, and, as wet dykes, in the grazing marshes of the North Kent coast, Stour Valley and Romney Marsh. The species associated with standing water vary across Kent, so that, for instance, the water beetle communities of the Wantsum marshes are substantially different to those on the Hoo Peninsula.

104) Saline Lagoons are considered a priority habitat in the UK BAP. The total area of saline lagoons in mainland Britain appears to be around 5000 ha. Saline lagoons support a unique flora and fauna adapted to brackish water conditions, but are vulnerable to such factors as coastal defence work, eutrophication, natural succession, and artificial control of water levels. The UK Habitat Action Plan for Saline Lagoons includes a target to maintain the current area of the habitat.

105) The Kent BAP includes a target to retain the current area of standing open water in Kent.

106) The following policies are therefore appropriate for standing water habitats.

SW1

When drawing the boundaries of Wildlife Sites selected for habitats other than standing water, all ponds or other standing water within or contiguous with the other habitats should normally be included within the Wildlife Site. Exceptions should only be made where the nature conservation function of the water body has been seriously compromised by

- **Pollution, including nutrient run-off leading to eutrophication;**
  AND/OR
- **Intensive use for angling or amenity;**
  AND/OR
- **Some other factor.**

SW2

All Saline Lagoons should be selected as Wildlife Sites, but they should normally support some typical lagoon fauna and flora, such as tasselweeds *Ruppia* spp. or lagoon cockle *Cerastoderma glaucum*, and should not be significantly damaged by eutrophication or other impacts.

SW3

Ponds, lakes or other water bodies (other than Saline Lagoons) should be selected as Wildlife Sites in their own right where

- **They hold a suite of appropriate wetland plant species, which would normally be expected to include two or more plant species which are considered rare or scarce in Kent or in the UK as a whole;**
  OR
- **They are high quality examples of typical open water habitat associated with a particular Natural Area;**
  OR
- **In the case of dykes, they would be considered 'good' or 'excellent' in the meaning set out above;**
  OR
- **They are important for wild birds;**
  OR
- **They are important for other species of plants or animals.**

Running water

107) Kent contains part or all of six river catchments. These are

a) The Thames;
b) The Medway;
c) The Great Stour;
d) The Rother;
e) The Darent; and
f) The Dour.

108) There is great variety in the biodiversity interest of these rivers, depending on the geology of the catchment and stream/river bed, and on saline influence. The Great Stour catchment, for instance, includes a winterbourne, acid and chalk headwaters, a stretch of chalk river, slow-flowing eutrophic stretches with fens, and a tidal estuary. Each section has its own associated species of plants and animals.

109) The demands of agriculture and flood defence have meant that very few rivers and streams can be considered to be very natural. Banks may be reinforced, and few areas of natural or semi-natural flood-plain vegetation remain.

110) Rivers and streams can be quite resilient to change, particularly as up- and down-stream colonisation can be rapid. However, they can still be damaged by such factors as
a) Pollution, including diffuse pollution from agricultural land;
b) Bank modification and hard flood-defences;
c) Water abstraction from ground and surface waters;
d) Soil and silt run-off, particularly associated with built development;
e) Culverting or impoundment.

111) Headwater streams, and their associated specialist fauna and flora, appear to be particularly vulnerable, and their nature conservation importance is often overlooked.

112) There is a UK Habitat Action Plan for Chalk Rivers. This includes a target to maintain the characteristic plants and animals of chalk rivers, including their winterbourne stretches. The Kent BAP includes a target to manage all catchments and maintain them in a condition which supports the full potential range of flora and fauna.

113) Running water is not an especially rare habitat in Kent, but
a) Relatively natural stretches are rare;
b) Chalk rivers are a UK priority habitat; and
c) Certain features, especially headwaters, are particularly fragile.
The following policies are therefore considered appropriate.

RW1
When drawing the boundaries of Wildlife Sites selected for habitats other than running water, all streams or other running water within or contiguous with the other habitats should normally be included within the Wildlife Site. Exceptions should only be made where the nature conservation function of the water course has been seriously compromised by

- **Pollution, including nutrient run-off leading to eutrophication;**
  AND/OR
- **Intensive management for amenity or flood-defence;**
  AND/OR
- **Substantial modification of the banks;**
  AND/OR
- **Some other factor.**

RW2
On each river catchment, the most natural stretches of water course associated with each of the different surface geologies and/or Natural Areas should be selected as Wildlife Sites. These stretches should normally have well developed submerged, floating, emergent and marginal vegetation, made up of appropriate plant species, and should be in the 'Good' water quality class.

RW3
Springs and headwater streams should be selected as Wildlife Sites where they represent the best example of a headwater stream in for a particular catchment and on a particular surface geology and/or in a particular Natural Area, OR where

- **They have not been substantially artificially altered;**

AND

- **They flow at least seasonally in most years.**

RW4

Stretches of chalk river should be selected as Wildlife Sites where

- **The channel has not been significantly modified;**
  AND
- **Where the water quality is in the 'Good' class;**
  AND
- **They support typical submerged, floating, emergent and marginal vegetation, including river water crowfoot *Ranunculus penicillatus*;**
  AND
- **Ideally where other typical chalk river species, including white-clawed crayfish *Austropotamobius pallipes* and brown trout *Salmo trutta*, also occur.**

RW5

When boundaries are set for running water Wildlife Sites, they should include

- **At least all the bank as far up as the first major break in the slope;**
  AND/OR
- **Where there is semi-natural vegetation at the top of the bank, a strip of this vegetation at least 5m wide;**
  AND/OR
- **Any contiguous fen, marsh, swamp, or wet woodland habitats where these are present.**

Coastal habitats

114) Kent holds the following coastal habitats which are priorities under the UK BAP.
   a) Maritime cliffs and slopes;
   b) Coastal sand dunes;
   c) Coastal vegetated shingle; and
   d) Coastal saltmarsh.

115) In each case, the habitats are of sufficient importance to be almost entirely included within Sites of Special Scientific Interest (SSSIs), as shown below. Note that the area measurement for maritime cliffs and slopes is not entirely meaningful as it does not take the angle of slope into account.

Habitat type	Total area in Kent	Area in SSSIs
Maritime cliffs and slopes	127 ha	126 ha
Coastal sand dunes	233 ha	201 ha
Coastal vegetated shingle	691 ha	620 ha
Coastal saltmarsh	1450 ha	1371 ha

116) These are all undoubtedly rare habitats in the county, and consideration therefore needs to be given to those small areas outside SSSIs. All the habitats are vulnerable to coastal defence work or coastal built development. Sand dunes and vegetated shingle are particularly vulnerable to trampling and disturbance.

117) Where sites are not heavily disturbed or modified, then they can develop a virtually entirely natural vegetation, often with specialised species of restricted distribution.

118) The following targets have been set for these habitats in the UK and Kent BAPs.

a) Maritime cliffs and slopes

UK BAP	Seek to maintain the existing maritime cliff resource of cliff-top and slope habitat.
Kent BAP	Protect sea cliffs from further development.

b) Coastal sand dunes

UK BAP	Protect the existing sand dune resource from further losses to anthropogenic factors, whether caused directly or indirectly (eg by sea defence schemes affecting coastal processes).
Kent BAP	Ensure no net loss of the existing resource.

c) Coastal vegetated shingle

UK BAP	Prevent, where possible, further exploitation of, or damage to, existing vegetated shingle sites through human activities.
Kent BAP	To retain the current area of vegetated shingle.

d) Coastal saltmarsh

UK BAP	There should be no further net loss of coastal saltmarsh.
Kent BAP	To prevent further loss of habitat, except to natural processes.

119) The following policies are therefore considered appropriate to identify and protect important coastal habitats outside SSSIs.

CO1

Blocks of maritime cliff and slope habitat, coastal sand dunes, coastal vegetated shingle and coastal saltmarsh over 2 ha in continuous extent should be selected as Wildlife Sites where

- **They support an assemblage of plant species typical of the habitat concerned, including a suite of species restricted or mainly restricted to the habitat concerned; OR**
- **The habitat is soft maritime cliff and it supports herbaceous vegetation as well as areas of bare ground and/or wet seepages.**

CO2

All areas of maritime cliff and slope habitat, coastal sand dunes, coastal vegetated shingle and coastal saltmarsh up to 2 ha in extent should be included as parts of larger Wildlife Sites where they are contiguous with other habitats which qualify for designation.

CO3

When the boundary is set for a maritime cliff or slope Wildlife Site, it should include any semi-natural cliff-top vegetation demonstrating a clear maritime influence in its species composition to a depth of at least 5m inland of the top of cliff or slope.

Selection of Wildlife Sites based on species features

General

SG1
Where a Wildlife Site is designated on the basis of the species present, the boundaries should be drawn to include the area and range of habitats necessary to secure the continued presence of the species on the site.

Biodiversity Action Plan species

120) There are published Species Action Plans for all UK BAP Priority species. These indicate the action considered necessary to achieve the favourable conservation status of the species concerned. In some cases, the prescribed action includes protection of some or all populations of that species.

BS1
Sites supporting UK BAP Priority Species should be designated as Wildlife Sites where this is in accordance with the prescribed actions in the appropriate Species Action Plan.

Lower plants and fungi

121) English Nature's criteria for the selection of Sites of Special Scientific Interest (SSSIs) treat lower plants together, and a similar approach is taken here. The criteria set out below are for use when identifying Wildlife Sites on the basis of communities of fungi, lichens, charophyte algae or bryophytes.

122) The criteria for the selection of SSSIs use a scoring system based upon the known frequency of species in the UK. It is appropriate to use a similar system here, but to adapt it to reflect local rather than national importance. The scoring system is set out in the table below; note that the most recent and authoritative records should be used in establishing the score for a site.

Status	Score
Nationally rare (i.e. UK Red Data Book)	100
Nationally scarce	50
Rare in Kent (i.e. Kent Red Data Book 1, 2, 3 or K status)	40
Scarce in Kent (Not KRDB, but known to occur in <50 DINTY tetrads)	25

LP1
A site with one nationally rare species should be selected as a Wildlife Site if

- **It supports the largest population of that species in a particular Natural Area; AND/OR**
- **It is the only occurrence of that species in the county.**

LP2
Any site scoring at least 150 using the system set out above should be selected as a Wildlife Site.

LP3
A site should be selected as a Wildlife Site where it is considered by an appropriately expert organisation or individual as being of importance for the maintenance of the conservation status of one or more species of fungus, lichen or lower plant within the county or within a

particular natural area, and where this decision is ratified through the decision-making process for the identification and delineation of Wildlife Sites.

LP4
A churchyard or graveyard site should be selected as a Wildlife Site where it

- **Supports at least 50 of lichen;**
  OR
- **Supports at least 15 species of bryophyte;**
  OR
- **Supports a well-developed community associated with lime-based render on north-facing walls.**

Vascular Plants

123) English Nature's criteria for the selection of SSSIs on the basis of their vascular flora use a scoring system based upon the known frequency of species in the UK. It is appropriate to use a similar system here, but to adapt it to reflect local rather than national importance. The scoring system is set out in the table below.

Status	Score
Nationally rare (i.e. UK Red Data Book)	100
Nationally scarce	50
Rare in Kent (i.e. Kent Red Data Book 1, 2, 3 or K status)	40
Scarce in Kent (Not KRDB, but known to occur in <50 DINTY tetrads)	25

VP1
A site with one nationally rare species should be selected as a Wildlife Site if

- **It supports the largest population of that species in a particular Natural Area;**
  AND/OR
- **It is the only occurrence of that species in the county.**

VP2
Any site scoring at least 150 using the system set out above should be selected as a Wildlife Site.

VP3
A site should be selected as a Wildlife Site where it is considered by an appropriately expert organisation or individual as being of importance for the maintenance of the conservation status of one or more vascular plant species within the county or within a particular natural area, and where this decision is ratified through the decision-making process for the identification and delineation of Wildlife Sites.

Invertebrates

124) Currently, the invertebrate fauna of Kent is insufficiently known to allow the setting of minimum thresholds for the identification of Wildlife Sites on the basis of invertebrate communities. However, the county undoubtedly supports some outstanding invertebrate sites, and it is considered appropriate to have a mechanism by which their importance can be recognised.

IN1

A site should be selected as a Wildlife Site where it is considered by an appropriately expert organisation or individual as being of importance for the maintenance of the conservation status of one or more invertebrate species within the county or within a particular natural area, and where this decision is ratified through the decision-making process for the identification of Wildlife Sites.

Amphibians and reptiles

125) A set of criteria for selection of Wildlife Sites on the basis of their amphibian fauna has been drawn up by the Kent Reptile and Amphibian Group, as the relevant expert organisation. The criteria are based on a scoring system which forms the basis of the selection of Sites of Special Scientific Interest for amphibians. This scoring system is set out in the table below.

Species	Method	Low population Score 1	Good population Score 2	Exceptional population Score 3
Gt crested newt	Seen or netted in day	<5	5-50	>50
	Counted at night	<10	10-100	>100
Smooth newt	Netted in day or counted at night	<10	10-100	>100
Palmate newt	Netted in day or counted at night	<10	10-100	>100
Common toad	Estimated	<500	500-5000	>5000
	Counted	<100	100-1000	>1000
Common frog	Spawn clumps counted	<50	50-500	>500

Notes

a) If four species are present, add 1 point; if five species are present, add two points to the total.
b) Daytime netting should be carried out for a 15 minute period for sites with less than 50m of water's edge, for 30 minutes for sites with 50m to 100m of water's edge, and so on.

126) The use of a scoring system allows sites with exceptional populations to be identified, as well as sites with good assemblages of a range of species.

127) It is considered appropriate that the identification of Wildlife Sites on the basis of their reptile fauna uses the methodology established by Froglife to identify Key reptile Sites. This is similar to the above system in that it uses a scoring system, and that it identifies

a) Sites which support a good assemblage of species;
b) Sites which support high populations of one or more species; and
c) Sites of importance for locally rare species.

The scoring system for identifying Key Reptile Sites is set out in the table below. It should be based on the maximum number of adult animals seen under artificial refugia (placed at a density of up to 10 per hectare) or by general observation by one person in one day.

Species	Low population Score 1	Good population Score 2	Exceptional population Score 3
Adder	<5	5-10	>10
Grass snake	<5	5-10	>10
Viviparous lizard	<5	5-20	>20
Slow worm	<5	5-20	>20

128) Kent Reptile and Amphibian Group consider that adder is sufficiently rare and threatened in Kent that 'good' or 'exceptional' populations should be considered for selection as Wildlife Sites.

129) Guidance on the selection of biological SSSIs states, 'Any breeding site of [natterjack toad or great crested newt] adjacent to an existing SSSI should be considered for inclusion in the SSSI.' It is considered appropriate to include a similar provision here.

AM1
All sites with an exceptional population of great crested newts should be selected as Wildlife Sites.

AM2
Sites should be selected as Wildlife Sites if they score a total of at least 5 points based on the system detailed above.

AM3
For the purposes of selecting Wildlife Sites on the basis of their amphibian fauna, a site may be

- **A single water body;**
  OR
- **A collection of water bodies supporting a metapopulation of on or more species.**

AM4
Where a site has been selected as a Wildlife Site on the basis of its amphibian fauna, the boundary should be drawn to include

- **Semi-natural vegetation immediate adjacent to the pond;**
  OR
- **Where great crested newts are present, areas of semi-natural vegetation linking nearby ponds where this vegetation may be considered critical to the functioning of a metapopulation.**

AM5
Where a breeding pond used by great crested newts is adjacent to an existing or proposed Wildlife Site, the pond should be included within the Wildlife Site boundary.

RE1
Sites should be selected as Wildlife Sites where the site

- **Supports three or more reptile species;**
  OR
- **Supports two snake species;**
  OR
- **Supports an exceptional population of one species;**
  OR
- **Supports an assemblage of species scoring at least 4 points using the system set out above;**
  OR
- **Supports a 'good' or 'exceptional' population of adder.**

Birds

130) A set of criteria has been established by Kent Ornithological Society, as the relevant expert organisation, for the selection of Wildlife Sites on the basis of their bird fauna (which is here taken to mean the naturally occurring populations of wild birds on a site). The criteria are based on established criteria for the selection of Sites of Special Scientific Interest, and on the Kent Red Data Book.

131) The criteria are intended to be applied to areas of habitat which are more-or-less discrete and homogenous. For example, a large block of woodland should not be treated as part of the same site as a large block of farmland. However, an intimately mixed area of small fields, hedges and small woods may be treated as a unit, as may the mix of scrub, swamp, marsh and open water vegetation associated with flood plains or around abandoned quarries.

132) The criteria have been designed to recognise

a) The rarity of certain breeding and wintering bird species;
b) Birds which may be considered vulnerable because their populations are in decline;
c) Birds which are vulnerable because of their colonial nesting habitats;
d) Birds which may be considered vulnerable because their non-breeding populations are concentrated in a small number of sites; and
e) Sites of importance for the presence of a diversity of species.

BI1

A site should be selected as a Wildlife Site if it can be considered as a single, identifiable unit (as explained above) in terms of its bird fauna and where

- **It is occupied regularly by at least 2.5% of the county population of any one or more bird species, based on the most recent and authoritative data;**
  OR
- **It is occupied regularly as a breeding site by species with a Kent population of 50 or fewer territories;**
  OR
- **It holds ten or more Kent Red Data Book 2 (KRDB2) species in the breeding season;**
  OR
- **It holds three or more Kent Red Data Book 3 (KRDB3) species at the appropriate time of year (normally this should not include a combination of breeding and wintering species);**
  OR
- **It holds one of the five largest colonies of colonial seabirds (with the exception of herring gull and black-headed gull), grey heron, little egret or sand martin;**
  OR
- **It is occupied regularly by 5% or more of the county population of any one or more species in non-breeding seasons, based on the most recent and authoritative data;**
  OR
- **It has been recorded as being regularly used in recent years by at least 50 breeding bird species;**
  OR
- **It has been recorded as being regularly used in recent years by at least 60 wintering bird species;**
  OR
- **It has been recorded as being regularly used in recent years by at least 100 passage bird species.**

Other considerations

Composite sites

OT1

Where a site includes a number of different habitat types, each habitat should normally qualify as a Wildlife Site in its own right in order to be included. The exceptions to this are

- **Where specific reference is made in policies relating to individual habitat types; OR**
- **Where the site qualifies on the basis of species which use the set of habitats as a whole; OR**
- **Where expert opinion determines that the habitats present, taken together, may be considered more important than the sum of their parts, based upon either habitat features, species features, or a combination of both, and where this decision is ratified through the decision-making process for the identification of Wildlife Sites.**

OT2

Where a site supports a number of different species of recognised national or county importance, but does not qualify as a Wildlife Site under the species criteria set out above, the site may still qualify as a Wildlife Site where, in the opinion of an appropriately expert organisation or individual, the combination of species present renders the site of substantive nature conservation value in a county context, and where this decision is ratified through the decision-making process for the identification of Wildlife Sites.

OT3

Where a site does not qualify as a Wildlife Site under any of the criteria set out in this document, it may still qualify as a Wildlife Site where, in the opinion of an appropriately expert organisation or individual, the features of the site are such that it should be considered of substantive nature conservation value in a county context, and where this decision is ratified through the decision-making process for the identification of Wildlife Sites.

OT4

In determining whether a site is of sufficient nature conservation importance to qualify as a Wildlife Site, consideration may be given to the potential, rather than actual value of a site, but only where

- **The potential of the site can be realised through a scheme of management which is practically possible;**
- **There is a real possibility that an appropriate system of management can be implemented in the short to medium term; and**
- **The site would qualify as a Local Wildlife Site under other criteria once its potential was realised.**

OT5

Once an area has been designated as a Wildlife Site, very careful consideration should be given before the designation is removed from part or all of the site. Deselection of part or all of a Wildlife Site should only generally occur

- **To correct mapping or other errors;**
- **To take into account built development; or**
- **Where irrevocable change has resulted in the loss of the feature(s) for which the site was designated.**

Where part or all of a site has been damaged or has degraded, deselection should not take place unless it is clear that there is no potential for repair or restoration of the feature(s) of special interest for which the site was designated.

Delineation of boundaries

133) The boundary to any Wildlife Site should normally be drawn tightly around the qualifying habitat or site using either the Kent Habitat Survey or Ordnance Survey 1:10000 scale map tiles (or Ordnance Survey 1:1250 map tiles for particularly small sites). The exceptions to this are

a) Where expert opinion determines that it is necessary to include a buffer of non-qualifying habitat to protect a particularly vulnerable habitat or species; or
b) Where for clarity it is easier to present a site boundary which coincides with an established boundary shown on the relevant scale Ordnance Survey map, or with a clear ownership or management boundary.

134) In the case of either exception, it must be made clear on the relevant citation document why the boundary was set as shown.

Procedure for selection and designation of Local Wildlife Sites in Kent

135) The Kent Biodiversity Partnership Steering Group will be the body responsible for the selection and designation of Wildlife Sites in Kent and Medway. As part of this role, it will establish, and review as necessary, the criteria by which Wildlife Sites are selected. As such, the Kent Biodiversity Partnership Steering Group will act as the Local Sites Partnership for Kent and Medway, in the meaning of the DEFRA guidance.

136) In its role as the Local Sites Partnership for Kent, the Kent Biodiversity Partnership Steering Group will be responsible for

a) Overseeing the setting, publishing, monitoring and reviewing the criteria for the identification and delineation of Local Wildlife Sites in Kent;
b) Ensuring that the criteria and relevant procedures follow national guidelines for such systems;
c) Acting as an expert body to advise on the application of criteria and to ensure consistency of application;
d) Overseeing consultation with outside organisations on the criteria and system; and
e) Where appropriate, and at its discretion, acting as mentor to any organisation or individual submitting a proposal for the identification, revision or deselection of a Local Wildlife Site.

137) In its role as the Local Sites Partnership for Kent, the Kent Biodiversity Partnership Steering Group does not have any formal planning responsibility. It is role of the relevant local planning authorities to

a) Decide whether or not to show or describe in any local planning documents the Local Wildlife Sites identified by the Kent Biodiversity Partnership Steering Group;
b) Decide how strategic planning policies will be applied to Local Wildlife Sites; and
c) Be responsible for all planning matters related to Local Wildlife Sites within their respective administrative areas, including making appropriate representation at planning inquiries or other hearings.

138) The Kent Biodiversity Partnership Steering Group may, at its discretion, establish a Site Selection Panel, the function of which will be to evaluate candidate Wildlife Sites, and to make recommendations to the Kent Biodiversity Partnership Steering Group as to which sites should be identified as Local Wildlife Sites.

139) The Site Selection Panel shall consist of no fewer than five representatives drawn from the membership of the Kent Biodiversity Partnership Steering Group.

140) The Kent Biodiversity Partnership Steering Group will, at its discretion, seek funding, or support bids by others for funding, in order to provide the necessary administrative support for the operation of the Local Wildlife Sites system in Kent and Medway.

141) Administrative support and day-to-day management of the Local Wildlife Sites system in Kent and Medway will be carried out by Kent Wildlife Trust, subject to the availability of appropriate resources. The Trust will, *inter alia*,:

a) Seek to identify sites which may qualify for selection as Local Wildlife Sites.
b) Provide the initial evaluation (including any site survey as appropriate) of proposed Local Wildlife Sites against established criteria;
c) Draw up supporting documents, including citation documents and boundary maps;
d) Circulate documents for consultation as appropriate;
e) Maintain a register of Local Wildlife Sites;

f) Maintain a register of details of land ownership; and
g) Carry out other appropriate activities, as determined by the Kent Biodiversity Partnership Steering Group, including the co-ordination of a programme of site monitoring.

142) The following procedure is to be followed in the selection and designation of Local Wildlife Sites.

a) Kent Wildlife Trust will
   i) Keep a register of all designated Wildlife Sites in Kent;
   ii) Seek to identify sites which might qualify for designation as Wildlife Sites;
   iii) Receive suggestions from outside agencies and individuals for sites which might qualify as Wildlife Sites.

b) Where potential Local Wildlife Sites are identified under 8a(ii) and 8a(iii) above, Kent Wildlife Trust will gather the information necessary to ascertain whether or not the site qualifies as a Local Wildlife Site under the criteria set out in this document. This will normally involve site survey to determine the biodiversity interest of the site, and to determine appropriate site boundaries.

c) A draft citation document for the site will be drawn up where
   i) A site clearly qualifies as a Local Wildlife Site under the selection criteria; or
   ii) Where further expert opinion is required to determine whether the site would qualify as a Local Wildlife Site under the selection criteria.

d) Where a site clearly does not qualify as a Wildlife Site, a set of detailed notes will be drawn up, explaining the basis of this judgement.

e) Where sites are resurveyed, Kent Wildlife Trust will
   i) Draw up a draft revised citation document for the site where changes to the site description or site boundaries are required; or
   ii) Draw up clear notes where it is considered a site should be deleted in its entirety.

f) The Kent Biodiversity Partnership Steering Group will consider, at an appropriate meeting, all outstanding
   i) Draft citation documents;
   ii) Draft revised citation documents;
   iii) Notes relating to potential sites which have been found not to qualify as Wildlife Sites; and
   iv) Notes relating to sites proposed for deletion.

g) The Kent Biodiversity Partnership Steering Group will then determine whether a site
   i) Should be confirmed as a Local Wildlife Site as set out in the draft citation document;
   ii) Should be confirmed as a Local Wildlife Site, but with a revised citation or boundary;
   iii) Should not be confirmed as a Local Wildlife Site;
   iv) Should be deleted as a Local Wildlife Site; or
   v) Should be deferred for consideration at a further meeting.

h) If the Kent Biodiversity Partnership Steering Group has chosen to operate with a Site Selection Panel, then it will be the purpose of this panel to give full consideration to the matters set out in f) and g) above, and to make appropriate recommendations to a meeting of the Kent Biodiversity Partnership Steering Group. However, it will be the responsibility of the Steering Group to confirm or reject any recommendations.

i) Where it is unclear whether a site meets the established criteria for selection as a Local Wildlife Site, or where its selection requires consideration of appropriate expert opinion, then the Kent Biodiversity Partnership Steering Group
   i) Should give a considered opinion, which should be the majority view of those present at the relevant meeting, and which should be considered binding as the Steering Group's view on the matter; or
   ii) Should seek the opinion of one or more relevant experts.

b) Prior to making any formal recommendations, the owner or owners of the site, and the relevant Local Planning Authority or Authorities, shall be given the opportunity to make observations relating to whether or not a site contains the feature or features considered to be of importance, and to whether the site meets the criteria for designation of Local Wildlife Sites. This consultation should be confined to factors relating directly to these Local Wildlife Site selection criteria.

c) Following its decision, Kent Wildlife Trust will draw up a confirmed citation document and site boundary plan, and will distribute copies to
   i) The landowner;
   ii) The appropriate local planning authority;
   iii) Other interested agencies as appropriate.

143) This procedure will only apply to new Wildlife Sites, or to sites which are resurveyed as part of the on-going monitoring of the county's Wildlife Sites, or to sites which are reassessed for other reasons. All Local Wildlife Sites in Kent and Medway which were designated under previous systems and/or criteria, and which were recognised by Kent Wildlife Trust as Sites of Nature Conservation Interest at the time of adoption of the current criteria and procedures, will continue to be recognised as Local Wildlife Sites.

Appendix 1 Ancient Woodland Indicator Species in Kent

Species	English name	Notes
Acer campestre	Field maple	1
Adoxa moschatellina	Moschatel	
Agrimonia procera	Fragrant agrimony	
Agropyron caninum	Bearded couch	
Allium ursinum	Ramsons	
Alnus glutinosa	Alder	1
Anagallis minima	Chaffweed	
Anemone nemorosa	Wood anemone	
Aquilegia vulgaris	Columbine	1, 2
Blechnum spicant	Hard fern	
Bromus benekenii	Lesser hairy brome	3
Bromus ramosus	Hairy brome	
Calamagrostis epigejos	Wood small reed	
Campanula trachelium	Nettle-leaved bellflower	
Cardamine bulbifera	Coral root bittercress	2
Cardamine impatiens	Narrow-leaved bittercress	2
Carex laevigata	Smooth-stalked sedge	
Carex ovalis	Oval sedge	
Carex pallescens	Pale sedge	
Carex pendula	Pendulous sedge	1
Carex remota	Remote sedge	
Carex strigosa	Thin-spiked wood sedge	2
Carex sylvatica	Wood sedge	
Carpinus betulus	Hornbeam	
Centaurium pulchellum	Lesser centaury	
Cephalanthera longifolia	Narrow-leaved Helleborine	2
Chrysosplenium alternifolium	Alternate-leaved golden saxifrage	2
Chrysosplenium oppositifolium	Opposite-leaved golden saxifrage	
Circaea lutetiana	Enchanters nightshade	
Conopodium majus	Pignut	
Convallaria majalis	Lily of the valley	1, 2
Cordalis claviculata	Climbing corydalis	2
Crataegus laevigata	Midland hawthorn	
Daphne laureola	Spurge laurel	
Dipsacus pilosus	Small teasel	2
Dryopteris aemula	Hay-scented buckler fern	
Dryopteris pseudomas	Scaly male fern	2
Epipactis helleborine	Broad-leaved helleborine	
Epipactis leptochila	Narrow-lipped helleborine	2
Epipactis phyllanthes	Green-flowered helleborine	3
Epipactis purpurata	Purple helleborine	2
Equisetum sylvaticum	Wood horsetail	2
Euonymus europaeus	Spindle	1
Euphorbia amygdaloides	Wood spurge	
Festuca gigantea	Giant fescue	
Frangula alnus	Alder buckthorn	2
Galium ordratum	Woodruff	
Gnaphalium sylvaticum	Heath cudweed	2
Helleborus foetidus	Stinking hellebore	2
Helleborus viridis	Green hellebore	2
Holcus mollis	Creeping soft grass	
Hypericum androsaemum	Tutsan	
Hypericum maculatum	Imperforate St. John's Wort	
Hypericum montanum	Pale St. John's Wort	2
Ilex aquifolium	Holly	1
Iris foetidissima	Stinking iris	
Lamiastrum galeobdolon	Yellow archangel	
Lathraea squamaria	Toothwort	
Lathyrus montanus	Wood vetch	
Lathyrus sylvestris	Narrow-leaved everlasting pea	2

Notes: 1 = Only include if occur well within a wood and do not appear to be planted 2 = Restricted 3 = Rare

Luzula forsteri	Southern woodrush	
Luzula pilosa	Hairy woodrush	
Luzula sylvatica	Great woodrush	
Lysimachia nemorum	Yellow pimpernel	
Malus sylvestris	Crab apple	1
Melampyrum pratense	Cow wheat	
Melica uniflora	Wood melick	
Milium effusum	Wood millet	
Monotropa hypopitys	Yellow bird's nest	2
Naricissus pseudonarcissus	Wild daffodil	1
Neottia nidus-avis	Birds nest orchid	
Ophrys insectifera	Fly orchid	2
Orchis mascula	Early purple orchid	
Orchis purpurea	Lady orchid	2
Oxalis acetosella	Wood sorrel	
Paris quadrifolia	Herb paris	
Phyllitis scolopendrium	Harts tongue fern	
Pimpinella major	Greater burnet saxifrage	
Platanthera bifolia	Lesser butterfly orchid	
Platanthera chlorantha	Greater butterfly orchid	
Poa nemoralis	Wood meadow grass	
Polygonatum multiflorum	Common solomon's seal	
Polygonum dumetorum	Copse bindweed	1, 2
Polypodium vulgare	Common polypody	
Polystichum aculeatum	Hard shield fern	2
Polyystichum setiferum	Soft shield fern	
Populus tremula	Aspen	
Primula vulgaris	Primrose	1
Prunus avium	Cherry	1
Pyrus communis	Wild pear	1, 3
Quercus petraea	Sessile oak	1
Radiola linoides	Allseed	
Ranunculus auricomus	Goldilocks buttercup	
Rhamnus cartharticus	Buckthorn	1
Ribes nigrum	Black currant	1
Rosa arvensis	Field rose	1
Ruscus aculeatus	Butcher's broom	
Sanicula europae	Sanicle	
Scirpus sylvaticus	Wood club rush	
Scorphularia nodosa	Common figwort	
Scutellaria minor	Lesser skullcap	
Sedum telephium	Orpine	
Serratula tinctoria	Sawwort	
Solidago virgaurea	Goldenrod	
Sorbus aria	Whitebeam	1
Sorbus aucuparia	Rowan	1
Sorbus torminalis	Wild service tree	2
Stachys officinalis	Betony	
Stellaria neglecta	Greater chickweed	2
Thelypteris oreopteris	Lemon-scented fern	3
Tilia cordata	Small leaved lime	1, 2
Ulmus glabra	Wych elm	
Vaccinium myrttillus	Bilberry	
Valeriana dioica	Marsh valerian	1
Veronica montana	Wood speedwell	
Viburnum opulus	Guelder rose	1
Vicia sylvatica	Wood vetch	2
Viola odorata	Sweet violet	1
Viola reichenbachiana	Early dog violet	
Wahlenbergia hederacea	Ivy-leaved bellflower	2

Appendix 2 Indicators of Unimproved Acid Grassland in Kent

Species	English name	Notes
Achillea ptarmica	Sneezewort	
Aira caryophyllea	Silver hair-grass	
Aira praecox	Early hair-grass	
Anagallis tenella	Bog pimpernel	
Campanula rotundifolia	Harebell	
Carex demissa	Common yellow sedge	
Carex distans	Distant sedge	1
Carex nigra	Common sedge	1
Carex panicea	Carnation sedge	1
Carex pillulifera	Pill sedge	
Dactylorhiza maculata	Heath spotted orchid	
Danthonia decumbens	Heath grass	
Deschampsia flexuosa	Wavy hair grass	
Euphrasia anglica	Eyebright sp	
Festuca tenuifolia	Fine-leaved sheep's fescue	
Galium saxatile	Heath bedstraw	
Galium verum	Lady's bedstraw	
Genista anglica	Petty whin	
Hydrocotyle vulgaris	Marsh pennywort	1
Isolepis setaceus	Bristle club rush	
Lathyrus montanus	Bitter vetch	
Luzula multiflora	Heath wood-rush	
Lychnis flos-cuculi	Ragged robin	1
Moenchia erecta	Upright chickweed	
Molinea caerulea	Purple moor grass	1
Ornithopus perpusillus	Birds-foot	
Pedicularis sylvatica	Lousewort	1
Pilosella officinarum	Mouse-ear hawkweed	
Plantago coronopus	Buckshorn plantain	
Polygala serpyllifolia	Heath milkwort	
Polygala vulgaris	Common milkwort	
Potentilla argentea	Hoary cinquefoil	
Potentilla erecta	Tormentil	
Ranunculus flammula	Lesser spearwort	1
Saxifraga granulata	Meadow saxifrage	
Scleranrhus annuus	Annual knawel	
Spergulgaria rubra	Sand spurrey	
Stachys officinalis	Betony	
Succisa pratensis	Devils bit	
Trifolium glomeratum	Clustered clover	
Trifolium ornithopodioides	Fenugreek	
Trifolium scabrum	Rough clover	
Trifolium striatum	Knotted clover	
Trifolium subterraneum	Subterranean clover	
Viola canina	Heath dog violet	
Viola riviniana	Common dog violet	
Bryophytes		
Brachythecium albicans		
Hypnum jutlandicum		

1 = Occurs in damp places

Appendix 3 Indicators of Unimproved Chalk Grassland in Kent

Species	English name	Notes
Aceras anthropophorum	Man orchid	
Acinos arvensis	Basil thyme	
Anthyllis vulneraria	Kidney vetch	
Arabis hirsuta	Hairy rock cress	
Asperula cynanchica	Sqinancywort	
Astragalus glycyphyllos	Wild liquorice	
Avenula pratensis	Meadow oat-grass	
Avenula pubescens	Downy oat-grass	
Blackstonia perfoliata	Yellow-wort	
Briza media	Quaking grass	
Campanula glomerata	Clustered bellflower	
Campanula rotundifolia	Harebell	
Carex caryophyllea	Spring sedge	
Carlina vulgaris	Carline thistle	
Centaurea scabiosa	Greater knapweed	
Cephalanthera damasonium	White helleborine	
Cirsium acaule	Dwarf thistle	
Cirsium eriophorum	Woolly thistle	
Clinopodium vulgare	Wild basil	
Coeloglossum viride	Frog orchid	
Danthonia decumbens	Heath grass	At rabbit burrows
Euphrasia pseudokerneri	Eyebright	
Festuca ovina	Sheep's Fescue	
Filipendula vulgaris	Dropwort	
Gentianella amarella	Autumn gentian	
Helianthemum nummularium	Common rock rose	
Hippocrepis comosa	Horseshoe vetch	
Juncus subnodulosus	Blunt-flowered rush	In damp areas
Koeleria macrantha	Crested hair grass	
Leontodon hispidus	Rough hawkbit	
Linum bienne	Pale flax	East Kent
Linum catharticum	Fairy flax	
Listera ovata	Common twayblade	
Onobrychis viciifolia	Sainfoin	
Ophioglossum vulgatum	Adder' s-tongue fern	
Ophrys apifera	Bee orchid	
Ophrys insectifera	Fly orchid	
Orchis masula	Early purple orchid	
Origanum vulgare	Marjoram	
Orobanche elatior	Knapweed broomrape	
Pilosella officinarum	Mouse-ear hawkweed	
Pimpinella saxifraga	Burnet saxifrage	
Plantago media	Hoary plantain	
Polygala austriaca	Dwarf milkwort	
Polygala calcarea	Chalk milkwort	
Polygala vulgaris	Common milkwort	
Primula veris	Cowslip	
Ranunculus bulbosus	Bulbous buttercup	
Rhinanthus minor	Yellow rattle	
Salvia pratensis	Meadow clary	
Sanguisorba minor	Salad burnet	
Scabiosa columbaria	Small scabious	
Spiranthes spiralis	Autumn lady's tresses	
Thymus praecox	Thyme	
Thymus pulegioides	Large thyme	
Trisetum flavescens	Yellow oat-grass	
Viola hirta	Hairy violet	

Appendix 4 Indicators of Unimproved Neutral Grassland in Kent

Species	English name	Notes
Achillea ptarmica	Sneezewort	
Agrimonia odorata	Fragrant agrimony	
Ajuga reptans	Bugle	
Alopecurus bulbosus	Bulbous foxtail	1
Anagallis tenella	Bog pimpernel	
Avenula pubescens	Downy oat grass	
Briza media	Quaking grass	
Bromus commutatus	Meadow brome	
Bromus racemosus	Smooth brome	
Caltha palustris	Marsh marigold	2
Carex caryophyllea	Spring sedge	
Carex distans	Distant sedge	
Carex disticha	Brown sedge	
Carex divisa	Divided sedge	1
Carex flacca	Glaucous sedge	
Carex nigra	Common sedge	2
Carex ovalis	Oval sedge	
Carex pallescens	Pale sedge	
Centaurea nigra	Common knapweed	
Dactylorhiza incarnata	Early marsh orchid	
Dactylorhiza praetermissa	Southern marsh orchid	
Festuca pratensis	Meadow fescue	
Genista tinctoria	Dyers greenwood	
Hordeum maritum	Sea barley	1
Hordeum secalinum	Meadow barley	
Hydrocotyle vulgaris	Marsh pennywort	2
Lathyrus montanus	Bitter vetch	
Lathyrus nissolia	Grass vetchling	
Lotus tenuis	Narrow leaved bird's-foot-trefoil	1
Lotus uliginosus	Greater bird's-foot-trefoil	2
Lychnis flos-cuculi	Ragged robin	2
Lysimachia nummularia	Creeping jenny	2
Oenanthe lachenalii	Parsley water-dropwort	2
Oenanthe pimpinelloides	Corky fruited water-dropwort	2
Oenanthe silaifolia	Narrow leaved water-dropwort	2
Ononis spinosa	Spiny restharrow	
Ophioglossum vulgaris	Adder's-tongue fern	
Orchis morio	Green winged orchid	
Petroselinum segetum	Corn parsley	
Pimpinella saxifraga	Burnet saxifrage	
Polygala vulgaris	Common milkwort	
Primula veris	Cowslip	
Pulicaria dysenterica	Fleabane	2
Rhinanthus minor	Yellow rattle	
Scirpus sylvaticus	Wood club-rush	2
Senecio erucifolius	Hoary ragwort	
Silaum silaus	Pepper saxifrage	
Sison amomum	Stone parsley	
Stachys officinalis	Betony	
Succisa pratensis	Devils bit scabious	
Trifolium fragiferum	Strawberry clover	1
Trifolium medium	Zigzag clover	
Triglochin palustris	Marsh arrowgrass	1, 2
Valeriana dioica	Marsh valerian	2
Valeriana officinalis	Common valerian	
Vicia cracca	Tufted vetch	
Viola riviniana	Common dog violet	

Notes: 1 = Occurs on grazing marsh 2 = Occurs in damp areas