

A review of the ornithological interest of SSSIs in England

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Allan Drewitt, Tristan Evans and Phil Grice

Natural England



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Project manager

Allan Drewitt - Ornithological Specialist
Natural England
Northminster House
Peterborough
PE1 1UA
Allan.Drewitt@naturalengland.org.uk

Contractor

Natural England
1 East Parade
Sheffield
S1 2ET
Tel: 0114 241 8920
Fax: 0114 241 8921

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Summary

This review is a systematic assessment of the coverage of important aggregations of breeding and non-breeding birds by England's network of Sites of Special Scientific Interest (SSSI). The proportions of the English breeding and non-breeding bird populations which occur within SSSIs has been estimated for 111 regularly occurring species which are (or could be) designated interest features under the SSSI selection guidelines. Each species is described individually, with separate estimates of coverage for breeding and non-breeding populations where relevant. The main ornithological features of special scientific interest relevant to this report are nationally important aggregations of breeding or non-breeding birds, smaller isolated colonies of particular species (e.g. Grey Herons) and assemblages of breeding birds.

Data from a wide range of sources have been reviewed to identify and list important aggregations for each species. Key data sources include the Wetland Bird Survey (WeBS), the Seabird Colony Register and the recent national Seabird 2000 census, Rare Breeding Bird Panel reports and single species national surveys (e.g. Nightjar 2004 and Woodlark 2006). This is the first review of the coverage of important bird populations by SSSIs in England. It shows that coverage is generally very high, commonly greater than 90% of the English population, for many of the most aggregated species, including wintering and passage wildfowl and waders and breeding seabirds. However, coverage is much lower for some groups, in particular near-shore marine species such as wintering divers, grebes and seaducks, and the more abundant and dispersed breeding species associated with farmland. Although coverage is high for many non-breeding waterbirds, a number of these are highly dependent on habitats outside designated sites for foraging or roosting.

Protected areas are a cornerstone of efforts to conserve England's avifauna and this assessment is important for three reasons. Firstly, by providing information on the proportions of the populations of rare, threatened or otherwise important species which are protected by designated sites, it can inform conservation strategies such as species and habitat action plans under the UK Biodiversity Action Plan. Secondly, it sets individual sites into context, thus highlighting their importance and reinforcing the case for their protection and sustainable management. Finally, it identifies gaps in coverage which may point to a need for further designations, or alternative conservation strategies such as the effective deployment of wider countryside measures (e.g. agri-environment schemes). Such an assessment is especially timely given the potential threats to biodiversity from man-induced climate change and the important role of designated sites in conserving England's avifauna the coming decades.

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1 Introduction

- 1.1 Protected areas have long been a cornerstone of efforts to conserve England's avifauna. Whilst there have been reviews of the coverage of internationally important bird sites (Special Protection Areas) at the UK level (eg Stroud et al. 2001), there has never been a systematic assessment of the ornithological coverage of England's network of Sites of Special Scientific Interest (SSSI). Such an assessment is important for three reasons. Firstly, it provides information on the proportions of the populations of rare, threatened or otherwise important species which are protected by designated sites, thus informing conservation strategies such as species and habitat action plans under the UK Biodiversity Action Plan. It also indicates the coverage of important assemblages of bird species and their habitats. Secondly, it sets individual sites into context, thus highlighting their importance and reinforcing the case for their protection and sustainable management. Finally, it identifies gaps in coverage which may point to a need for further designations, or alternative conservation strategies such as the effective deployment of wider countryside measures (eg agri-environment schemes). Such an assessment is especially timely given the potential threats to biodiversity from man-induced climate change and the possible shift this may require in the role of designated sites in conserving England's wildlife in the coming decades.
- 1.2 The proportions of the English breeding and/or non-breeding populations which occur within SSSIs has been estimated for 111 bird species which regularly occur in England and which are (or could be) designated interest features under the SSSI selection guidelines due to their aggregation or rarity. Each species is described individually, with separate estimates of coverage for breeding and non-breeding populations where relevant.

2 Selection Guidelines

- 2.1 The ornithological features which merit consideration for SSSI status are described in Chapter 14 of the Guideline for selection of biological SSSIs (NCC 1989). A summary of the full list of features is shown in Appendix 1 and the most important categories are described below. The numbers of SSSIs including each of these different bird features are listed in Appendix 2.

Breeding aggregations and localities of very rare species

- 2.2 This usually relates to nationally important aggregations of a species and, less often, to seabird colonies of over 10,000 breeding pairs. Nationally important aggregations of a single species are those which hold 1% or more of the estimated British population. Only those species with a highly aggregated distribution, or low population levels, are likely to occur in nationally important numbers at individual locations. In practice this guideline applies largely to waterbirds which often congregate in large numbers at relatively few sites. It also relates to breeding seabirds which gather in large colonies, and rare or scarce breeding birds (less than 300 pairs) which often have a very localised distribution. In exceptional circumstances and for the rarest of our breeding birds (eg Bittern), the presence of a single pair may be sufficient to merit consideration for SSSI status.

Smaller isolated colonies of seabirds and other selected colonial species

- 2.3 This guideline allows for the selection of smaller aggregations of breeding birds of certain species in particular circumstances. These generally relate to colonially-breeding birds such as seabirds (excluding Herring and Lesser Black-backed Gulls), Grey Herons and Sand Martins which occur in numbers which are important at the regional or county level. Such colonies must hold more than 10 pairs of the species concerned. This approach can increase the level and distribution of coverage of relatively scarce colonial species with dispersed populations which very rarely occur in nationally important aggregations.

Important aggregations of non-breeding birds

- 2.4 Similar to the guideline for breeding birds, this allows for the selection of sites which regularly hold nationally important numbers of a non-breeding population of any species at any season. This category usually applies to wintering birds, but may also be applied to pre- and post-breeding gatherings, non-breeding summer flocks, moulting flocks and passage concentrations. The majority of wintering waterbirds in Britain form large aggregations and sites which regularly hold such aggregations generally merit consideration for SSSI status under this guideline.

Assemblages of breeding birds

- 2.5 The selection of SSSIs for breeding bird assemblages is based on the diversity of breeding species (generally those which are less abundant and more localised) associated with a particular habitat. The assemblages are composed of species which meet the other selection guidelines relating to aggregations, as well as relatively more numerous and widespread species which rarely or never satisfy these guidelines. The 370 SSSIs which include one or more breeding bird assemblages are listed in Appendix 3.

Rare species and features

- 2.6 There are a few other special cases where the guidelines indicate that SSSI designation might be appropriate. The most relevant of these is the selection of wet meadows used by breeding waders, an approach based on a survey of the birds breeding on England's lowland wet grasslands undertaken in 1982 (Smith 1983) and a subsequent evaluation. National and regional thresholds for breeding waders can be used to identify sites eligible for SSSI status under this guidance. Given the massive decline in the extent and quality of lowland permanent grasslands and the loss of their associated breeding waders, it was decided that all sites of at least regional interest should be considered for SSSI status. These regional thresholds are shown in Appendix 4. Less commonly used examples under this heading include unique or unusual features such as isolated colonies outside the main range of a species and inland cormorant colonies.

Variety of species

- 2.7 Finally, 41 SSSIs have been selected for the overall variety of bird species that they support (see Appendix 3). The guidelines allow for the selection of localities that support at least 70 breeding species, at least 90 wintering species, or at least 150 species during spring/autumn passage.
- 2.8 This review is concerned with quantifying, as far as possible, the level of coverage of the SSSI network of different populations of birds in England. As such, the main focus of the following assessment is on those sites which hold important aggregations of individual species. As the sizes of aggregations on SSSIs are known for many species, this approach provides a reasonably accurate indication of overall coverage. In the case of assemblage SSSIs (including variety of species), which are based on the presence of a species alone rather than numbers, this degree of quantification is not possible. Although assemblage sites have not been addressed in detail in this review, it is recognized that they hold a significant proportion of the English breeding populations of some species. In these cases, the number, distribution and extent of the different breeding bird assemblages have been used to increase estimates of overall coverage for some species.

3 Interest features and levels of protection

- 3.1 The occurrence of a species within a SSSI does not necessarily confer any additional protection beyond the level of legal protection that exists for all naturally occurring bird species under Part 1 of the Wildlife & Countryside Act (1981, as amended). For full protection under the SSSI legislation a species must be described as an 'interest feature' on a SSSI citation. There is no standard terminology for such a description but, generally, if a species or assemblage which includes that species is on the citation then it can usually be inferred to be a legitimate interest feature.
- 3.2 This review attempts to identify the coverage of species, not only by the SSSI series overall, but also by those SSSIs where they are formally protected as an interest feature. The majority of SSSI citations include all species which occur in important numbers. However, there are exceptions (for example, the nationally important breeding colony of Puffins on Coquet Island), especially where population changes at a national or site level have occurred since designation.
- 3.3 Clearly, many SSSIs support breeding or non-breeding bird populations in less than important numbers and such species are rightly not listed as interest features. However, in these cases such species may still benefit from indirect protection if their habitat receives protection in its own right or because it supports other, legitimate species interest features which are present at the same time of year and which share broadly the same ecological requirements. In order to give a complete picture of coverage it is therefore important to include both SSSIs which describe a species as an interest feature and those which support the species in smaller numbers. Estimates of numbers of a species on SSSIs where it is not an interest feature, or where it is only of importance at the assemblage level, are generally approximate.
- 3.4 An added complication when determining the degree of protection conferred by a designated site is that many ornithological SSSIs are also designated as Special Protection Areas (SPA). In such cases the SPA designation often shares the same interest features as the SSSI. However, in those cases where a large SPA includes many smaller SSSIs (eg Dorset Heathlands) the SPA is often designated for a species which, at the level of an individual SSSI, is not an interest feature. In these cases, although there is no formal protection at the SSSI level, there is protection at the wider SPA level. Additionally, those SPAs designated for a waterfowl or seabird assemblage (ie more than 20,000 individuals, a category which includes all waterfowl or seabirds present on the site) will confer formal protection on many more species than those described as interest features at the SSSI level.
- 3.5 Thus a bird species may be protected at a range of different levels on a designated site, ranging from specific protection as a SSSI or SPA interest feature (individually or as part of an assemblage) during the season when it is present, to only indirect protection on sites where it is not an interest feature at any level. An objective of this review is to describe these different levels of protection for each relevant species at each SSSI, and thus indicate the degree of coverage under the different scenarios described above.

4 Data sources

- 4.1 Birds are the most intensively studied, surveyed and monitored taxonomic group in England (Brown & Grice 2005), and a wide range of data are available for assessing numbers at the national, regional and site level. However, coverage by monitoring schemes is rarely comprehensive and the estimates derived for some species and species groups are more reliable than others. Generally speaking, the more aggregated species are better covered by monitoring schemes and so estimates of abundance for these species, subject to particular caveats, are most accurate. This includes wintering waterfowl which are concentrated at coastal sites and breeding seabirds and certain rare and scarce breeding birds which are subject to dedicated national surveys. The main survey and monitoring schemes which have been used for this review are described below.
- 4.2 The Wetland Bird Survey (WeBS) is a joint scheme of the British Trust for Ornithology (BTO), the Wildfowl & Wetlands Trust (WWT), the Royal Society for the Protection of Birds (RSPB) and the Joint Nature Conservation Committee (JNCC) to monitor non-breeding waterbirds in the UK. Counts are undertaken, principally by volunteers, usually once a month from September to March every year at around 2,000 wetlands sites, especially estuaries and the larger inland waterbodies.
- 4.3 The WeBS sites include many of the SSSIs (and SPAs) designated for non-breeding aggregations of waterbirds (indeed, many designations are based on WeBS data). However, the overlap between WeBS count areas and designated sites is not complete: some designated sites, especially those on the open coast or on smaller inland waterbodies, are not covered by WeBS. Furthermore, some SSSIs are only partially covered by WeBS counts or, more commonly, WeBS sites are larger than the SSSI or contain several SSSIs. Thus the relationship between WeBS counts and designated sites is often complex and this is reflected by the species tables which employ WeBS data. For example, some WeBS sites relate to two or more SSSIs, and the numbers of birds indicated often relates to an aggregation of several SSSIs. However, despite these limitations, these data give a good indication of coverage by designated sites.
- 4.4 Some species are relatively poorly covered by WeBS. In particular, seaducks and other species present on inshore waters, which in many cases fall within designated sites, are poorly covered by WeBS, largely because counting seaducks from shore is dependent on visibility, sea conditions and the distance of the birds from the shore. As a result, the numbers recorded fluctuate both with actual population size and viewing conditions, and are often likely to be considerable underestimates.
- 4.5 The more dispersed waterbirds which use smaller inland waterbodies, riparian habitats, floodlands or open coasts are also relatively poorly covered as few of these habitats are regularly counted. This means that some SSSIs have no reliable data for waterbird numbers and, furthermore, some national estimates for species with relatively small numbers on WeBS sites are likely to be underestimates. Regarding national estimates, recent efforts have been made to address potential underestimates due to biases in WeBS sampling (Jackson et al. 2006).
- 4.6 Other species that are under-represented by WeBS are secretive or cryptic birds such as Bitterns and Snipe, non-breeding species such as gulls and terns, for which counts are optional under WeBS, and those which also exploit non-wetland habitats such as wintering Lapwings and Golden Plovers. Species which occur in large numbers during passage are also likely to be under-represented, not only because of poorer coverage outside the winter months, but also due to the very high turnover of birds at individual sites over a short time period.
- 4.7 As mentioned above, waterbirds using open coastal areas are poorly covered by WeBS. For this reason, counts of open coast birds are undertaken every ten years by the Non-estuarine Coastal Waterbird Survey. The most recently published survey took place in the winter of 1997/98 (Rehfishch et al. 2003). This provides more accurate national population estimates as well as reliable site data for open coast sites such as the Northumberland Shore SSSI.

- 4.8 Another recent innovation is the use of aerial surveys to provide better estimates of the numbers of seabirds and divers using near-shore and offshore waters. Although these techniques are also likely to underestimate total numbers (because a proportion of birds will be missed between the flown transects), statistical techniques can be used to correct for this underestimate (though where cited in the WeBS data, the uncorrected counts have been quoted).
- 4.9 A proportion of breeding seabirds colonies are monitored annually by the JNCC's Seabird Colony Register and nearly all seabirds breeding in England were covered by the extensive Seabird 2000 surveys undertaken between 1998 and 2002 (Mitchell et al. 2005).
- 4.10 Wintering gulls are poorly covered by WeBS because counts are best undertaken at roosts at dusk, a technique not compatible with WeBS, and because they are widely dispersed at inland sites and open coastal areas which are generally not well covered by WeBS. For this reason a national survey of wintering gulls was undertaken during the three winters 2003/04-2005/06. This identified key roosting sites supporting nationally important numbers of individual species and internationally important assemblages of over 20,000 seabirds, and allowed the calculation of more accurate national population estimates (Banks et al. 2007).
- 4.11 Breeding waders on lowland wet grasslands in England were surveyed by the Breeding Waders of Wet Meadows survey in 2002 (Wilson et al. 2005). This survey included many lowland wet grassland SSSIs of importance for breeding waders.
- 4.12 The Rare Breeding Birds Panel (RBBP) collates data submitted mainly to county bird recorders on certain specified rare and scarce breeding birds. These confidential data are produced annually and include site details for each species. Although not comprehensive, these data give a reasonable indication of SSSI coverage for some rare and scarce breeding birds.
- 4.13 County Bird Reports are a good source of information for the numbers and locations of the less common and more localised breeding species. Again, the data collected are not comprehensive and vary in completeness depending on species and location, but they can provide a good indication of coverage, especially at the more regularly monitored sites.
- 4.14 National, single-species surveys are coordinated and funded under the auspices of the Statutory Conservation Agency/RSPB Breeding Bird Scheme (SCARABBS). This oversees a rolling programme of surveys of scarce and declining birds, with the majority of species covered once every 12 years. Recent single-species datasets used for this review include the Nightjar survey (2004), Marsh Harrier survey (2005), and Dartford Warbler and Woodlark surveys (2006). These extensive surveys are usually tailored to ensure comprehensive coverage of designated sites, with additional data from other locations and randomly selected grid squares (usually 1 km²) used to generate national population estimates. Additionally, annual data are also available for a few, rare species subject to ongoing recovery projects (eg Bittern, Stone-curlew).
- 4.15 Finally, Natural England's programme of site monitoring work also generates comprehensive bird data for individual SSSIs, with surveys recently completed of upland breeding birds in the South and North Pennines and of breeding seabirds on the Isles of Scilly.
- 4.16 The period covered by this report depends on data availability, but is generally from 1999 to 2004. All WeBS data used here are the average for the five annual peak counts ('five-year peak mean') collected during the winters 1999/2000 to 2003/04. All other data are, wherever possible, taken from a similar period, though may be as recent as 2006 or 2007 for some rare breeding species (eg Woodlark, Dartford Warbler, Stone-curlew).

5 Species Accounts

- 5.1 The species accounts provide background summary information on the abundance and distribution, legal and conservation status and ecology of each species, plus an assessment of coverage by designated sites during each stage of their life cycle spent in England. The different types of information are described below.
- 5.2 The 1% GB population figure is derived from the latest national estimates of breeding and non-breeding populations, using standardized rounding protocols. The estimates are produced by the Avian Population Estimates Panel (APEP) which comprise members of the BTO, WWT, RSPB, JNCC and Game and Wildlife Conservation Trust (GWCT). The panel reviews published population estimates of birds in the UK periodically and publishes tables of estimates every three years. In some cases, where a species' population is undergoing a rapid change, these estimates quickly become out of date, although as the formal, recognized estimate they must continue to be applied until updated. The population estimates refer to the number of individuals unless otherwise stated. For non-breeding populations, a minimum threshold of 50 birds is normally applied.
- 5.3 The England population estimates are derived from a number of sources. For waterbirds many of the estimates are derived from WeBS, where counts for the peak month (i.e. the month which, overall, contains the highest counts across all sites) are summed across all the WeBS sites to give an England total. The reliability of this estimate will depend on how well a species is covered by WeBS. In cases where coverage is known to be relatively low, other data have been used to adjust the England estimate (for example, Jackson et al. 2006 and Rehfisch et al. 2003).
- 5.4 For those species with recent national surveys it is often possible to extract relatively precise data for England (and, in many cases, species are more-or-less restricted to England anyway). So, in the case of breeding seabirds and individual species such as the Nightjar and Marsh Harrier, the estimate for England is likely to be highly accurate. Similarly for a small number of rare and scarce breeding birds, where virtually every breeding pair is known, it is possible to provide a precise estimate. Additionally, recently improved monitoring techniques have generated more accurate estimates for English populations (for example, in the case of wintering gulls). As a result, the England estimate is sometimes more accurate and up to date than the 'official' British estimate given by APEP. In such cases it is not unusual for the English estimate to exceed the British estimate, dependent on recent population trends (eg Avocet, Woodlark).
- 5.5 For some less well monitored species, there are often no reliable figures for the numbers present in England alone and, in these cases, an approximate estimate is derived from the British estimate based on known numbers in designated sites and the distributional and density information given in the British wintering and breeding bird atlases (Lack 1986, Gibbons et al. 1993). Many such estimates are taken from Birds in England (Brown & Grice 2005) and updated where possible.
- 5.6 Given the often approximate nature of national and site population estimates, the figures for coverage have been provided as ranges covering 10% bands, except in those cases where coverage is known to be complete. Where it is possible to provide a more precise estimate of coverage then this is given in the text. Accuracy varies greatly depending on the reliability of national and site estimates, with low accuracy for poorly monitored groups (eg offshore birds) compared with well monitored groups such as coastal waterfowl and breeding seabirds.
- 5.7 The legal status of each species is described. Legal protection in England under the Wildlife and Countryside Act (1981, as amended) applies to all wild birds, and their nests, eggs and dependent young. However, some species listed under separate Schedules may be taken for certain purposes and by specified means. Thus 'quarry species' are only fully protected during the close season from 31 January (or 20 February on intertidal land) until 1 September, which applies to certain wildfowl, Golden Plover, Snipe and Woodcock. Certain species listed on

Schedule 1 of the Act are specially protected in that it is illegal to intentionally or recklessly disturb them while they are breeding at or near the nest.

- 5.8 The provisions of the Birds Directive, in particular the requirement to designate SPAs, apply to species listed on Annex I of the Directive and all regularly occurring migratory species. The main relevance of this distinction to site-based protection is that populations of Annex I birds reaching the level of national importance can be considered for SPA status (rather than international importance as in the case of migratory birds).
- 5.9 The conservation status of birds in the UK is reviewed by conservation agencies and non-governmental organisations every five years, and the status of each species as identified in the most recent review (2002-2007) are presented here (Gregory et al. 2002). The reviews are based on the most up-to-date information on global and European status, trends in breeding and non-breeding populations, and species distribution and population size at the UK level. Quantitative criteria are used to place species on different lists. The red list (high concern) species are those which are globally threatened; those whose populations have declined rapidly (greater than 50% in the last 25 years); or those that have declined historically and not shown a substantial recovery. Amber list species (medium concern) are those with an unfavourable conservation status in Europe; those with a moderate population or range decline (greater than 25% in the last 25 years); those which have declined historically but have since made a substantial recovery; rare breeders; and those with internationally important or localised populations. All other species are not of conservation concern.
- 5.10 The conservation status of birds in Europe has been most recently reviewed for the period 1990-2000 (Burfield & Bommel 2004). Priority birds of conservation concern are listed under four main categories: SPEC1 are species of global conservation concern; SPEC2 species have an unfavourable status and are concentrated (greater than 50% of global breeding or wintering population or range) in Europe; SPEC3 species have an unfavourable status; Non-SPEC species have a favourable conservation status.
- 5.11 The UK BAP category identifies those species which appear on the list of priority species in the UK Biodiversity Action Plan. The UK BAP list of priority birds has been reviewed recently and now includes additional species under new criteria relating to particular races or subspecies.
- 5.12 The text of each account begins with a brief summary of the species' biology, including global breeding range, status in Britain, breeding and wintering habitats, main food items and, where relevant, information on population trends. A description of breeding and/or wintering distribution in England follows, along with an assessment of coverage by designated sites (both overall and as a recognized interest feature). Limitations in data may be described here and appropriate caveats to estimates may be identified.

6 Species Tables

- 6.1 The species tables generally list only those sites (SSSIs and non-designated) which hold at least nationally important numbers. In some cases, where a species is rare and good data are available, all SSSIs are listed, even where numbers fall below the threshold for national importance.
- 6.2 The tables for wintering waterbirds, where data are derived from WeBS, list single or groups of SSSIs alongside their relevant WeBS site. In some cases a single WeBS site may cover many SSSIs (for example, the Somerset Levels) and data at the level of individual SSSIs is not presented. In all cases the data provided for WeBS species is the five-year peak mean (5YPM) derived during the winters 1999/2000 – 2003/04. Note that these peaks for individual sites cannot be summed to give overall coverage as, in most cases, the peaks for different sites will occur in different months. In some cases the summing of these peaks would lead to the double-counting of birds which move between sites during the course of the winter or passage periods. Where there is a highly accurate English estimate then the percentage of the English population present on individual sites is given (% Eng). Elsewhere the percentage contribution across the sites is given, simply to illustrate the importance of particular sites.
- 6.3 The status of the species as an interest feature is described. This is a hierarchical approach, with SSSI status being most important (in the context of this report). Thus, in cases where a species qualifies as both a SSSI interest feature and a SPA interest feature, only the former is indicated. Those species which are only of interest because they are part of a wider 20,000 waterfowl assemblage are identified as such in the table. If the species is not referred to at any of these levels then it has no status as an interest feature.
- 6.4 Finally, in cases where a species might be listed as an interest feature during different seasons on different sites, the relevant season (breeding, wintering, passage) is described. The notified seasonal feature may differ from the actual period of importance for species on some sites (e.g. snipe on the Ouse Washes are only specifically notified as a breeding interest feature, despite important numbers occurring in the winter as well). In the case of SPAs, birds which are designated interest features benefit from formal protection throughout the year (Stroud et al. 2001).
- 6.5 The data presented for breeding birds are similar to those described above, although the period of coverage varies depending on data availability and accuracy. For those species where data availability and/or comprehensiveness is poor, or where breeding numbers and distribution fluctuate, then data for several years is given. Breeding bird data generally relates to confirmed breeding pairs, and exceptions to this general rule are identified.

Table 1 Red-throated Diver *Gavia stellata*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	170 (2007)	11,000 (2007)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC3	No

- 6.6 The most numerous of Britain's wintering divers, Red-throated Divers are distributed widely around the coast though their numbers vary greatly from region to region. They nest beside small pools and lakes across the tundra and moorlands of northern Eurasia and America, and in Britain they are restricted to northern and western Scotland. Birds breeding in Scandinavia, Russia and

Greenland winter in northwest European waters, with British waters supporting approximately 19% of this population. Wintering birds show a strong preference for water less than 30m deep, especially over sandy substrates, where they feed on a variety of fish and crustaceans. They are most numerous on the east coast, especially from the Wash to the south coast of Kent, and in the northwest in Liverpool Bay. Though winter numbers are relatively stable, the European breeding population has declined greatly since the 1970s and the species is of conservation concern both in Britain and Europe.

- 6.7 Known locations of known importance for wintering Red-throated Divers are listed in **Table 111**. Although commonly recorded in coastal waters during passage and when wintering, Red-throated Divers are most numerous beyond the sight of land-based observers and have been found to be most abundant 10-20km offshore. This has been highlighted by recent aerial surveys of waterbirds using the Thames Estuary, the Greater Wash and Liverpool Bay (Webb et al. 2005a, b, Wilson et al. 2007). These estimates have resulted in a recent revision of the national non-breeding estimate from 5,000 to 17,000 individuals. In the light of these findings, the WeBS data clearly only present part of the picture, being limited to the narrow zone of coastal water visible to onshore observers and often only representing counts from selected sectors within a larger WeBS site. Accepting that around 11,000 birds occur in English Waters (O'Brien et al. in press), it is estimated that less than 5% of the English population occurs within the often narrow band of inshore waters (i.e. above the mean low water mark) included within coastal SSSIs. The species is not a specified interest feature on any site in England, though will be included as part of the 20,000 waterfowl assemblage for many coastal SPAs.

Table 2 Black-throated Diver *Gavia arctica*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	7 (1980-86)	300 (2000)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC3	Yes

- 6.8 Black-throated Divers breed on lakes in boreal and arctic Eurasia, including a small population in north and northwest Scotland. The species is a scarce winter visitor and passage migrant to coastal waters around England, rarely exceeding one or two birds at any location, with the exception of south-western coasts in winter and the eastern English Channel during spring migration. Most wintering birds occur offshore, though usually in waters less than 30m deep, where they feed on small fish and crustaceans. Black-throated Divers are considered to be of conservation concern in the UK and Europe, and the race *arctica*, which breeds and winters in Europe, is a priority BAP species.
- 6.9 As with other offshore birds, relatively little is known about the numbers and distribution of wintering Black-throated Divers, with the majority of observations restricted to shore-based counts. The highest wintering numbers have been recorded off the south Cornwall and Dorset coasts, with peaks of 160 between Gribbin Head and Dennis Head in 1999/2000 and 53 in Gerrans Bay during 2000-2005. Few birds occur regularly in coastal SSSIs and only a proportion of these will be included as an interest feature at the SPA level as part of a waterbird assemblage.

Table 3 Great Northern Diver *Gavia immer*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	28 (1974-84)	1000 (2005)	1-10%
& Countryside Act Wildlife	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

6.10 Great Northern Divers breed widely on undisturbed lakes in the forests and tundra of Iceland, Greenland and North America, and winter mainly along the Pacific and Atlantic coasts of North America. The species is relatively scarce in Britain, tending to occur at very low densities with only one or two birds present annually even at favoured sites. They favour coastal waters and winter both off open coasts and in the mouths of estuaries, feeding on small fish and crustaceans, and are uncommon away from coastal waters. Most wintering birds in the UK are found off northern and western Scotland. Around 75% of the northwest European total of 5,000 wintering birds occur in waters around Britain and Ireland, and the species is thus considered to be of conservation concern in the UK.

6.11 Nationally important wintering numbers of Great Northern Diver have been recorded off the south Cornwall coast, specifically Gribbin Head to Dennis Head, with a peak of 109 birds in 1999-2000, and Torbay, with a peak of 60 up to 1991. None of these birds occur within designated sites and coverage of this species, with one, and twos occurring irregularly in some coastal SSSIs, is estimated to be less than 10%.

Table 4 Little Grebe *Tachybaptus ruficollis*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	75 pairs (1988-91)	4,500-9,000 pairs (2005)	11-20%
Non-breeding	75* (1994-99)	10,000 – 100,000 (2005)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

*Note that the formal GB population estimate is less recent than the England estimate

6.12 The Little Grebe or Dabchick breeds commonly over much of Eurasia and is numerous and widespread throughout much of lowland Britain. The highest densities are found in the major river valleys where birds breed on a wide range of still and slow-moving waters with abundant submerged and emergent vegetation. They feed on the larvae of aquatic insects, fish fry and molluscs. Little Grebes occupy a wider range of wetlands during the winter, including coastal lagoons and inshore waters. Resident birds are joined by continental migrants during the autumn and winter, with the number of immigrants depending on weather conditions on the continent. Some British birds also leave the country to winter in Ireland and France. The species is highly sensitive to adverse winter weather and, with recent milder conditions, appears to be faring well at present, with the wintering population roughly doubling since monitoring began in the early 1990s.

6.13 The Little Grebe is a dispersed breeding bird with only one individual site known to support nationally important numbers: Dungeness, Romney Marsh and Rye Bay SSSI. It is estimated that up to 20% of the breeding population occurs on wetland SSSIs, including sites notified for their

lowland fen and open water breeding bird assemblage, as well as SSSIs which support SPA waterfowl assemblages.

- 6.14 Although many Little Grebes are recorded on WeBS sites, they are widely dispersed on other small waterbodies and rivers, and so the wintering population estimate, which is based on WeBS data alone, is likely to fall far short of the true population. There are five WeBS sites of national importance for Little Grebes (based on the current 1% threshold value for GB importance of at least 100 individuals), encompassing 11 individual sites, of which all but one are designated SSSIs (**Table 112**). Little Grebes are an interest feature on seven SSSIs at the SSSI/SPA level. It is estimated that a maximum of 25% of the wintering population occurs within SSSIs, with the majority included as an interest feature at the SSSI/SPA level.

Table 5 Great Crested Grebe *Podiceps cristatus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	80 adults (1988-91)	7,500 adults (2005)	11-20%
Non-breeding	160 (1994-99)	15,000 (1999-2004)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

- 6.15 Widely distributed and abundant throughout much of Eurasia, the Great Crested Grebe is a common species of reservoirs and flooded gravel pits of lowland England. Inland still waters and slow-flowing rivers with emergent vegetation are the preferred breeding habitats, with smaller numbers also nesting on coastal pools and lagoons. During the autumn and winter, birds of both local and continental origins congregate at inland and coastal sites. Winter numbers have undergone a gradual increase in Britain since the late 1980s, with numbers peaking at 9,500 on WeBS sites in 2003/04 (Collier et al. 2005).
- 6.16 Great Crested Grebes are widely dispersed and occur at low density during the breeding season. As a consequence there are no known sites which support nationally important numbers. However, it is probable that up to 20% of the population breed on wetland SSSIs throughout England, and birds will be included as an interest feature on those sites where they form part of the lowland water breeding bird assemblage and where part of an SPA 20,000 waterbird assemblage.
- 6.17 **Table 113** lists 21 WeBS and other sites of national importance for Great Crested Grebes, encompassing 27 individual sites. These include 21 SSSIs, of which half include the species as an interest feature at the SSSI/SPA level. Assuming that up to 15,000 birds winter in England, it is estimated that at least a third of the English population occurs within SSSIs, with 7% present at Lade Sands, Kent alone. However, only around 24% are formally protected as an interest feature. Several undesignated sites support nationally important numbers: Queen Mary Reservoir in Surrey, Cotswold Water Park (West) in Gloucestershire, Bewl Water in East Sussex and Draycote Water in Warwickshire and the coastal waters of the Thames Estuary and Dorset.

Table 6 Red-necked Grebe *Podiceps grisegena*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	50* (1981-99)	100 (2005)	11-20%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

- 6.18 The Red-necked Grebe is an extremely rare breeding species and a scarce winter visitor to Britain. The species breeds across the Holarctic, with the European breeding population concentrated in Finland, Poland and Denmark. Although birds have made several attempts to breed on shallow pools and lakes with dense emergent vegetation in southern and eastern England, successful breeding has yet to be confirmed outside Scotland. Red-necked Grebes winter widely off the northern Atlantic and Pacific coasts, south to the southern Mediterranean. Away from a concentration in the Firth of Forth, the majority of Britain's wintering birds occur in England, especially in sheltered bays and estuaries off the south and east coasts, and with small numbers at inland lakes and gravel pits. The species is of conservation concern in the UK due to its small breeding population and localised winter distribution.
- 6.19 Wintering Red-necked Grebes occur in small numbers, rarely reaching two or more individuals at a site. As with other species using inshore waters, they are poorly covered by WeBS, and **Table 114** provides an incomplete picture of their true numbers and distribution. Given that a higher number occur close inshore, within the seaward limits of some coastal SSSIs, but are not routinely counted by WeBS, it is estimated that up to 20% of wintering Red-necked Grebes in England occur within designated sites.

Table 7 Slavonian Grebe *Podiceps auritus*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	50* (1986-93)	269 (1986-1993)	11-20%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC3	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

- 6.20 The Slavonian Grebe breeds in boreal regions across North America and Eurasia and many European birds winter off the coasts of northwest Europe, including Britain. Although the species breeds in small numbers in Scotland it does not breed in England. Slavonian Grebes are a scarce winter visitor to British coasts, with much smaller numbers occurring sporadically inland. They favour sheltered inshore waters, estuaries and bays, where they feed on fish as well as crustaceans and other invertebrates. The species is of conservation concern in the UK due to the small size of its breeding population and has an unfavourable conservation status in Europe due to a recent decline in numbers.
- 6.21 Wintering birds are widespread, although often numbering only one to three birds at individual sites. Table 5 identifies WeBS and other sites of greatest importance in England, which are located on the south and east coasts. These encompass eleven individual sites, of which six are SSSIs, including four which identify Slavonian Grebes as an interest feature at the SPA level. As with other grebes and ducks using coastal waters, Slavonian Grebes are poorly covered by

shore-based surveys, and these figures are likely to be underestimates. It is calculated that up to 20% of the Slavonian Grebes wintering in England are covered by designated sites, though the true extent to which each site includes this species is unclear as most SSSIs extend only to mean low water.

Table 8 Black-necked Grebe *Podiceps nigricollis*

	1% GB Population	English population estimate	Coverage by designated sites
Breeding	1 pair (1998-2002)	43-61 pairs (2004)	21-50%
Non-breeding	50* (1981-84)	40 (1999-2004)	41-50%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Amber, Non-SPEC	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

- 6.22 A common and widespread breeding species throughout much of Eurasia, the Black-necked Grebe is a scarce breeding and wintering bird in Britain, and is thus considered to be of conservation concern in the UK. The species breeds colonially, often in association with Black-headed Gull colonies, and favours shallow eutrophic pools with emergent vegetation, a relatively scarce habitat in Britain. Wintering birds inhabit coastal waters and larger inland waters, with numbers at individual sites rarely reaching more than 2-3 birds. At least a third of the estimated British wintering population occurs in England.
- 6.23 Black-necked Grebes have been recorded during the breeding season on a wide range of sites across the Midlands and into northern England, although records of probable or proven breeding generally only relate to 1-2 pairs at each location. Furthermore, breeding at many sites is only transitory, with birds often present for only a year or two. The more frequently occupied breeding sites during 2000-2004 are listed in **Table 116a**. Of these, the site which consistently supports the highest numbers is Woolston Eyes SSSI in Cheshire, which includes the species as an interest feature and holds up to 25% of the breeding population in England. Between 25-50% of nesting Black-necked Grebes in England occur on designated sites annually.
- 6.24 **Table 116b** lists seven WeBS sites which have held greater than ten wintering Black-necked Grebes, of which five are wholly or partly within designated sites, (though only three of these include the species as an interest feature). Special surveys of the south Cornwall coast and Poole Bay, including boat-based observations at the latter, suggest that these near-shore areas are perhaps the most important location in Britain for wintering Black-necked Grebes, although a similar approach using dedicated surveyors and boats might well reveal greater numbers at other coastal sites. As with other offshore species, the national population estimate for wintering Black-necked Grebes is likely to significantly underestimate true numbers. The estimate of up to 50% of England's wintering Black-necked Grebes occurring within SSSIs is thus very approximate.

Table 9 Fulmar *Fulmarus glacialis*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	5,000 pairs (1998-2002)	6,291 pairs (1998-2002)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.25 Fulmars breed widely throughout the north Atlantic and Pacific, with Britain supporting 12-18% of the north Atlantic population. Birds are present year-round in Britain, though they disperse from their breeding colonies after the breeding season and return early in the following year. Fulmars usually nest on wide ledges near the top of grassy cliffs, close to their marine feeding areas. They take a wide variety of marine foods including zooplankton, small fish and offal discarded by the fishing industry. The species has increased dramatically, both in breeding range and population, since the mid 18th century, when they were restricted to Iceland and St Kilda in the Western Isles, increasing by up to 13-19% annually. This rate of increase is thought to have been driven by increased food availability in the form of offal discarded by the whaling and fishing industries, although other factors such as hydrographical trends related to climatic change may have also played a part. The population growth slowed or stopped during the 1980s and 1990s and the species is now one of the most abundant in British coastal waters. Despite this increase Fulmars are of conservation concern in the UK as a large proportion of their breeding population is concentrated in a few very large colonies.

6.26 Most Fulmars in Britain breed in Shetland, Orkney and the Western Isles, and less than 2% of the British population breeds in England (Mitchell et al. 2005). The majority of these breed in Northumberland, on Flamborough Head in East Yorkshire and in Cornwall. There are no sites of national importance for breeding Fulmars in England. Of the 14 SSSIs notified for breeding Fulmars at the SSSI/SPA level, Flamborough Head supports by far the largest population (**Table 117**). It is estimated that around 72% of England's breeding Fulmars occur within SSSIs, though only around 27% occur on sites which include the species as an interest feature.

Table 10 Manx Shearwater *Puffinus puffinus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	3,000 pairs (1998-2002)	367 pairs (1998-2002)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	No

6.27 Manx Shearwaters breed in the north Atlantic south to the Azores and around 90% of the world population breeds in Britain and Ireland. Highly pelagic outside the breeding season, they nest colonially in burrows on grassy slopes on small offshore islands and forage at sea up to 360km from the colony on small fish, cephalopods, crustaceans and fishing offal discarded at sea. They are highly aggregated, breeding on around 36 islands in Britain and Ireland, with 90% of the UK population on Rum off west Scotland and on the islands of Skokholm, Skomer and Middleholm off the Pembrokeshire coast. The species is of conservation concern in the UK due to the

international importance of its breeding population and has an unfavourable conservation status in Europe because of the high aggregation of breeding colonies. Despite the high vulnerability of Manx Shearwaters to introduced mammalian predators, especially Brown Rats, their population currently appears to be stable.

- 6.28 Manx Shearwaters are extremely difficult to survey due to their nesting habits and because they are only active at night. A recent census, relying largely on the use of tape-playback at burrows, recorded 367 occupied sites at colonies on the Isles of Scilly and Lundy, representing less than 1% of the British population (**Table 118**). All colonies are within SSSIs which include the species as an interest feature at the SSSI/SPA level and it is therefore concluded that the coverage of breeding Manx Shearwaters in England is complete.

Table 11 Storm-petrel *Hydrobates pelagicus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	260 pairs (1998-2002)	1,475 pairs (1998-2002)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Amber, Non-SPEC	No

- 6.29 The Storm-petrel is confined to Europe, breeding from the Canary Islands, the Bay of Biscay and the Mediterranean north to Iceland, the Faroes and Norway. Birds nest colonially on remote offshore islands, using burrows and crevices under rocks on boulder beaches and scree and stone walls and ruined stone buildings. They feed offshore on small fish and zooplankton gleaned from the surface and by diving and inshore on intertidal crustaceans. Storm-petrels are highly pelagic, wintering off the coasts of western and southern Africa, and returning to land only to breed. Although breeding birds are extremely difficult to census due to their nocturnal habits and concealed nests, recent surveys using tape-playback suggests that 3-11% of the world population breed on at least 77 islands in Britain. The species is of conservation concern in the UK due to its highly aggregated breeding distribution.
- 6.30 As with many other seabirds in Britain, the majority of Storm-petrels breed in Scotland, with only around 6% of the British total breeding in England. The English total of around 1,475 pairs is currently confined to the Isles of Scilly, with all colonies occurring within SSSIs and included within the Isles of Scilly SPA as an interest feature (**Table 119**). It is therefore likely that all English breeding Storm-petrels are protected by designated sites.

Table 12 Gannet *Morus bassanus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	2,200 nests (2003-04)	2,552 nests (1998-2002)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.31 The Gannet is confined to the north Atlantic where it breeds from Brittany to Iceland, the Faeroes and Norway. Gannet colonies are highly traditional, with birds returning to the same inaccessible offshore islands or sheer mainland cliffs over decades or even centuries. Outside the breeding season they disperse to waters around the breeding colonies or migrate south to the Mediterranean and seas off Africa. They feed by plunge-diving to depths of up to 20 metres or more on a range of medium-sized pelagic fish including mackerel and herring. Feeding ranges can be extensive, with birds breeding on Bass Rock off southeast Scotland, for example, travelling up to 540km from the colony. Gannets are of conservation concern in the UK because nearly 60% of the world population breeds here and the majority of birds are concentrated in a few very large colonies. Gannets have increased in numbers overall by 2% annually since the late 1960s, largely as a result of a recovery from prolonged persecution as a source of food up until the 19th century.

6.32 The great majority of Gannets breed in Scotland, with only around 1% breeding in England. Gannets in England are currently found at a single colony at Bempton Cliffs within the Flamborough Head SSSI in East Yorkshire. Thus all England's breeding Gannets nest within a designated site (where they are included as an interest feature), though in common with many other seabirds, none of their marine foraging habitat is designated.

Table 13 Cormorant *Phalacrocorax carbo*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Breeding	85 pairs (1998-2002)	2,649 pairs (2000)	81-90%
Non-breeding	230 (1994-99)	12,466 (1999-2004)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.33 The Cormorant breeds throughout much of Europe, South Asia, Australasia, Africa and northeast North America, with Britain supporting 13-14% of the world population of the carbo race. Inland birds are a mixture of the carbo and the continental sinensis races, the former being sedentary while the latter is more migratory. The species is fairly widespread in Britain, both as a resident breeding and wintering bird, and has increased in abundance greatly since the 1980s, especially at inland sites away from its more traditional coastal habitats. The population increase is due to protection, the growth of inland fisheries and the spread of sinensis birds from Europe. During the breeding season birds favour coastal cliffs, stacks and islands and, inland, large reservoirs and gravel pits with suitably large, undisturbed trees for nesting. England holds 35% of the British population, with concentrations on the northeast and south coasts and inland in the East

Midlands and southeast. Around 50% of the English breeding population occurs inland. Cormorants are widely distributed during the winter, both on the coast and inland. They are almost entirely piscivorous, foraging in a range of inshore estuarine and coastal waters and still and flowing freshwater habitats inland. The species is of conservation concern in the UK due to its aggregated breeding population and because a large proportion (19%) of the European population winters in Britain.

- 6.34 Most Cormorant breeding colonies are small, with the great majority holding fewer than 50 pairs. **Table 120a** lists 13 sites of national importance for breeding Cormorants, of which all but two are designated, and two further SSSIs currently supporting less than nationally important numbers. Only five nationally important colonies are included as interest features at the SSSI/SPA level. It is estimated that 86% of breeding Cormorants in England occur within SSSIs, though only 36% benefit from formal protection as an interest feature.
- 6.35 Most wintering sites support fewer than ten birds and only 5% of sites support more than 100 birds (Brown & Grice 2005). There are 33 WeBS sites of national importance for Cormorants relating to 58 individual sites of which all but five are designated (**Table 120b**). The species is a notified feature at the SSSI/SPA level for 36 SSSIs. Accepting that the size of the British population is likely to have been underestimated due to poor coverage of birds inland, it is calculated that 71-80% of the Cormorants wintering in England occur within SSSIs, with up to 50% formally protected as an interest feature.

Table 14 Shag *Phalacrocorax aristotelis*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	270 pairs (1998-2002)	3,863 (1998-2002)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

- 6.36 The European Shag is restricted to the northeast Atlantic and the Mediterranean, with up to 40% of the world population breeding in Britain. Exclusively an inshore species, Shags breed in generally discrete colonies ranging from a few pairs to several thousand. They normally breed on cliffs or offshore islands and feed on a wide range of small fish, especially sandeels, which are caught on or near the seabed over both sandy and rocky substrates. Shags typically forage in waters less than 40m deep and within 15km of the colony. The breeding strongholds are in the north and west of Britain. During the winter they disperse widely, with first-year birds travelling the furthest, reaching as far as northern France and Norway. Shags increased in numbers greatly during the 20th century, at rates of up to 10% per annum in some regions, largely as a result of reduced exploitation for food and reduced persecution. Since this sustained increase the population has subsequently undergone a widespread decline, particularly in its Scottish strongholds. The reasons for this decline are not well understood, though it is considered likely that reduced breeding success due to low prey availability (linked to over-fishing and changes in prey distribution and behaviour) plays a part.
- 6.37 England supports an estimated 14% of the British breeding population of Shags. The great majority of these occur in three areas: the Farne Islands, Northumberland, the south Cornwall coast and the Isles of Scilly. Twelve SSSIs include breeding Shags as an interest feature at the SSSI/SPA level, of which only the Farne Islands supports nationally important numbers (**Table 121**). Although included as an interest feature at St Bee's Head, Cumbria, the species does not breed there. There are no nationally important colonies outside designated sites. It is

estimated that approximately 86% of the Shags breeding in England are within SSSIs, with around 66% receiving formal protection as an interest feature.

Table 15 Bittern *Botaurus stellata*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 male (1998-2002)	44 males (2006)	91-100%
Non-breeding	1 (1981-84)	50-150 (1981-84)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Red, SPEC3	Yes

- 6.38 Bitterns are widespread in Europe, North Africa and central and eastern Asia, though they have declined dramatically throughout much of their range due to the loss of reedbeds. Once locally numerous, they are now one of Britain's rarest breeding birds, with 44 'booming' males recorded in 2006, all in England and largely confined to about ten sites. Bitterns favour large, freshwater reedbeds where they require standing water during the breeding season and an abundance of prey including eels, rudd and other fish, amphibians, small mammals and birds. In winter, numbers are boosted by the arrival of continental immigrants, with birds distributed throughout lowland England across a wider range of sites than those used during the breeding season. The species is of conservation concern both in the UK and Europe.
- 6.39 The great majority (70% in 2006) of breeding Bitterns are in coastal Suffolk and the Norfolk Broads, along with a recently established and growing population in north Lincolnshire on the Humber Estuary. All sites with at least one booming male present during at least three out of the five years 2002-2006 are listed in **Table 122**. All except two sites are SSSIs and all but two of these include the species as an interest feature at the SSSI/SPA level. All the key sites are managed specifically for breeding Bitterns.
- 6.40 Bitterns are widely distributed during the winter, and although most numerous in their main breeding areas on the Suffolk and Norfolk coasts, the Norfolk Broads and the Humber, single birds often occur regularly elsewhere. Many of the more regularly used wintering sites are within designated sites, including Amwell Quarry, Rye Meads and Turnford and Cheshunt Gravel Pits in the Lee Valley, Hertfordshire/Essex, Dungeness in Kent and various locations in the Somerset Levels. Although very secretive during the winter, and thus more likely to be underestimated in numbers both nationally and at individual sites, it is estimated up to 80% of the Bittern population occurs on designated sites at this time. The species is an interest feature for the majority of sites.

Table 16 Little Egret *Egretta garzetta*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair* (2002)	347-350 pairs (2004)	51-60%
Non-breeding	8-9* (2000)	2,600 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Amber, Non-SPEC	No

*Note that the formal GB population estimate is less recent than the England estimate

- 6.41 Breeding from southern and western Europe and northwest Africa to Asia and Australasia, the Little Egret has undergone a dramatic change in status in Britain in the last few decades as its European range has expanded northwards. Formerly a vagrant, the species is now a widespread and locally numerous winter visitor and scarce breeding bird. This population increase has continued since the time of the last national population estimate and it is possible that autumn numbers now exceed 4,000 individuals (Collier et al. 2005). As the numbers of non-breeding visitors has grown, so the numbers staying into the breeding season have increased, with successful breeding first recorded in 1996. The numbers of confirmed breeding pairs have increased steeply during the last decade with up to 350 pairs breeding in England during 2004. The majority of Little Egrets currently breed in southwest and southeast England, although as with non-breeding birds, numbers are gradually increasing further north in East Anglia and the northwest. They generally breed in coastal areas, favouring undisturbed scrubby wetlands and reedbeds with shrubs and trees suitable for nesting. Little Egrets are most numerous during the autumn and early winter, as large influxes of birds from the continent occur in early autumn, with many staying throughout winter. The species is of conservation concern in the UK due to the small size of its breeding population.
- 6.42 **Table 123a** shows those sites which held ten or more breeding pairs of Little Egrets in 2004. Three colonies are within designated sites and, of these, two include the species as an interest feature at the SPA assemblage level. Although the majority of foraging areas are within coastal and other wetland SSSIs, birds often nest in patches of scrub and trees outside designated sites. It is estimated that 50-60% of England's Little Egrets nest in designated sites, with the majority of sites including the species as an interest feature at the SPA assemblage level.
- 6.43 While Little Egrets are still most numerous on the coasts and estuaries of the south and southeast of England, they are becoming increasingly well established further north in East Anglia and on the Dee Estuary in the northwest. **Table 123b** lists 30 WeBS sites which support at least 26 individuals during the non-breeding period. Many of these counts are likely to be underestimates as Little Egrets can be surprisingly inconspicuous when feeding in saltmarsh creeks. For example, a dedicated roost count on the Medway Estuary revealed 413 birds compared to a WeBS count total of only 101 in September 2003 (Collier et al. 2005). It is estimated that over 90% of the non-breeding Little Egrets in England occur within SSSIs, with at least 70% receiving formal protection as an interest feature at the SSSI/SPA level.

Table 17 Grey Heron *Ardea cinerea*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	130 nests (2003)	8,000 nests (2002)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

- 6.44 Grey Herons breed over much of the Palearctic including all of Europe. Around 8,000 were estimated to breed in England during 2002, with breeding birds found in every English county, although the majority breed in the major lowland river valleys. Grey Herons usually nest colonially in groups of a few individuals to up to about 40 pairs, with colonies of over 100 pairs being exceptional. Although few in number, the larger colonies are widespread (see **Table 124**). Whilst some heronries have existed for centuries, others are more transient. They feed in shallow water on fish, amphibians, small mammals and invertebrates. In England, the great majority of heronries are located in trees, with a few also found in reedbeds. Most English breeding birds remain within 200km of the heronry throughout the year, though some southern birds fly to southern and western Europe for the winter, while the resident population is joined by immigrants from northern Europe. Grey Herons are highly sensitive to adverse weather conditions during the winter and, with recent mild conditions, numbers in England are now at their highest since the 1960s.
- 6.45 Heronries which support nationally important numbers and/or the largest numbers in a particular county are eligible for SSSI status. **Table 124** lists 55 sites which either meet these criteria or are within an existing SSSI. A total of 32 sites are designated, of which 23 include breeding Grey Herons as an interest feature. The 23 undesignated sites support the most important colonies within their respective counties and one, Marbury Mere in Cheshire, holds nationally important numbers and is one of the largest heronries in England. Around 23% of breeding Grey Herons occur within SSSIs, although only half of these receive formal protection as an interest feature.

Table 18 Mute Swan *Cygnus olor*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	55 pairs (1990)	3,900 pairs (1992)	11-20%
Non-breeding	380 (1994-99)	15,194 (1999-2004)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

- 6.46 Mute Swans are distributed widely from western Europe to northeast China. Their origins in Britain are unclear: although the current population appears to originate from introduced, semi-domesticated birds, fossil evidence suggests that they are an indigenous species which almost certainly became extinct around a thousand years ago. An estimated 3,900 pairs breed in England, along with 12,000 non-breeding birds (Delany et al. 1992), inhabiting a wide variety of still and slow-moving freshwater and brackish wetlands throughout the year and feeding on submerged vegetation. Birds are highly territorial and thus breeding densities are generally low, with nests spaced 2-3km apart on rivers (Brown & Grice 2005). The main concentrations in England are in the river valleys of the south and south-east, the coasts of East Anglia and the

south-east, and the East Anglia fens. Non-breeding birds moult communally between May and July, sometimes in flocks of up to several hundred birds. The largely resident English population is joined by significant numbers of continental birds only during periods of severe winter weather in Europe. Wintering birds move from inland still waters to coastal areas, freshwater marshes and rivers from November onwards. Both breeding and wintering numbers have increased since the 1980s. Mute Swans breed in internationally important numbers in Britain and are therefore of conservation concern in the UK.

- 6.47 As a consequence of their highly dispersed population and low breeding densities, there are no known sites in England which support nationally important numbers of breeding Mute Swans. The only exception is the Fleet in Dorset (part of Chesil and the Fleet SSSI, which includes the species as an interest feature), which supports an artificially maintained breeding population of 50-100 pairs (Gibbons et al. 1993). Mute Swans are not included in the lowland water breeding bird assemblage, although an estimated 10-20% of the breeding population will receive at least some incidental protection on SSSIs notified for other breeding wildfowl species.
- 6.48 There are seven WeBS sites of at least national importance for wintering Mute Swans, amounting to 21 individual sites, all of which are SSSIs with the exception of the Avon Valley in Wiltshire and Hampshire (**Table 125**). In addition Abberton Reservoir, which was until recently of national importance for this species, supported just under the national 1% threshold during 1999/00 to 2003/04 with a five-year mean peak of 360 birds. It is estimated that at least a third of the English wintering population occurs within designated sites, with 24% benefiting from formal protection as an interest feature at the SSSI/SPA level. Although not practiced to the same degree as by Bewick's and Whooper Swans, Mute Swans also feed on undesignated farmland adjacent to their wetland breeding and wintering habitats, favouring grass and young oilseed rape.

Table 19 Bewick's Swan *Cygnus columbianus bewicki*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Non-breeding	80 (1994-99)	6,691 (2003-04)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC3	Yes

- 6.49 The Bewick's Swan is a race of the widespread Tundra Swan which breeds on the northern Siberian tundra. The western population winters mainly in Britain and the Netherlands. The species is highly gregarious during the winter, with over 90% of the population present on eleven sites across England and around 68% of the population regularly occurring at just one site: the Ouse Washes in Cambridgeshire and Norfolk. Traditionally feeding on submerged vegetation and waterside pastures, numbers in Britain have increased greatly since the late 1930s, largely as a result of switching to feed on arable farmland, especially potato and sugar beet root wastes, cereal stubbles and autumn-sown wheat. Despite this change in foraging habitat, however, Bewick's Swans are still tied to roosting on extensive wetlands to which they return at dusk. The species is of conservation concern due to its unfavourable conservation status in Europe (resulting from a recent, large decline), its localised winter distribution and because the UK regularly supports 30-40% of the biogeographic population.
- 6.50 Bewick's Swans are widely distributed across England, occurring from the Somerset Levels and Romney Marshes in the south to Martin Mere and the Dee estuary in the northwest. **Table 126** lists ten WeBS sites of at least national importance for wintering birds, covering 30 individual sites. Of these, all but two are SSSIs and all but four relatively minor sites include the species as an interest feature. The two undesignated nationally important sites are Old Romney in Kent and

St Benet's Level in the Norfolk Broads. It is estimated that over 90% of wintering Bewick's Swans in England occur on designated sites. However, in common with other swans and most wintering geese in England, the arable farmland which supports feeding birds is not included within the boundaries of designated sites.

Table 20 Whooper Swan *Cygnus Cygnus*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	55 (1994-99)	4000 (2000)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

- 6.51 Whooper Swans breed across the northern Palearctic, including very small numbers in Scotland. Almost the entire Icelandic breeding population winters in Britain and Ireland and virtually all birds wintering in England originate from there. Although a few sites hold national or even internationally important numbers, the majority of wintering flocks are small, generally amounting to less than ten birds. The species is highly aggregated, has a small breeding population and has an internationally important wintering population in the UK, and is thus of conservation concern.
- 6.52 In England, Whooper Swans generally inhabit a range of freshwater wetlands during the winter, feeding on emergent and submerged aquatic vegetation, while coastal birds feed on intertidal eel-grass. In common with other swans and geese, they have also increasingly taken to feeding on arable and pasture within 5km of their wetland roosts. They particularly favour grass, autumn-sown cereals, oil-seed rape, waste root crops and stubbles. The population wintering in Britain has increased greatly since the 1980s in line with increases in the Icelandic breeding population. More recent increases since the 1990s may be the result of increased numbers of birds arriving from the continent.
- 6.53 **Table 127** lists 12 WeBS sites of at least national importance for wintering Whooper Swans, encompassing 19 individual sites. Of these, all but four are SSSIs, and all but four of these include wintering Whooper Swans as an interest feature at the SSSI/SPA level. It is estimated that over 80% of Whooper Swans wintering in England occur within designated sites.

Table 21 Bean Goose *Anser fabalis fabalis*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Non-breeding	50* (1994-99)	138 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

6.54 Breeding right across the northern Palearctic, the Bean Goose is a rare wintering species in Britain, occurring regularly at only two locations: the Yare Valley in Norfolk and the Slamannan Plateau in the Falkirk area of Scotland. The few other records that occur annually tend to be sporadic and involve only small numbers, often relating to the less abundant “Tundra” Bean Goose (rossicus race). The species is of conservation concern in the UK due to its highly localised winter distribution. The Norfolk flock feeds on damp grasslands within two SSSIs and is thus well covered by designated sites (**Table 128**). The majority of other areas that support small numbers on a generally irregular basis are within SSSIs or SPAs notified for wintering waterbird interests and thus coverage for this species is virtually complete.

Table 22 Pink-footed Goose *Anser brachyrhynchus*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	2,400 (1994-99)	140,000 (2003/04)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected during the close season	Migratory	Amber, Non-SPEC	No

6.55 The Pink-footed Goose breeds on the tundras of Greenland, Iceland and Svalbard. All of the Pink-footed Geese breeding in Iceland and Greenland, about 85% of the world population, over-winter in Britain. Migrating birds first arrive in northern Scotland before making their way southwards to other parts of Scotland, northern England and Norfolk. Although the population in England varies between years, over 50% of the British population has wintered here (Collier et al. 2005), and impressive numbers occur at the main wintering sites on the coasts of Lancashire and Norfolk. Away from the few key locations Pink-footed Geese are very scarce and this extremely localised distribution, coupled with Britain’s internationally important wintering population, is the reason for their status as a species of conservation concern in the UK.

6.56 Pink-footed Geese traditionally wintered on saltmarshes, where they grazed on saltmarsh grasses and other vegetation. However, since the early 1900s they have increasingly taken to feeding on arable farmland, especially winter barley, waste potatoes and sugar beet, and on pasture. Birds may fly up to 20km to feed on preferred fields, though most often they move only 2-5km from their roosts on estuarine flats and sandbanks. As a result of this increase in food availability, as well as reduced hunting pressure, the population has increased dramatically since the 1950s. A dedicated roost census recorded 274,594 birds in Britain in November 2003, the highest count ever achieved (Collier et al. 2005). Roost counts are important as many geese disperse away from WeBS count sectors to feed inland when high tide counts are undertaken.

6.57 **Table 129** lists 14 WeBS sites of at least national importance for Pink-footed Geese. All these sites are within SSSIs, and all but eight include wintering Pink-footed Geese as an interest feature at the SSSI/SPA level. These SSSIs are predominantly coastal and are generally roosting sites, while the great majority of the inland foraging areas lie outside designated sites.

Table 23 European White-fronted Goose *Anser albifrons albifrons*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	55 (1994-99)	2,345 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	Yes

- 6.58 The European White-fronted Goose breeds in northern Russia and Siberia, and winters mostly in the Netherlands, with a small proportion of the population wintering in southern England. The numbers wintering in England in any single winter are largely dependent on weather conditions on the continent. A trend towards milder winters, coupled with increased food availability on farmland in continental wintering areas, is likely to have caused the decline in numbers in Britain since the mid-1980s (Collier et al. 2005) and is the reason for the species being of conservation concern in the UK. Traditionally foraging on coastal grasslands, saltmarshes and floodplains, where they graze on grass and clover, European White-fronted Geese have recently taken to feeding on autumn-sown wheat during the spring. Inland feeding areas are generally less than 10km from the roosting sites which are situated on established estuarine sandbanks.
- 6.59 European White-fronted Geese occur in nationally important numbers on eleven WeBS sites, encompassing 18 individual sites, which hold virtually the entire English wintering population (**Table 130**), although this amounts to less than 1% of the million strong Baltic/North Sea population. The majority of these birds occur at the Wildfowl and Wetlands Trust reserve at Slimbridge on the Severn Estuary, though there is a recent trend for numbers to decline there as they increase at east coast locations, including the North Norfolk coast and Breydon Water (Collier et al. 2005).

Table 24 Icelandic Greylag Goose *Anser anser*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	820 (1994-99)	3,000 (2003)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected in close season	Migratory	Amber, Non-SPEC	No

- 6.60 The Icelandic population of the Greylag Goose winters in Britain and Ireland, predominantly occurring in Scotland with much smaller numbers in northern England. In recent years there has been a northward shift in their wintering distribution, with the largest numbers now present in northern Scotland and Orkney and a corresponding decline in northern England. The Icelandic Greylag Goose is of conservation concern in the UK due to the international importance and high degree of aggregation of its wintering population.
- 6.61 There are three nationally important sites for wintering Icelandic Greylags in England (**Table 131**). Two sites are within SSSIs, although only one of these includes wintering Greylags as an interest feature. A further site, Holburn Lake and Moss SSSI, does include the species as an interest feature, though it has not supported qualifying numbers since the late 1990s. It is estimated that about 60% of the wintering Icelandic Greylag population in England occurs within designated sites, with less than 30% being formally protected as interest feature.

Table 25 Barnacle Goose *Branta leucopsis*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	220 (1994-99)	25,952 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Annex I	Amber, Non-SPEC	No

- 6.62 Barnacle Geese breed on the arctic tundras of eastern Greenland and western Eurasia and winter in northwest Europe. Those breeding on Svalbard in Siberia migrate to Britain after the breeding season and virtually the entire population spends the winter on the Solway Estuary. Early arriving flocks first gather along the east coasts of Scotland and northern England before moving on to the Solway later in early winter. They are highly gregarious and roost and feed in large dense flocks. They roost on undisturbed tidal flats and feed on grass-dominated saltmarshes, adjacent pastures and stubble fields, usually within 5km of their roosting areas. The population of Svalbard Barnacle Geese has increased greatly since the 1970s, though wintering birds remain highly aggregated. As a result of this high degree of aggregation, as well as the international importance of Britain's wintering population, the species is of conservation concern in the UK.
- 6.63 With virtually the entire population wintering on the Upper Solway Flats and Marshes SSSI/SPA, and many early arriving birds using other SSSIs (for example, Lindisfarne with 786 birds in 2003/04), it is considered that coverage of this species in England is virtually complete. However, in common with other wintering geese, very little farmland foraging habitat is included within the designated sites.

Table 26 Dark-bellied Brent Goose *Branta bernicla bernicla*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	980 (1994-99)	77,500 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	Yes

- 6.64 The Dark-bellied race of the Brent Goose breeds on the tundra of northern Siberia and winters on the coasts of northwest Europe. Around a third of the total world population of this highly gregarious goose winters in England. Once restricted to intertidal flats, where they feed on eel-grass and algae, Dark-bellied Brent Geese have recently taken to feeding inland on grassland, autumn-sown cereals and oilseed rape. Although eel-grass remains a preferred food early in the winter, along with saltmarsh grasses, the majority of their foraging time is now spent on farmland within about a kilometre of the intertidal roosting areas. In line with changes to the world population, Dark-bellied Brent Geese increased greatly in numbers in Britain from the 1960s to the early 1990s, but have since declined significantly. Numbers recorded in Britain during the winter of 2003/04 were the lowest since 1981/82 (Collier et al. 2005). This decline is linked to low productivity, perhaps due to limiting factors on the breeding grounds. The Dark-bellied Brent Goose is of conservation concern in the UK due to its important and highly aggregated wintering population and has an unfavourable status in Europe as a result of the recent population decline.
- 6.65 The great majority of Dark-bellied Brent Geese in Britain spend the winter on and around the east and south coast estuaries of England, from the Humber to the Exe. Birds are highly site-faithful and ringing studies have shown that individuals return to the same estuaries, or even the same parts of estuaries, in successive years (Brown & Grice 2005). Virtually the entire area of intertidal habitat exploited by the geese in England is within designated sites (**Table 132**). Of the 47 SSSIs that fall within the 25 WeBS sites important for Dark-bellied Brent Geese all but eight include the species as an interest feature at the SSSI/SPA level. There are no nationally important populations on undesignated sites. However, in common with several other species of wintering waterfowl, most foraging areas for Dark-bellied Brent Geese are on farmland which lies outside the boundaries of designated sites.

Table 27 Light-bellied Brent Goose *Branta bernicla hrota*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	50* (1994-99)	3,915 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

6.66 The population of Light-bellied Brent Geese breeding on Svalbard winters almost exclusively at Lindisfarne in Northumberland. As with the Dark-bellied race, coastal farmland is becoming increasingly important to this species as it supplements the traditional diet of intertidal eelgrass and saltmarsh vegetation. Unlike the Dark-bellied race, numbers are currently fairly stable. With virtually the entire wintering population occurring on a single designated site (excluding farmland feeding areas), it is considered that coverage of this race is almost complete.

Table 28 Shelduck *Tadorna tadorna*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	110 pairs (1988-91)	8,000 pairs (2005)	61-70%
Non-breeding	780 (1994-99)	60,000 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.67 Shelducks in northwest Europe breed on the coasts of the Atlantic, Baltic and North Sea, with Britain supporting the largest population. They nest in rabbit burrows and other holes in dunes, banks, trees and even abandoned buildings. Although mostly coastal, smaller numbers also breed inland in England, particularly in the fens of East Anglia, Breckland, North Norfolk, Cheshire and the major river valleys of eastern England, where they exploit flooded gravel pits and reservoirs. English birds are generally resident and are joined by immigrants from elsewhere in Europe during the winter, with Britain supporting approximately 26% of the west European population at this time. Shelducks favour estuaries with extensive sand and mudflats, where they feed on small worms, snails and crustaceans, and also occur inland on the larger wetlands. Following a steady increase since the 1960s, both in Britain and elsewhere in Europe, the numbers of wintering Shelducks have fallen in numbers since the late 1990s (Collier et al. 2005). The species is of conservation concern in the UK due to its internationally important breeding and wintering populations and because of its aggregated winter distribution.

6.68 There are no known sites in England of national importance for breeding Shelducks and no SSSIs include breeding birds as an interest feature in their own right. However, a very large proportion of the species' coastal breeding habitat falls within coastal SSSIs designated for breeding and wintering waterfowl generally, including wintering Shelducks. Furthermore, on many coastal and inland breeding sites, Shelducks are included as an interest feature as part of a broader breeding bird assemblage. It is therefore conservatively estimated that 60-70% of the breeding population in England occurs on designated sites.

6.69 **Table 133** lists the WeBS sites of at least national importance for wintering Shelducks in England. There are 23 sites in all, which encompass 45 individual sites, all of which are SSSIs. Of these SSSIs, all but 11 relatively minor sites include Shelducks as an interest feature at the SSSI/SPA level. It is estimated that over 80% of non-breeding Shelducks in England occur within designated sites, and that the majority are interest features at the SSSI/SPA level.

Table 29 Wigeon *Anas Penelope*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	4 pairs (1988-91)	150 pairs (2005)	41-50%
Non-breeding	4,100 (1994-99)	310,000 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in the close season	Migratory	Amber, Non-SPEC	No

6.70 Although one of England's rarest breeding ducks, the Wigeon is also one its most numerous wintering waterbirds. The species breeds across the Palearctic, with birds from Iceland, Scandinavia and central Siberia wintering in Britain. Small numbers breed in Scotland and a few localities in England, mainly in the North Pennines, where they nest in tall vegetation adjacent to open water. Wintering birds are much more numerous and widespread, with up to a third of the north-western European population visiting Britain annually. Non-breeding birds are found across a range of coastal and freshwater wetlands, including mudflats, saltmarshes, grazing marshes, flooded gravel pits and reservoirs. Wigeons are almost exclusively herbivorous, feeding in tight flocks throughout the day on eel-grass, saltmarsh and other grasses, seeds, crop stubbles and autumn-sown wheat. In common with some other waterbirds they have switched from predominantly coastal habitats in the last few decades to exploit inland freshwater areas and adjacent farmland. Although widely distributed, a large proportion occurs at a small number of sites. For this reason, and due to the international importance of the wintering population, the species is of conservation concern in the UK.

6.71 In England the great majority of breeding Wigeons are found in the uplands, with only small numbers breeding sporadically at lowland sites. The only site known to regularly support confirmed breeding pairs in nationally important numbers is the undesignated Derwent Reservoir in Northumberland. Some of the smaller and more sporadic breeding populations present elsewhere in the uplands and lowlands are within SSSIs and it is estimated that up to 50% of the English breeding population occurs within designated sites. No SSSIs include breeding Wigeons as a separate interest feature, though the species is included as a component of the upland breeding bird assemblage in SSSIs in the North Pennines (which held up to 61 breeding pairs in 2006-07).

6.72 **Table 134** lists 23 sites of at least national importance for wintering Wigeon. These encompass 65 individual sites, of which all except one, Cassington and Yarnton gravel pits in Oxfordshire, are SSSI. All but 13 of the SSSIs include wintering Wigeons as an interest feature at the SSSI/SPA level. It is estimated that over 80% of the wintering Wigeons in England occur within SSSIs.

Table 30 Gadwall *Anas strepera*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	8 pairs (1990)	1,297 pairs (2004)	31-40%
Non-breeding	170 (1994-99)	15,000 (1999-2004)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in close season	Migratory	Amber, SPEC3	No

- 6.73 The Gadwall breeds widely throughout North America and Eurasia. The small but growing population of breeding birds in Britain, largely originating from introduced stock, is mainly located in England, where birds are found on reservoirs, gravel pits, coastal wetlands and flood meadows. Gadwalls feed predominantly on submerged aquatic vegetation, obtained by up-ending and dipping and, especially in recent times, by theft from foraging Coots. Wintering Gadwalls originate from north and east Europe whilst some of the British breeding population winters in southern Europe. In line with recent increases in Europe, the wintering population in Britain has grown enormously, with an approximate doubling of numbers recorded by WeBS during the ten years leading up to 2003/04, when counts were the highest ever recorded (Collier et al. 2005). The winter distribution is similar to that seen during the breeding season, with a large proportion of the population found on inland reservoirs and gravel pits in the southeast, East Anglia and the Midlands. Despite its recent population increase in Britain, the Gadwall has an unfavourable conservation status in Europe due to a decline in the breeding population during 1970-1990. For this reason, as well as the importance of the wintering population in Britain (28% of the northwest European population), the species is of conservation concern in the UK.
- 6.74 Gadwalls breed in low numbers across much of southern and central England, with Somerset, Kent, Cambridgeshire and Norfolk each supporting over 100 pairs. Confirmation of breeding numbers is rare as broods are often difficult to detect when concealed in emergent vegetation and not all adult birds present are likely to breed. **Table 135a** refers only to the numbers of counted broods or otherwise confirmed breeding pairs and is therefore likely to underestimate the actual number of breeding pairs at those sites. It also omits many additional sites where numbers are likely to exceed the 1% threshold but for which there is little evidence of proven breeding. A potential additional site, which regularly support twenty pairs or more during the breeding season, is the Nene Washes in Cambridgeshire. All sites of known importance are within SSSIs although only two currently include breeding Gadwalls as a specific interest feature. It is estimated that up to 40% of breeding Gadwalls occur within designated sites, with many of these receiving protection as part of a breeding bird assemblage.
- 6.75 There are 48 WeBS sites of national importance for Gadwalls in England, covering 76 individual sites (see **Table 135b**). Of these sites, 63 are SSSIs of which 53 include Gadwalls as an interest feature at the SSSI/SPA level. It is estimated that up to 80% of the Gadwalls wintering in England occur within designated sites, with perhaps 60-70% included as interest features at the SSSI/SPA level. Nationally important populations occur on a further 13 undesignated sites.

Table 31 Teal *Anas crecca*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	20 pairs (1988-91)	500-800 pairs (2005)	51-60%
Non-breeding	1,900 (1994-99)	130,000 (1999-2004)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in the close season	Migratory	Amber, Non-SPEC	No

- 6.76 The Teal breeds across the northern Palearctic, migrating southwards in the winter as far as North Africa, though most individuals in northwest Europe winter in Britain, Ireland, Denmark, the Netherlands and northern France. In Britain they breed in a range of freshwater and brackish wetlands, including moorland pools. During the winter the Teal is one of Britain's most widespread and abundant ducks, with British breeding birds joined by visitors from Iceland, Scandinavia and the near continent. At this time they inhabit a wide range of shallow water habitats including estuaries, coastal lagoons, marshes and flooded pastures, though coastal sites and reservoirs are their most important habitats. They feed throughout the day and night by dabbling in shallow water for seeds and small invertebrates. The winter population has increased greatly since the 1960s, though numbers are subject to a high level of fluctuation, often related to the prevailing weather conditions. The Teal is of conservation concern in the UK due to the international significance of the wintering population which amounts to as much as 50% of the total northwest European winter population.
- 6.77 The most important areas for breeding Teals in England are coastal East Anglia, north Kent, the Humber Basin, the Lower Derwent Valley in North and East Yorkshire and the Pennine moors. It is difficult to calculate the numbers of such a scarce and thinly distributed breeding species, and estimates are hampered further by the species' very secretive habits. As a consequence, few locations have reliable estimates of confirmed breeding pairs and very few sites are known to hold populations of national importance. The Lower Derwent Valley, which includes SSSIs designated for breeding birds generally, is one of the most important locations in England, supporting around 50 pairs (Ralston 2005). No other sites are known to hold nationally important numbers, though some of the more extensive wetland sites in East Anglia and north Kent may do so. Given that much of the habitat suitable for breeding Teals falls within coastal, lowland wet grassland and moorland SSSIs, it is conservatively estimated that up to 60% of the English breeding population inhabits designated sites.
- 6.78 **Table 136** lists the 27 WeBS sites of at least national importance for wintering Teal. These encompass 69 individual sites, all of which are SSSIs except Otmoor in Oxfordshire. All except 12 SSSIs include wintering Teal as an interest feature at the SSSI/SPA level. It is estimated that up to 70% of the wintering Teal population in England occurs within designated sites, with the great majority benefiting from protection as an interest feature.

Table 32 Mallard *Anas platyrhynchos*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	810 pairs (1988-91)	70,000 pairs (2005)	11-20%
Non-breeding	3,500 (1994-99)	106,000 (1999-2004)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in close season	Migratory	Non-SPEC	No

- 6.79 The Mallard breeds and winters throughout the Holarctic region and is one of the most abundant wildfowl species in the world. It is the most widely distributed duck in Britain, exploiting all types of wetlands from small ponds, rivers, marshes and gravel pits to large reservoirs, estuaries and even the open coast. Adults have a very varied diet, feeding from both land and water on invertebrates, seeds, fruit and agricultural waste. Breeding and wintering numbers in England are greatest in the lowlands of the south and east. Breeding birds in England are sedentary and, during the winter, birds from Iceland and nearby Europe join the resident population, with additional birds arriving from the Baltic and north-eastern Europe during periods of cold weather. Although the species is not of conservation concern, wintering numbers in Britain have suffered a gradual but consistent decline since the late 1980s, the cause of which is unknown, and despite the annual release of many thousands of hand-reared birds for shooting.
- 6.80 Given the abundance and widely dispersed nature of the breeding population in England it is perhaps not surprising that no single site supports nationally important numbers of Mallards. Furthermore, as the species is currently considered to be common and widespread, breeding populations are not included under any of the SSSI selection guidelines for breeding bird assemblages. It is estimated that 10-20% of the breeding Mallards in England occur on designated sites and many will receive some incidental protection on sites notified for other breeding wildfowl species.
- 6.81 Mallards are the most frequently recorded species during WeBS, occurring at nearly 2,000 sites throughout Britain (Collier et al. 2005). However, as only a proportion of the wintering population is covered by WeBS sites, the English population is likely to be greatly underestimated. Due to the abundant and widespread nature of the wintering Mallard population, only two locations are of national importance in England: the Lower Derwent Valley in North and East Yorkshire and the Ouse Washes in Cambridgeshire and Norfolk (**Table 137**). Both include designated sites which cite wintering Mallards as an interest feature. Several other SSSIs regularly support over 2,000 birds each, including Martin Mere and Morecambe Bay, both in Lancashire, and the Humber Estuary in East Yorkshire and Lincolnshire (Collier et al. 2005), and it is estimated that up to 30% of the wintering population occurs on designated sites.

Table 33 Pintail *Anas acuta*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (1998-2002)	1-13 pairs (1997-2001)	91-100%
Non-breeding	280 (1994-99)	15,400 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected during the close season	Migratory	Amber, SPEC3	No

- 6.82 In Eurasia the Pintail breeds in northern and Baltic Europe, Fennoscandia and western Siberia. Birds from these areas winter widely from northern Europe to West Africa and the Middle East. Breeding Pintails are extremely rare in Britain and inhabit coastal wetlands and a few inland lowland wet grassland sites where they nest in open areas adjacent to shallow freshwater or brackish pools. They feed by dabbling and upending in search of small snails and seeds and, in the winter, some birds feed on crop stubbles and root crops adjacent to wetland areas. Pintails are more numerous and widespread in the winter, when Britain hosts internationally important numbers derived from the breeding populations of west Siberia, Fennoscandia, the Baltic states and Iceland. They inhabit a variety of wetlands at this time with the greatest numbers on estuaries. Although widespread, most sites only support small numbers of birds, with the bulk of the British wintering population concentrated at a few locations. For this reason, as well as the small size of their breeding population and their internationally important wintering numbers, Pintails are of conservation concern both in Europe and the UK. Following a sustained decline in numbers since the 1980s, the wintering Pintail population has recently shown signs of a recovery (Collier et al. 2005).
- 6.83 The Pintail is generally a sporadic breeder and few locations regularly support breeding pairs. As a consequence very few sites meet the criteria for national importance. Additionally, establishing proven breeding is difficult, and many of the figures quoted in **Table 138a** are for possible breeding attempts only. All the nationally important sites, and a great many of those which only support occasional breeding pairs, are within wetland SSSIs notified for breeding birds generally (though few include the species as a specific interest feature) and coverage is considered to be virtually complete.
- 6.84 There are 31 WeBS sites of at least national importance for wintering Pintails in England, with 16 of these of international importance (**Table 138b**). The top three sites are all in the northwest and this is the most important region for Pintails both in Britain and northwest Europe. These WeBS sites encompass 73 individual sites, of which all are SSSIs with the exception of two: the Dee Flood Meadows in Cheshire and Coombe Hill Canal in Gloucestershire. It is estimated that approximately 84% of the wintering Pintails in England occur within designated sites, of which 57 include the species as an interest feature at the SSSI/SPA level. Of those sites which do not include Pintails as an interest feature, some relate to individual WeBS sites with very large numbers (for example Avon Valley in Hampshire with an internationally important peak count of 863 individuals). In common with other wildfowl species, a proportion of Pintails, perhaps especially on inland sites, find some of their food on undesignated farmland.

Table 34 Garganey *Anas querquedula*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (1997-2001)	125 pairs (1999-2004)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Migratory	Amber, SPEC3	No

6.85 The Garganey breeds across the Palearctic but only a small population breeds in Britain, mainly in eastern and central England. Uniquely among wildfowl, the Garganey occurs only as a summer visitor and passage migrant in Britain. The species breeds on shallow freshwaters with abundant emergent vegetation and feeds mainly on the seeds and leaves of aquatic plants, switching to a diet of insect larvae, crustaceans and tadpoles during the breeding season. Garganeys occur sporadically at many sites and their numbers vary greatly, probably depending on habitat suitability and the numbers of passage birds. Birds breeding in northwest Europe largely migrate to West Africa for the winter. Numbers have declined in recent decades, both in Britain and elsewhere in Europe, largely as a result of the loss and deterioration of wetlands, and the species is considered of conservation concern both at UK and European levels.

6.86 The Garganey is a secretive species, nesting in dense emergent vegetation, and it is therefore very difficult to obtain proof of breeding. **Table 139** lists all those WeBS sites which supported at least four birds between the spring and autumn passage periods. Although it is likely that more birds will be present during passage periods than will actually attempt to breed, these numbers give a useful indication of the potential importance of sites for breeding birds. Many of the most important summering/passage sites are in the southeast and East Anglia. All are within designated sites and the majority are included as interest features at the SSSI/SPA level. Given that much of the remaining wetland habitat suitable for breeding Garganeys is now restricted to designated sites, it is conservatively estimated that up to 70% of the population in England occurs in SSSIs.

Table 35 Shoveler *Anas clypeata*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	13 pairs (1985-90)	<1000 pairs (2005)	41-50%
Non-breeding	150 (1994-99)	12,000 (1999-04)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	No

6.87 Shovelers breed widely across the northern Holarctic and winter further south, including northwest Europe south to West Africa. They are a scarce and localised breeding species in Britain, being most numerous in the south and east, but are much more abundant and widespread during the winter when British birds are joined by immigrants from Scandinavia and northeast Russia. In Britain, Shovelers breed in a variety of freshwater wetlands, preferring shallow, eutrophic stillwaters, where they feed on molluscs, crustaceans, insects and plant seeds. The British wintering population, the bulk of which occurs in England, amounts to approximately 40% of the northwest European wintering population. The species is of conservation concern in

the UK as result of its internationally important wintering population and due to the high degree of aggregation of both wintering and breeding birds across a relatively small number of locations. Shovelers have an unfavourable conservation status in Europe due to a recent population decline.

- 6.88 It is estimated that less than 1,000 pairs of Shovelers breed in England (Brown & Grice 2005). The majority of these occur in small numbers dispersed across a wide range of lowland wetlands. **Table 140a** lists those sites which are known to support nationally important numbers. All these sites except Ham Wall in Somerset are within SSSIs. Many of the designated sites include breeding birds as an interest feature at the SSSI/SPA level, though only five include breeding Shovelers as a specified interest feature. Accepting that many individual SSSIs, especially in the Broads and Somerset Levels, will support smaller numbers of birds, it is estimated that up to 50% of the breeding Shoveler population in England occurs within designated sites.
- 6.89 During the winter Shovelers generally occur in small numbers at individual sites, with large congregations on only a few favoured reservoirs, gravel pits, lakes and other wetlands. There are 38 WeBS sites of at least national importance for wintering Shovelers (**Table 140b**). These encompass 81 individual sites of which all but two are SSSIs. Of the SSSIs, all but 14 include wintering Shovelers as an interest feature at the SSSI/SPA level. It is estimated that approximately 60% of the wintering Shoveler population in England occurs within designated sites, with the majority included as an interest feature at some level.

Table 36 Pochard *Aythya farina*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	5 pairs (1998-2002)	440 pairs (2004)	41-50%
Non-breeding	600 (1994-99)	28,800 (1999-2004)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in the close season	Migratory	Amber, SPEC2	No

- 6.90 The Pochard is a scarce breeding bird and a numerous and widespread winter visitor in Britain. The species breeds widely across Eurasia and winters over much of southern and western Eurasia and northern Africa. While some of the British breeding birds remain here during the winter, the majority of Pochards wintering in Britain are from eastern Europe and Russia. The wintering population increased dramatically in Britain during the last century, although numbers have declined recently, reaching a record low in 2003/04 (Collier et al. 2005). Pochards appear to be particularly susceptible to disturbance, during both the breeding and wintering periods. Britain supports 17% of the north European population during the winter and the species is therefore of conservation concern in the UK. Pochards also have an unfavourable conservation status in Europe due to the recent population decline.
- 6.91 In England, Pochards breed on undisturbed, still and slow-moving fresh and brackish waters with abundant marginal vegetation for nesting and submerged aquatic plants such as stoneworts for feeding. The most important areas for breeding Pochards in England (and Britain) are the coastal marshes of north Kent and Essex, the Norfolk coast and the Somerset Levels (**Table 151a**). The majority of the nationally important populations are within SSSIs (which are also nature reserves managed for birds). Many of these SSSIs are notified for breeding Pochards and the remainder include breeding birds, in general, as an interest feature. It is conservatively estimated that up to 50% of breeding Pochards occur within designated sites.

6.92 Pochards are widely distributed across England during the winter with important concentrations in the south, East Anglia and the Midlands. They are highly mobile and often show great variation in numbers at individual sites, both between and within years, especially in response to freezing weather conditions. There are 14 WeBS sites of at least national importance for wintering Pochards, including 19 individual sites (**Table 151b**). Of these, all but three are SSSIs, with all but five including Pochards as an interest feature at the SSSI/SPA level. It is estimated that up to 60% of wintering Pochards in England are found within designated sites. Pochards from Britain and northern Europe also aggregate in important numbers in England during the late summer. At this time they form large moulting flocks at a several reservoirs and large gravel pits, including Abberton Reservoir in Essex, Rutland Water in Leicestershire, several reservoirs in southwest London and the Cotswold Water Parks.

Table 37 Tufted Duck *Aythya fuligula*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	75 pairs (1979-83)	6,000 pairs (2005)	21-30%
Non-breeding	900 (1994-99)	50,000 (1999-2004)	41-50%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in the close season	Migratory	SPEC3	No

6.93 Tufted Ducks breed throughout the northern and middle latitudes of the Palearctic. The breeding population in Britain has increased greatly, both in range and numbers, due to the creation of flooded gravel pits, reservoirs and other inland wetlands, where birds feed mainly on invertebrates, particularly molluscs such as the Zebra Mussel. During July the males gather to moult on the larger, least disturbed reservoirs in eastern and southern England. Both moulting and wintering flocks are joined by immigrants from Fennoscandia and Russia, which greatly swell their numbers, especially when cold winter weather affects the continent. Winter distribution mirrors that during the breeding season, with the majority of birds found in southern, central and eastern England. The British wintering population has been relatively stable since a substantial increase during the 1960s, although the species has an unfavourable conservation status in Europe due to a recent decline.

6.94 Due to their highly dispersed breeding population, only one known site supports nationally important numbers of breeding Tufted Ducks: Dungeness, Romney Marsh and Rye Bay SSSI with an estimated 152 pairs (2001-2005). A significant proportion will breed within other wetland SSSIs notified for both their bird interest generally. It is therefore estimated that up to 30% of breeding Tufted Ducks in England occur within SSSIs, though few of these sites include them specifically as an interest feature.

6.95 A total of 15 WeBS sites support nationally important numbers of Tufted Ducks, amounting to 18 individual sites (**Table 152**). Of these, 15 are SSSIs, of which eight include wintering Tufted Ducks as an interest feature at the SSSI/SPA level. Of those sites which exclude the species as an interest feature, some hold significant numbers, with Middleton Pool in Warwickshire, Hanningfield Reservoir in Essex and Pitsford Reservoir in Northamptonshire holding nearly 6,000 birds or over 10% of the estimated English population between them. It is estimated that up to 50% of the Tufted Ducks wintering in England occur within SSSIs, though perhaps only around 35% are formally protected as an interest feature. The remaining undesignated sites are Alton Water in Suffolk, Besthorpe and Girton gravel pits in Nottinghamshire and Draycote Water in Warwickshire.

Table 38 Scaup *Aythya marila*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	75 (1990-99)	3,000 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Migratory	Amber, SPEC3	Yes

6.96 The Scaup breeds widely across sub-arctic North America and Eurasia. Breeding birds from Europe and Siberia winter largely in the coastal waters of northwest Europe, in particular in the Baltic and the Wadden Sea. It is a not uncommon winter visitor to Britain with birds usually occurring only sporadically and in low numbers outside the key areas found from the northern Irish Sea and Firth of Forth northwards. In England the species prefers shallow coastal waters, particularly brackish waters within large estuaries. The Solway is by far the most important site in Britain, with numbers elsewhere in England not regularly reaching national importance at any individual site. Birds breed very occasionally in Britain, including England on a few occasions in the 20th century. As a result of its highly localised winter distribution the species is of conservation concern in the UK and also has an unfavourable conservation status in Europe due to a very large decline during 1990-2000.

6.97 During the five-year period 1999-2004 the Solway supported a mean peak of 2,395 birds. This site falls within the Upper Solway Flats and Marshes SSSI, which includes wintering Scaup as an interest feature. With the coverage provided by this SSSI, combined with the coverage of smaller numbers of Scaup at other SSSIs including the Thames Estuary, the Humber, the Wash and the North Norfolk coast, it is estimated that over 90% of the population wintering in England occurs within designated sites.

Table 39 Eider *Somateria mollissima*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	310 pairs (1988-91)	1,500 pr (2000-04)	91-100%
Non-breeding	730 (1990-99)	12,400 (1981-84)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.98 Eiders are amongst the most numerous ducks in the world, breeding in Arctic regions from North America, Greenland and Iceland to eastern Siberia. The British population, which is largely sedentary, has increased greatly since the 1950s. A true seaduck, Eiders are found in estuaries, sheltered natural harbours and inshore waters around much of the British coast, though they are most abundant from Northumberland and Cumbria northwards. They tend to prefer shallower waters, roosting at high tide and feeding at low water, taking mussels, cockles, crabs and other crustaceans. Although resident birds are sedentary, or make short-distance movements, winter numbers on the east coast are supplemented by migrants from the continent. The Eider is of conservation concern in the UK due to its highly aggregated winter distribution.

- 6.99 Being at the southern edge of the species' breeding range, Eiders breed only very locally in England, nesting amongst coastal vegetation and rocks in Northumberland and Cumbria. The main colonies are on the Farne Islands and Coquet Island in Northumberland and Walney Island off south Cumbria (**Table 153a**). Although all these colonies at one time held nationally important numbers, currently only the Farne Islands retains this status. The main colonies are all within SSSIs which include breeding Eiders as an interest feature. It is estimated that over 90% of breeding Eiders in England occur within designated sites.
- 6.100 **Table 153b** shows 4 WeBS sites of national importance for Eiders, encompassing nine individual sites. All nationally important sites are within SSSIs which include Eiders as an interest feature, though the Northumberland Shore and the Farne Islands SSSIs include them as a breeding species only. It is estimated that over 80% of the wintering Eiders in England occur within designated sites. However, as is the case with the Common Scoter and other marine waterbirds, these figures are derived from shore-based counts and should be viewed with caution. Due to the limited coverage of shore-based WeBS counts, this list of sites may be incomplete and, furthermore, the site figures and even the England total are likely to be underestimates.

Table 40 Common Scoter *Melanitta nigra*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Non-breeding	500 (1990-99)	30,000 (1999-2004)	11-20%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Red, Non-SPEC	Yes

- 6.101 The Common Scoter breeds widely across the higher latitudes of North America and the Palearctic, including a small population in Scotland. The British wintering population is small compared to the estimated 1.6 million birds occurring elsewhere in the western Palearctic. The ducks are most abundant in shallow, inshore waters, where they feed in flocks or larger rafts on bivalves, crustaceans and fish taken from the seabed. The most important areas in Britain are the Moray Firth in Scotland, Carmarthen Bay in Wales and Liverpool Bay off north Wales and northwest England. Birds tend to be present throughout the year at their most favoured sites, although numbers vary greatly between years. Recent aerial surveys offshore have shown that the current numbers are much higher than estimates made only a few years earlier. It is clear that many birds are missed by land-based surveys, as illustrated by estimates for Liverpool Bay where a peak of 15,000 individuals were recorded during aerial surveys in the winter of 2002/03 (Webb et al. 2004), compared with just 2,000-3,000 recorded from the shore. The Common Scoter is of conservation concern because a large proportion of its winter population is restricted to a small number of sites and because its breeding population has declined rapidly over the last 25 years.
- 6.102 The figures given in **Table 154** are largely derived from shore-based counts and should therefore be viewed with caution: the list of sites may not be complete and many of the figures are likely to be underestimates. The degree to which numbers have been underestimated on these sites is unknown, but is perhaps unlikely to be of the same magnitude as the example given above for Liverpool Bay. For example, aerial surveys of the Wash during the winter of 2005/06 found 2,300 scoters (WWT 2006), which is similar to a peak number recorded by WeBS in 2000/01 (although it is not clear if the lower counts in other years were due to small numbers of scoters being present or poor counting conditions). Although many of the known nationally important populations are within SSSIs, the most important population within Liverpool Bay is currently not protected. It is therefore estimated that less than 20% of England's non-breeding Scoters currently occur within designated sites.

Table 41 Goldeneye *Bucephala clangula*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	250 (1994-99)	10,000 (2005)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected in the close season	Migratory	Amber, Non-SPEC	No

6.103 Goldeneyes breed on freshwater lakes, pools and rivers in coniferous forests throughout northern Eurasia and North America. There is a small breeding population in Scotland but, despite increasing numbers of summering pairs in the Midlands and north-west, there has been no confirmed breeding in England. During the winter Goldeneyes, originating mainly from Scandinavia, can be found on coastal and inland waters throughout Britain. They feed on mussels, cockles, crabs, worms, fish and algae on the coast and insect larvae at inland sites. The British wintering population has undergone a sustained and major increase since the mid-1960s, although the species is of conservation concern in the UK due to its small breeding population and highly aggregated winter distribution.

6.104 Goldeneyes congregate in large numbers at relatively few locations and usually occur in only small numbers at the majority of their English wintering sites. **Table 155** lists seven WeBS sites of national importance for wintering Goldeneyes. These encompass 13 individual sites of which ten include the species as an interest feature at the SSSI/SPA level. There are no known undesignated sites of national importance. It is estimated that up to 40% of the population wintering in England occurs within designated sites, with perhaps 25% benefiting from formal protection.

Table 42 Smew *Mergellus albellus*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	50* (1994-99)	350	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Annex I	SPEC3	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

6.105 The Smew is a scarce but regular winter visitor to Britain, with the great majority of birds wintering in England, particularly on the reservoirs and gravel pits of the southeast and the East Midlands. The species breeds on freshwater pools and lakes in the boreal forests of north Eurasia and those wintering in Britain are probably from Fennoscandia and western Russia. In common with other sawbills, they are largely piscivorous. The species is of conservation concern in Europe because the important Russian breeding population has undergone a decline in both numbers and range.

6.106 WeBS sites supporting four or more birds are listed in **Table 156**. These encompass 32 individual sites of which 22 are SSSIs. Of the SSSIs, only four include the species as an interest feature at the SSSI/SPA level. As a consequence, only approximately 16% of the wintering Smew population receives direct protection from designated sites, though up to 60% fall within SSSIs designated for wildfowl generally.

Table 43 Red-breasted Merganser *Mergus serrator*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	20 pairs (1988-91)	150 pairs (2005)	1-10%
Non-breeding	100 (1986-91)	2,000 (1999-2004)	41-50%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

6.107 Red-breasted Mergansers are a locally common winter visitor to Britain and a scarce but widespread breeding species. Britain is at the southernmost edge of their world range, which includes northern Eurasia and North America. In England the majority of breeding birds are found in the Lake District, with small numbers elsewhere in Lancashire and Derbyshire. They breed on slow-moving upland rivers, lakes and estuaries and feed on small fish and crustaceans. It is estimated that approximately 150 pairs breed in England (Brown & Grice 2005). In winter most of the British breeders move to shallow coastal waters, where their numbers are increased by visitors from Greenland, Iceland, Fennoscandia and the Baltic. Red-breasted Merganser numbers have increased greatly in Britain since the 1960s, although the wintering population peaked and started to decline during the late 1990s.

6.108 Due to the highly dispersed breeding population, there are no known sites of national importance for breeding birds in England. Small numbers breed in SSSIs in the northwest, including the Duddon Estuary and several Cumbrian lakes, though few of the latter are designated for breeding birds. It is estimated that less than 10% of the breeding population occurs on designated sites.

6.109 There are ten WeBS sites of national importance for Red-breasted Mergansers, encompassing 16 individual sites (**Table 157**). Of these, all are SSSIs and all but four include the species as an interest feature. There are no known sites of national importance outside designated areas and it is estimated that up to 50% of the population wintering in England occurs within SSSIs, with the majority of these birds protected as an interest feature at the SSSI/SPA level.

Table 44 Goosander *Mergus merganser*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	25 pairs (1987)	300 pairs (1988-1991)	21-30%
Non-breeding	160 (1994-99)	2,200 (1999-2004)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

6.110 Goosanders breed across northern Eurasia and are a scarce breeding species in England. Breeding birds are concentrated in Cumbria, Northumberland, Lancashire and parts of Yorkshire, with smaller numbers in the south Pennines and the southwest, where they favour clear, fast-flowing upland rivers and stillwaters, nesting in cavities in trees, cliffs and among boulders. They feed predominately on fish, generally taking smaller prey up to 7.5cm in length. English birds rarely winter more than 150km from their breeding grounds and their numbers are boosted greatly by birds from Fennoscandia and northwest Russia. The majority of wintering birds are

found on freshwater in northern and central England and in the London area. The Goosander population has steadily increased in range and numbers since the 1960s and the species is therefore not of conservation in the UK or in Europe.

- 6.111 There are no SSSIs designated for breeding Goosanders, although a proportion of England's breeding birds will occur within upland moorland and river SSSIs notified for other interest features. It is estimated that up to 30% of breeding birds nest within SSSIs.
- 6.112 Seven SSSIs include wintering Goosanders as an interest feature: Staines Moor in Surrey, Abberton Reservoir in Essex, Eccup Reservoir in South Yorkshire, Blithfield Reservoir in Staffordshire, Wraysbury and Hythe End Gravel Pits in Berkshire, Hay-a-Park in North Yorkshire and the Eastern Peak District Moors in Derbyshire. There are no sites in England which currently support nationally important numbers. It is estimated that up to 30% of the wintering population occurs within SSSIs.

Table 45 Honey Buzzard *Pernis apivorus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (2000)	14-30 pairs (2004)	30-60%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

- 6.113 Honey Buzzards breed widely across temperate and boreal Eurasia, wintering in Africa south of the Sahara. They are a scarce passage migrant and very rare breeding summer visitor to Britain, nesting almost exclusively in well-wooded areas in both the uplands and lowlands. The staple food is wasp and bee larvae and pupae. Due to historically high levels of persecution and the continuing threat from egg-collectors, many nesting attempts by Honey Buzzards go unreported, and information on breeding numbers is almost certainly incomplete. The species is of conservation concern in the UK due to the small size of its breeding population.
- 6.114 Important populations of Honey Buzzards occur in Hampshire and Northumberland with smaller numbers (1-2 pairs per county) scattered across southern England, the West Midlands and in Cumbria. Three SSSIs are known to include the species as an interest feature at the SSSI/SPA level: the New Forest in Hampshire, Haldon Forest in Devon and Swanton Novers Woods in Norfolk. The proportion of the population in England occurring within designated sites is unknown but thought to fall between 30% and 60%.

Table 46 Marsh Harrier *Circus aeruginosus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	2 females* (1998-2002)	378 females (2005)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

* Note that the formal GB Population estimate is less recent than the England estimate

- 6.115 The Marsh Harrier is distributed widely, breeding across the western Palearctic and wintering from western and southern Europe to Africa and on the Indian sub-continent. Historically associated with wetlands, particularly reedbeds, Marsh Harriers have recently taken to nesting in arable crops such as winter wheat and oilseed rape. Birds hunt over open areas including reedbeds, grazing marshes, saltmarshes, heathland and farmland, taking a wide variety of small birds and mammals as prey. Formerly widespread in England, extensive losses of wetland habitats to agriculture combined with severe persecution led to the species' extinction as a breeding bird by the end of the 19th century. Following recolonisation in the early 20th century numbers remained at very low levels until a dramatic increase from the 1980s. There are now approaching 400 females nesting in Britain, with nearly all of these in England. Birds from north and northwest Europe winter in the Mediterranean Basin and in central and southern Africa, although increasing numbers of birds now winter in southeast England. The species is not of conservation concern in Europe, but, despite a recent rapid increase in the breeding numbers in England, the species is of concern in the UK as numbers are still far below historical levels.
- 6.116 A national survey undertaken in 2005 found that the majority of nesting birds occur in Kent, Suffolk, Norfolk and Lincolnshire. Reedbeds hold around two-thirds of nests, with the remainder in other tall vegetation including reed-fringed ditches and arable crops. Around 60% of reedbed nests, and 40% of the total for England, occur within SSSIs. **Table 158** lists all those sites which held four or more nests during 2005 (all within SSSIs), with 26% of the English population occupying only five sites and the same percentage benefiting from formal protection as an interest feature at the SSSI/SPA level.

Table 47 Hen Harrier *Circus cyaneus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	5 pairs (1998)	12 pairs (2006)	100%
Non-breeding	7 (1981-83)	400 (1983-85)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Red, SPEC3	Yes

- 6.117 The Hen Harrier is widespread across the northern Holarctic, though habitat loss and intense, continuing persecution has reduced the population greatly in Britain and to near-extinction in England. In Britain, Hen Harriers breed predominantly on heather moorland with a tall growth of heather, rushes or bracken for nesting. A wide range of food is taken, including mammals such as voles and rabbits and birds such as Meadow Pipits, Skylarks, small waders and grouse. Formerly occurring in both the uplands and lowlands of northern England, the bird is now only a regular breeder in a few areas of moorland in the Bowland Fells and the North Pennines, where the birds and nests are actively protected. Many British breeding Hen Harriers migrate to western, central and southern Europe during the winter, whilst Britain hosts wintering birds from Scandinavia and the near continent, particularly the Netherlands. In England, the main wintering areas are in the south and southeast, particularly coastal areas between the Humber and Hampshire, in Breckland, Broadland, the New Forest and on Salisbury Plain. Birds hunt over a wide variety of prey-rich habitats in the winter, including river valleys, reedbeds, fens, heaths, young forests, rough grasslands, saltmarshes and arable farmland. They roost, often communally, on the ground in tall semi-natural vegetation such as reedbeds and saltmarsh. The Hen Harrier is of conservation concern both in the UK and in Europe due to significant declines in its breeding population.

- 6.118 All breeding territories are located within SSSIs, particularly the Bowland Fells in Lancashire, and the species is an interest feature at the SSSI/SPA level for all sites.
- 6.119 **Table 159** lists those winter roost sites which are known to support at least seven Hen Harriers, or that are within a designated site which includes the species as an interest feature. All these sites, with the exception of Belton and Langley Marshes, adjacent to Halvergate Marshes in Norfolk, are within designated sites, and the majority include wintering Hen Harriers as an interest feature at the SSSI/SPA level. It is estimated that around 30% of wintering Hen Harriers regularly roost within SSSIs.

Table 48 Goshawk *Accipiter gentiles*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	4 pairs (1995)	103-158 pairs (2004)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	No	Non-SPEC	No

- 6.120 Breeding across the boreal and temperate forests of the Holarctic, the Goshawk is a rare breeding bird in Britain, occupying extensive coniferous, mixed or broad-leaved woodland. Although strictly nesting in woodland, British birds often feed over adjacent open areas such as moorland and farmland where they take a wide range of prey including rabbits, hares and medium-sized birds such as Woodpigeons. Goshawks are resident and young birds do not disperse widely. The species became extinct by the late nineteenth century as a result of persecution and the current population is thought to originate largely, if not entirely, from the accidental and intentional release of captive-bred birds used for falconry. A more recent recolonisation of southern and south-eastern England may, in part, have been fuelled by immigration from fast-growing populations on the near-continent.
- 6.121 Due to their habit of nesting in the more extensive woodlands and plantations, and because they can be surprisingly inconspicuous, Goshawks are difficult to count and their numbers have almost certainly been underestimated. As a high proportion are known to nest in extensive conifer plantations which, with a few exceptions, are undesignated, it is estimated that the coverage of Goshawks in England is less than 30%. The species is an interest feature on only one SSSI: Haldon Forest in Devon.

Table 49 Merlin *Falco columbarius*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	13 pairs (1993-94)	350 (1993-94)	81-90%
Non-breeding	13 (1990-94)	700 (1990-94)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

- 6.122 The Merlin has a circumpolar distribution, with the core of its European range in Russia, Sweden and Norway, and is a scarce breeding bird in Britain. Merlins nest on the ground in heather and bracken in open upland habitats and in old crow nests in isolated trees, small woods and on the edge of conifer plantations. They hunt over both moorland and adjacent farmland, preying on a wide range of small birds, especially Meadow Pipits, as well as insects and small mammals. After breeding, birds disperse rapidly, with most staying in Britain and many moving no more than 100km from their nest site. Smaller numbers migrate to the near continent as far as southern France and northern Spain, while the resident birds are joined by visitors from Iceland and possibly also Scandinavia. Non-breeding Merlins favour coastal areas, hunting over saltmarshes and grazing marshes, dunes and coastal fields. They also occur inland, especially in the Brecks, in the Fens, on southern heathlands and on Salisbury Plain. Although not of conservation concern in Europe, the species is of concern in the UK due to a protracted population decline during the last two centuries resulting from habitat loss and organochlorine poisoning.
- 6.123 The majority of Merlins nesting in England inhabit the moorlands of the Pennines, the North York Moors and the Bowland Fells (**Table 160**). The greater part of their nesting habitat is therefore within SSSIs and SPAs, and it is estimated that up to 90% of breeding Merlins in England occupy designated sites, with the great majority of sites including the species as an interest feature.
- 6.124 Merlins are widely dispersed during the winter and few sites regularly support a significant aggregation of roosting birds. Many of the favoured wintering areas are within designated sites, and it is conservatively estimated that up to 30% of wintering Merlins hunt and roost within SSSIs and SPAs. However, only those SSSIs within the Dorset Heaths SPA include wintering Merlins as an interest feature (at the SPA level).

Table 50 Hobby *Falco subbuteo*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	20 pairs (2000)	1000-2000 (1989-91)	11-20%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Non-SPEC	No

- 6.125 The Hobby has an extensive breeding range which extends across the Palearctic. In Britain the species is a scarce but increasing summer visitor and passage migrant, nesting in old Carrion Crow nests on the edges of woodland and in hedgerows on lowland heathland and farmland. The great majority nest in England. Hobbies hunt for both invertebrate and avian prey, taking large aerial insects such dragonflies and small birds, especially hirundines and swifts. The numbers of breeding Hobbies in England have increased greatly since the 1970s and, due to the relatively low level of monitoring of the species, combined with a the reluctance of some observers to submit data in an attempt to protect birds from egg collectors, the population figures given above are almost certainly considerable underestimates.
- 6.126 Breeding Hobbies are concentrated in southern and south-eastern England and the East Midlands, with lower densities further north in Yorkshire and Northumberland. Only two SSSIs include the species as a named interest feature: Salisbury Plain in Wiltshire and Broadmoor to Bagshot Heaths and Woods in Berkshire, although many other heathland sites include Hobbies as a component of their breeding bird assemblages. Given this species' widely dispersed distribution, it is likely that only the largest of sites will support nationally important numbers. It is estimated that up to 20% of the population in England occurs within designated sites.

Table 51 Peregrine *Falco peregrinus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	12 pairs (1991)	278 pairs (2004)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

6.127 The Peregrine has an almost worldwide distribution, with Europe supporting about a fifth of the world population. The species nests on the ledges of high coastal and mountain cliffs and, increasingly, on buildings, pylons, chimneys and other man-made structures. In England they are concentrated along the coasts of the southwest and in the Cumbrian Lake District, though numbers are gradually increasing elsewhere, especially in the uplands of the Pennines. They take a wide variety of prey, including small to medium-sized birds, especially pigeons. Most English adult birds remain in their breeding territories throughout the year and are joined by migrants in winter from northern Europe. Although numbers in Britain have recovered greatly from the depredations of persecution and organochlorine poisoning in the last century, the species is still of conservation concern in the UK and the breeding population remains relatively small and vulnerable.

6.128 Two SSSIs currently include breeding Peregrines as an interest feature: Harbottle Moors in Northumberland and the Bowland Fells in Lancashire. Additionally, all SSSIs in the North Pennines SPA include the species as an interest feature at the SPA level and many other upland SSSIs include it as a feature of the upland breeding bird assemblage. SSSIs which include Peregrines as an interest feature, and those which held breeding birds during the last national census in 2002, are listed in **Table 161**. Additionally, many of the species' favoured nesting sites on coastal cliffs in the southwest and the mountainous areas of Lake District are within SSSIs, although these currently provide little additional formal protection for the species as many are geological sites only. It is estimated that up to 70% of breeding Peregrines nest within SSSIs, although only around 17% are recognized as interest features specifically or as part of a wider upland bird assemblage.

Table 52 Black Grouse *Tetrao tetrix*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	65 males (1995-96)	1029 males (2006)	37-40%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected in the close season	-	Red, SPEC3	No

6.129 The Black Grouse occurs across the Palearctic, from Britain to northern and central Europe and Siberia. Once widespread in Britain the species underwent a dramatic decline during the last century and in England it is now found only in the northern uplands. Black Grouse are resident in Britain and are associated with landscapes supporting a combination of heather moorland, blanket bogs, unimproved grasslands and light birch or hawthorn woodland and scrub. Tall rushes or heather are used for nesting and moorlands and grasslands are used foraging, where adults feed on herbs, grasses, sedges and rushes and chicks feed on surface invertebrates.

Birds also feed on heath and shrub berries and shoots and, in the spring, adult birds use traditional communal leks on short unimproved pastures or bogs. The loss of the intricate mix of open and scrubby habitats due to changes in land use is considered the most likely cause of the decline of Black Grouse in Britain. Due to the species' rapid decline in the UK and abroad it is considered of conservation concern in both a UK and European context.

6.130 **Table 162** shows all SSSIs which held lekking male Black Grouse in 2006. Of these, Allendale Moors in Northumberland and Upper Teesdale in County Durham, supported nationally important numbers. A total of 385 lekking males were found within SSSIs, representing 37% of the total number of lekking males located during the survey. However, a number of these leks were on grasslands adjacent to moorland SSSIs, and it is reasonable to assume that a proportion of these birds bred on designated sites. As a result, the true proportion of England's Black Grouse breeding on SSSIs is likely to be much higher. The species is not specifically recognized as an interest feature on any SSSI, though it is included as a component of the upland breeding bird assemblage on all except two relatively minor sites.

Table 53 Quail *Coturnix coturnix*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	2 males (1998-2002)	299 males (2004)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Red, SPEC3	No

6.131 The Quail breeds widely across Eurasia, the Middle East and Africa, and is a scarce breeding species in Britain. Eurasian birds are migratory, wintering as far south as the Sahel. Quails breed in open country, including dry grasslands, hay meadows and cereal crops, showing a strong association with chalk landscapes in England. They feed on weed seeds and, during the breeding season, invertebrates. Quails may breed solitarily or in loose colonies and their numbers vary greatly between years. Favoured areas in England are the southwest, southeast and east, especially Dorset, Wiltshire, Cambridgeshire, Norfolk and Lincolnshire. The species has declined across much of its European range and is considered to be of conservation concern at both UK and European levels.

6.132 Quails are exceptionally cryptic and their presence is usually only revealed by the distinctive calling of male birds. As many of these may be unpaired individuals, which range widely in search of a mate, this unit of measurement is likely to overestimate the number of breeding birds. However, the presence of calling males at least provides an indication of the potential value of an area to the species as a breeding habitat. Only one SSSI includes breeding Quails as an interest feature: Salisbury Plain in Wiltshire. Given that many birds breed widely on undesignated farmland, it is likely that coverage in any year is, on average, less than 10%.

Table 54 Water Rail *Rallus aquaticus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	7 pairs (1988-91)	1,000 pairs (2005)	41-50%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

- 6.133 Breeding widely across the Palearctic, the Water Rail is an uncommon resident and winter visitor in Britain. This highly elusive species, more often heard than seen, inhabits wetlands with much tall emergent vegetation such as sedges, rushes and reed. They are mainly insectivorous, but will also take larger prey such as frogs, fish and small birds, as well as vegetable matter and carrion. Breeding birds are most numerous in parts of East Anglia, the West Midlands and around the Humber Estuary, and are largely absent from the southwest. Water Rails are more numerous and widely distributed during the winter when resident birds are joined by migrants from northern and north-western Europe. The species is of conservation concern in the UK due to a recent range contraction.
- 6.134 Water Rails are a relatively dispersed breeding species which occur widely but generally at low densities. Important concentrations are only to be found at wetland nature reserves with extensive reed beds and other emergent vegetation. Examples of such important sites which hold nationally important numbers include Minsmere and Walbersick in Suffolk, Leighton Moss in Lancashire, Dungeness, Romney Marsh and Rye Harbour in Kent and Poole Harbour in Dorset. Accepting that Water Rails are most numerous in extensive wetlands, and that virtually all such habitats are within designated sites, it is estimated that up to 50% of breeding pairs occupy designated sites. The species is included as an interest feature at many of these sites, either specifically or as part of the lowland fen and lowland open waters breeding bird assemblages (see **Appendix 3**). The distribution and hence coverage of wintering Water Rails is similar to that of breeding birds.

Table 55 Spotted Crake *Porzana porzana*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 male (1999)	22-35 males (1999)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

- 6.135 The greater part of the world population of Spotted Crakes breeds in Europe, including Britain where they are rare breeding birds and scarce passage migrants. They breed in lowland swamps, wet grasslands and fens, and alongside lakes and rivers with much tall, marginal vegetation. They feed on a variety of aquatic invertebrates and plant material, especially molluscs, insects and seeds. Spotted Crakes are migratory and winter in south and east Africa. The species is of conservation concern in the UK to due to small size of its breeding population.
- 6.136 Spotted Crakes are extremely secretive and rarely seen, with the presence of breeding birds usually only betrayed by calling males. Their numbers vary greatly from one year to the next and, due to their secretive nature, it is likely that their true numbers are underestimated. Only the Ouse Washes in Norfolk and Cambridgeshire includes the species as an interest feature, though it is known to breed regularly on several other wetland SSSIs including the Nene Washes in Cambridgeshire and the Derwent Ings in North and East Yorkshire. As Spotted Crakes are generally restricted to sites holding extensive areas of suitable habitat, which are almost exclusively within SSSIs, it is estimated that coverage for this species is nearly complete.

Table 56 Corncrake *Crex crex*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	6 males (1998)	4 males (2004)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Red, SPEC1	Yes

6.137 Corncrakes once bred across much of temperate Europe and were a common and widespread summer visitor to Britain. However, as a result of a decline which started in the nineteenth century and continues to the current day, they are now regarded as globally threatened. Britain's population was reduced to fewer than 500 pairs by the early 1990s, although agricultural schemes have since improved nesting conditions for Corncrakes in their core areas in Scotland and increased the population to around 1,000 singing males in 2004. They breed in tall grass and other vegetation, including hay or silage, iris beds, sedges and reeds. The mechanisation of mowing and the loss of traditional, late-cut hay meadows to more intensive agricultural methods is, to a great extent, responsible for their decline in Britain and abroad. Corncrakes are highly cryptic and seldom seen, their presence usually only being advertised by the distinctive call of the male which is normally made at night. The species is of the highest conservation concern in the UK and Europe.

6.138 Until recently Corncrakes were virtually extinct as a breeding bird in England, with only sporadic records of calling males on wetland sites and set-aside land. However, with the confirmation of breeding on the Nene Washes in Cambridgeshire in 2004 resulting from a reintroduction project on the site, there is now hope that the species will establish regular breeding there. They are an interest feature at only one site: the Lower Derwent Valley SPA in North and East Yorkshire, which encompasses five individual SSSIs, although Corncrakes have not been recorded there recently.

Table 57 Coot *Fulica atra*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Breeding	250 pairs (2000)	20,000 pairs (2000)	1-10%
Non-breeding	1700 (1994-99)	99,000 (1999-2004)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected during the close season	Migratory	Non-SPEC	No

6.139 The Common Coot is an abundant and widespread breeding resident and winter visitor to Britain. The species breeds from Europe to eastern Asia and Australasia, favouring shallow, eutrophic freshwater with abundant submerged vegetation for food and emergent vegetation for nesting. Highly gregarious outside the breeding season, the resident population is swelled greatly by an influx of birds from northern and north-eastern Europe, especially during cold weather. Wintering birds prefer the larger bodies of freshwater, although they are also widely distributed on smaller ponds and rivers. The species is not of conservation concern in Britain, though the winter population has experienced a slight decline in recent years.

6.140 In England, breeding Coots are most numerous and widespread in the lowlands of central and southern England, where they favour gravel pits, reservoirs and smaller lakes. The species is relatively dispersed as a breeding bird and, although densities can be high at some sites, for example the Ouse Washes (Brown & Grice 2005), there are no known nationally important breeding sites. Although not a SSSI interest feature, it is estimated that up to 10% of the breeding Coots in England occur within designated sites.

6.141 There are 17 WeBS sites of national importance for non-breeding Coots encompassing 21 individual sites (**Table 163**). Of these, all but four are within designated sites, although only five SSSIs include Coots as an interest feature at the SSSI/SPA level. It is estimated that at least 50% of the Coots wintering in England occupy designated sites, with around 17% benefiting from formal protection as an interest feature.

Table 58 Common Crane *Grus grus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (1998-2002)	5 pairs (2004)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC2	No

6.142 Common Cranes breed from central to Eastern Europe and, after an absence of nearly 400 years, they returned to breed in England in 1981. They breed in well-vegetated wetland habitats and, in Broadland, at their most well established breeding location in England, they nest in a dense reedbed. They feed on a variety of plants, large invertebrates and amphibians on adjacent grazing marshes. Cranes currently breed at two sites in England, both within designated sites, though the species is not recognized as an interest feature at any designated site. Cranes are of conservation concern in the UK due to the small size of their breeding population and have an unfavourable conservation status in Europe.

Table 59 Oystercatcher *Haematopus ostralegus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,100 pairs (1985-98)	10,000 pairs (2005)	21-30%
Non-breeding	3,200 (1994-99)	165,000 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.143 Oystercatchers breed across the Palearctic from Iceland to Russia and south to the Mediterranean, with most wintering around the Irish and North Sea coastline. They are a locally numerous breeding resident and passage and winter visitor around the British coastline, and an increasingly widespread inland breeding bird. Traditionally breeding on dunes, sand and shingle beaches, saltmarshes and rocky cliffs and islets, increasing numbers of birds also now nest on river gravel banks and adjacent pastures, arable land, lowland wet grassland and gravel pits. Adult Oystercatchers are largely resident in England and remain on their breeding grounds or

move to the coast outside the breeding season, where they are joined by migrants from Scotland, Iceland, Scandinavia and other western European countries. At this time they inhabit sandy beaches and estuaries, rocky shores and coastal pastures and feed on cockles, mussels, limpets, earthworms and other invertebrate prey. Britain supports internationally important numbers of Oystercatchers throughout the year, though the population aggregates across a relatively small number of sites in the winter, and the species is therefore of conservation concern. Following a decline in the early 1990s, the wintering population is currently relatively stable and represents about 30% of the East Atlantic Flyway population.

- 6.144 There are no breeding sites of national importance for this relatively numerous and widespread species. However, it is estimated that up to 30% of England's breeding Oystercatchers occur on coastal SSSIs and lowland wet grassland, many of which include breeding bird assemblages as an interest feature.
- 6.145 There are ten WeBS sites of at least national importance for Oystercatchers in England, encompassing 24 individual sites (**Table 164**). Of these, all are SSSIs and all except six relatively minor sites include wintering Oystercatchers as an interest feature. It is estimated that over 80% of wintering Oystercatchers occur on SSSIs, with the majority included as an interest feature at the SSSI/SPA level. Inland feeding areas are of varying importance at some coastal sites where pastures and arable land provide an alternative foraging habitat at high tide, during severe weather and when disturbed. However, very little of this non-intertidal habitat is included within the boundaries of designated sites.

Table 60 Avocet *Recurvirostra avosetta*

	1% GB Population	English population estimate	Coverage by designated sites
Breeding	9 pairs* (1997-2002)	1,386 pairs (2004)	91-100%
Non-breeding	35* (1994-99)	4,686 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

* Note that the formal GB population estimate is less recent than the England estimate

- 6.146 Avocets breed widely in the Palearctic and eastern and southern Africa. Absent from Britain for much of the early 20th century, the species returned to the Suffolk coast to nest in the 1940s and the population has since undergone a steady growth in numbers and range up to the present day. Avocets breed on the eastern coast of England from Kent to the Humber and, more recently, at Poole Harbour, Dorset and Leighton Moss, Lancashire. In 2004 the breeding population reached 1,386 pairs, with the great majority on the coasts of East Anglia and the southeast (RBBP). Although most birds breed near the coast, some colonies have become established at inland wetland sites including the Norfolk Broads and the Ouse Washes in Cambridgeshire and Norfolk. They breed on saline and brackish lagoons, saltmarshes and inland freshwater wetlands. After breeding, large numbers gather to feed in favoured areas near their breeding grounds and, during the winter, many Avocets, including continental birds, congregate on estuaries on the south and east coasts between the Tamar and the Humber. Although largely site-faithful as a breeding species, there is evidence of considerable interchange between breeding and wintering sites, both within England and between England and the near continent. The species is of conservation concern in the UK due to the concentration of over half of the UK population at no more than ten wintering and breeding sites.

- 6.147 The great majority of both breeding and non-breeding Avocets occur in designated sites, with almost 100% of the population present on SSSIs throughout the year. **Table 165a** lists 17 sites of national importance (i.e. with more than 15 pairs, based on the 2004 GB population estimate of 1,494 pairs) for their populations of breeding Avocets, of which all except two are SSSIs and of which 14 include the species as an interest feature at the SSSI/SPA level. It is estimated that at least 95% of Avocets breeding in England nest on designated sites, and that 66% of the breeding population receives formal protection as an interest feature.
- 6.148 **Table 165b** lists 17 WeBS sites of national importance for non-breeding Avocets, encompassing 34 individual sites. All are within designated sites and all but five include Avocets as an interest feature at the SSSI/SPA level. It is estimated that virtually the entire wintering population occurs on designated sites, with the majority receiving formal protection as an interest feature.

Table 61 Stone-curlew *Burhinus oedicanus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	2 pairs* (1996-2000)	348 pairs (2007)	60-70%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Red, SPEC3	Yes

* Note that the formal GB population estimate is less recent than the England estimate

- 6.149 The Stone-curlew breeds in temperate and tropical latitudes from Europe and north Africa to Indochina. The species is a summer visitor to Britain and breeds only in England. Birds winter in Spain, southern France and west Africa and England's breeding population is at the north-western limit of the species' global range, which stretches across the southern Palearctic from the Canary Islands to southeast Asia. Formerly widespread and locally abundant in England, Stone-curlews are now rare and localised due to the wide scale loss and fragmentation of their preferred dry grassland and grassy heathland breeding areas to agricultural intensification and forestry during the last century. This has resulted in an increasing proportion of birds nesting on spring-sown arable land within mixed farming landscapes, where they are vulnerable to agricultural operations. The species is now largely restricted to its historical heartland in Breckland, with small outliers in North Norfolk and on the Suffolk coast, and on Porton Down and Salisbury Plain, with smaller numbers in neighbouring areas of Hampshire, Oxfordshire and Berkshire. From a low point of only 120-160 pairs in the mid-1980s, intensive conservation action resulted in an increase to 338 pairs in 2006.
- 6.150 Stone-curlews continue to nest on their traditional habitats of closely-grazed chalk downlands and grass heaths, and increasingly on sparsely-vegetated spring-sown arable crops including kale, maize, peas, beans, carrots, onions, cereals and sugar beet. Only 20% of nests are on semi-natural habitats (heathland) in Breckland and 57% (grassland) in central-southern England. Adults and chicks require sparse vegetation with bare ground where they forage for invertebrates such as earthworms, woodlice and beetles. These conditions are generally provided by the management of open plots of land on grassland and arable areas, where bare ground is maintained either by cultivation or spraying with herbicide. Birds nesting away from plots on arable are vulnerable to the destruction of eggs and chicks by farm machinery and also to rapid vegetation growth which reduces the availability of bare ground for foraging. Intensive conservation measures are therefore required to alert farmers to the presence of birds in such cases and to advise on appropriate management.
- 6.151 **Table 166** lists the SSSIs which supported breeding Stone-curlews during 2006 or which include the species as an interest feature at the SSSI/SPA level. Of these sites, by far the most important is Breckland Farmland SSSI which supports around 40% of the national population. It is

estimated that some 64% of the breeding Stone-curlew population occurs within SSSIs, with the remainder on undesignated arable farmland, especially in central-southern England.

Table 62 Ringed Plover *Charadrius hiaticula*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	85 pairs (1984)	2,389 pairs (1984)	71-80%
Non-breeding	320 winter (1994-99)	5,776 (1999-2004) 10,000 (passage)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.152 Breeding widely throughout arctic and temperate zones, the Ringed Plover is a locally numerous breeding species around Britain's coast, with smaller numbers breeding inland. In England, at the southern extreme of the species' world breeding range, Ringed Plovers nest on sand and shingle beaches, saltmarsh and coastal farmland, and inland on river gravel, lowland gravel pits and reservoirs and, in Breckland, on sandy heaths. The majority of breeding birds in England are found between the Humber and the Solent, with the greatest numbers in East Anglia and the southeast (Prater 1989). Many of England's Ringed Plovers are resident, though some southern birds winter in Ireland and along the Atlantic coasts of France and Iberia. During the winter resident birds are joined by birds from the Wadden Sea and the Baltic, with Britain supporting 44% of the European and North African wintering population. Britain also holds important numbers of Ringed Plovers on passage, with birds on route to breeding grounds in Canada, Greenland, Iceland and northern Europe stopping over during March to May and those returning to winter in Iberia and northern and western Africa passing through during August and September. Non-breeding birds are widely distributed around Britain's coasts, favouring broad sandy beaches and muddy estuaries where they feed predominantly on crustaceans and polychaete worms. The species is of conservation concern in the UK as the internationally important wintering population has declined by 28% in the last 25 years.

6.153 **Table 167a** lists those designated sites which include breeding Ringed Plovers as an interest feature at the SSSI/SPA level. The North Norfolk Coast is the only known site of national importance in England, although this population has declined by 60% since a dedicated survey in 1993 found 277 pairs (West, 2002). The decline is considered to be due to a combination of factors including recreational disturbance, predation, habitat erosion and loss of nests to storms. Many coastal birds are now restricted to nature reserves and beach exclosures. Accepting that no more than 15% of breeding birds in England inhabit inland areas (Prater 1989), and given the significant overlap between coastal breeding areas and coastal SSSIs, it is estimated that up to 80% of the English breeding population occurs within designated sites, with many receiving at least some protection at the SPA level.

6.154 **Tables 167b and 167c** list sites important for wintering and passage Ringed Plovers respectively. **Table 167b** lists nine WeBS sites of at least national importance, constituting 20 individual sites of which all are SSSIs and all but five relatively minor sites include Ringed Plovers as an interest feature at the SSSI/SPA level. Additionally, the Northumberland Shore and Durham Coast SSSIs, both non-estuarine sites not well covered by WeBS, together support a further 300-400 birds. **Table 167c** lists 17 WeBS sites of at least national importance for passage Ringed Plovers, covering 38 individual sites. Again, all these sites are SSSIs and all but seven relatively minor sites include Ringed Plovers as an interest feature. It is estimated that the up to 80% of England's non-breeding Ringed Plovers occur within designated sites, again with the majority benefiting from protection at the SPA level.

Table 63 Golden Plover *Pluvialis apricaria*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	230 pairs (1981-84)	6,000 pairs (2007)	81-90%
Non-breeding	2,500 (1981-92)	134,000 (1999-2004)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected in close season	Annex 1	Non-SPEC	No

- 6.155 Golden Plovers breed across the north-western Palearctic from Iceland, Ireland, Britain and Scandinavia to northwest Siberia. In Britain they nest in upland areas, favouring flat or gently sloping ground with short vegetation on heather moorland, blanket bog and montane tops. Adult birds forage as much as 10km away from the moorland nesting areas, feeding on earthworm-rich pastures or crane fly-rich arable fields and improved pastures, depending on location (Whittingham et al. 2000). Foraging chicks, in particular, require flushes and marshy areas rich in invertebrates within 2km of nest sites. Wintering Golden Plovers are found widely throughout coastal and inland areas of northwest Europe, the Mediterranean Basin and Africa. In Britain the resident population is joined by visitors from Iceland, Scandinavia and western Siberia. They are highly gregarious and flocks are found on permanent pastures, ploughed farmland, sugar beet stubbles and winter cereals. Golden Plovers also feed at night, often in different areas to those used during the day. Roosting birds prefer undisturbed intertidal habitats, gravel pits and ploughed land.
- 6.156 The estimated English breeding population of around 6,000 pairs occurs largely on the North Pennines, with smaller numbers present on the South Pennines, the North York Moors and the Bowland Fells, all areas which have been extensively designated as SSSI and SPA for their breeding bird populations (**Table 168a**). It is estimated that the moorland habitat of up to 90% of the Golden Plovers breeding in England has been designated. However, very little of the important 'in-bye' foraging habitat outside the unenclosed moorland is currently designated.
- 6.157 Golden Plovers are widely distributed during the winter and, as birds are generally only regularly counted at coastal locations, we have a limited understanding of their distribution and the location of key inland sites. The assessment of important sites in **Table 168b** is therefore far from comprehensive and, with a few exceptions, focuses on coastal locations. There are 28 WeBS sites of at least national importance for Golden Plovers amounting to 63 individual sites. All but four of these sites are designated as SSSIs and, of these, 47 include wintering Golden Plovers as an interest feature. It is estimated that as much as 60% of the wintering population in England occurs on designated sites. However, this figure relates largely to roosting rather than feeding birds and does not include the farmland foraging areas for which there is little or no coverage by designated sites.

Table 64 Grey Plover *Pluvialis squatarola*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	530 pairs (1994-99)	36,000 pairs (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.158 The Grey Plover is a locally abundant non-breeding visitor to Britain from its breeding grounds on the Arctic tundra. The species is almost entirely confined to the coast in the winter and favours the larger estuaries and open shores with more extensive, open areas of mudflat. Grey Plovers feed on a wide range of mud-dwelling invertebrates, including worms and molluscs. Numbers have increased greatly in Britain since the early 1970s, but this trend has reversed recently with a decline following the high peak of the mid-1990s (Collier et al. 2005). Britain supports internationally important numbers, representing approximately 20% of the East Atlantic Flyway population, and the species is thus of conservation concern in the UK.

6.159 The vast majority of wintering Grey Plovers in Britain are found on the English coast, with the eastern and north-western estuaries supporting the majority of birds. There are 21 WeBS sites of national importance covering 37 individual sites, all of which are within SSSIs (Table 169). All but seven SSSIs include Grey Plovers as an interest feature at the SSSI/SPA level and it is estimated that over 90% of the population occurs in designated sites overall.

Table 65 Lapwing *Vanellus vanellus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,500 pairs (1985-98)	61,000 pairs (1998)	1-10%
Non-breeding	18,000 (1981-92)	1,000,000 (1981-92)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	Yes

6.160 Widely distributed in Eurasia, from southwest Europe to eastern Asia, the Lapwing is still Britain's most numerous breeding wader despite a long-term and large decline in breeding numbers caused by agricultural changes. Lapwings require bare ground or short turf for nesting and feeding, favouring ploughed/fallow land, spring-sown crops and grazed pastures. Between 1987 and 1999 the population in England and Wales declined by 49% (Wilson et al. 2001), a change which is largely attributed to poor breeding productivity as a result of the switch from spring- to autumn-sown crops, the decline in mixed arable-livestock farming and the increased mechanisation and heavy grazing of pastures. The wintering population consists of a proportion of British breeding birds along with a large fraction of the European population. Lapwings are of conservation concern in the UK due to the decline in their breeding population and because at least 50% of Europe's birds over-winter here. Europe probably holds over 50% of the global population and the species has an unfavourable conservation status at the European level due to a large decline in numbers during 1990-2000.

- 6.161 The Lapwing is a widely distributed breeding bird in England, although the population is concentrated in northern England and relatively scarce in the southwest. The majority of Lapwings breed on farmland, with the highest densities occurring on mixed farmland where birds nest on bare ground or grazed, short grassland and feed on damper, invertebrate-rich grasslands. There are no sites of national importance for this relatively abundant and dispersed species. Table 50a lists 20 sites of regional importance (ie supporting at least 30 pairs) which qualify for selection as SSSIs under the breeding waders of wet meadows guidelines. Many of these sites include managed wetland reserves. Six sites are undesignated, including Chedgrave Marshes in the Norfolk Broads, Alconbury Airfield in Cambridgeshire and Wath lngs in South Yorkshire, each supporting over 70 pairs. Although **Table 170a** provides a good assessment of important breeding sites in lowland England, there is less information on Lapwings using upland farmland, where the highest densities and greatest numbers are perhaps likely to occur. About 3,500 pairs breed in the South and North Pennine Moors SPAs. It is estimated that no more than 10% of the breeding population in England occurs on designated sites.
- 6.162 Lapwings form large flocks in the winter and are widely distributed on grassland and arable farmland, especially in southern and central England. Although birds are regularly counted at coastal WeBS sites, the numbers inland are poorly quantified and thus the population estimate for England derived from WeBS alone is likely to underestimate the actual population size. The population estimate of a million individuals applied here is reasonable and probably conservative given that the majority of Lapwings in Britain winter in England (Lack 1986). There are only three WeBS sites of national importance for wintering Lapwings (**Table 170b**), relating to 18 individual sites, all of which are SSSIs. Lapwings are an interest feature at the SSSI/SPA level on all these sites except two. Including 35 additional WeBS sites, which each hold a minimum of 2,000 birds (and again all including Lapwings as an interest feature at the SSSI/SPA level), it is estimated that up to 40% of the Lapwings wintering in England occur within SSSIs.

Table 66 Knot *Calidris canutus*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	2,800 (1994-99)	222,500 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	No

- 6.163 Breeding in the high Arctic and wintering on temperate and tropical coasts around the world, Knots winter in internationally important numbers in Britain. Those wintering in Britain are mostly birds of the islandica race, which breeds in Greenland and northern Canada, and the great majority are found on the larger estuaries of England. Knots favour extensive sand and mudflats where they feed in large flocks on intertidal invertebrates, specialising on small bivalves such as tellins and cockles. At high tide they roost in densely packed flocks on sandbanks, saltmarshes and coastal fields, and are often highly faithful to these roosting sites. They are of conservation concern in the UK for their internationally important wintering numbers and due to their very highly aggregated distribution, and have an unfavourable status in Europe due to a recent population decline. Knot numbers are currently stable in Britain although there has been a slight decline since the peak in the late 1980s (Collier et al. 2005).
- 6.164 There are 17 WeBS sites of national importance for Knots, encompassing 37 individual sites (**Table 171**). Of these sites, all are SSSIs and all but seven include Knots as an interest feature at the SSSI/SPA level. It is estimated that over 90% of the wintering Knots in England occur in designated sites. In common with other coastal waders, birds roosting at some sites may use adjacent non-intertidal land such as farmland, which is usually undesignated.

Table 67 Sanderling *Calidris alba*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	210 (1994-99)	10,000 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

- 6.165 Sanderlings breed on the tundra of the high Arctic and winter widely on temperate and tropical coasts, including those of Britain and northwest Europe. Greenland and Siberian breeding birds migrate through northwest Europe, with chiefly Siberian birds arriving at key sites in England such as the Wash, Tees and Ribble Estuaries from mid-July to moult, with many staying for the winter. In the spring, passage birds returning to Greenland occur in even larger numbers on the estuaries of northwest England. Sanderlings prefer sandy estuaries and open shores where they feed at the water's edge on small crustaceans and polychaete worms. It is estimated that Britain supports 17% of the East Atlantic Flyway population in winter, and around 65% of these are associated with non-estuarine coasts (Rehfishch et al. 2003).
- 6.166 **Tables 172a and 172b** show the key wintering and passage sites for Sanderling respectively. All the important passage sites are also wintering sites, though the numbers of birds they support vary greatly with the time of year. For example, the Ribble Estuary, the most important wintering and passage site for the species, holds a mean peak of 2,375 birds in winter but over 8,000 in the spring. **Table 172a** lists 16 WeBS sites of at least national importance for wintering Sanderlings, encompassing 34 individual sites. Of these, all are SSSIs and all except six generally minor sites include wintering Sanderlings as an interest feature at the SSSI/SPA level. **Table 172b** lists nine WeBS sites of at least national importance for passage numbers of Sanderlings, relating to 25 individual sites. Again, all these sites are SSSIs and all but five include Sanderlings as an interest feature. A proportion of non-estuarine Sanderlings fall within other, non-WeBS coastal SSSIs including the Northumberland Shore and Durham Coasts SSSIs. It is estimated that over 80% of wintering and passage Sanderlings in England occur within designated sites.

Table 68 Purple Sandpiper *Calidris maritima*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	180 (1994-99)	1,200 (1997-98)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Migratory	Amber, Non-SPEC	No

- 6.167 Purple Sandpipers breed over a large part of the Arctic, from eastern Canada to the Taimyr Peninsula in Russia, with a tiny population breeding in the mountains of Scotland. Birds from eastern Greenland, Iceland, Scandinavia and Russia winter in northwest Europe, with approximately 24% of the western European wintering population occurring in the Britain (Collier et al. 2005). Purple Sandpipers are restricted to the coast during the winter and are common on rocky shores from the Scottish border to Flamborough Head in East Yorkshire, but localised and uncommon elsewhere. They feed on intertidal molluscs and communally roost on rocks and man-made structures at high tide. As the great majority inhabit non-estuarine coasts, the species is poorly monitored by WeBS. The latest population estimate is based on data collected during a

special count of non-estuarine waders in the winter of 1997/98 (Rehfisch et al. 2003). In common with many other species recorded during this census, Purple Sandpipers have declined significantly since the first such survey carried out in 1984/85. The species is of conservation concern in the UK due to the small size of its breeding population (in Scotland) and the importance of its wintering population.

- 6.168 Seventy percent of Purple Sandpipers wintering in England occur on the east coast north of the Humber. **Table 173** lists four WeBS sites with peaks of 100 or more birds, all of which are within SSSIs but only two of which include the species as an interest feature. According to WeBS (which is likely to underestimate the true numbers) the Farne Islands alone held nationally important numbers during 1999-2004. It is estimated that at up to 70% of the Purple Sandpipers wintering in England do so within designated sites, though only 25% benefit from formal protection as an interest feature.

Table 69 Dunlin *Calidris alpina*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	95 pairs (1981-84)	600 (2005)	71-80%
Non-breeding	5,600 (1994-99)	328,000 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Annex I*	Amber, SPEC3	No

* schinzii race only

- 6.169 One of Britain's most abundant wintering waders, the Dunlin breeds throughout the northern temperate and arctic latitudes and winters on coasts throughout the northern hemisphere. Three races occur in Britain: the widespread schinzii race breeds, occurs on passage and winters in small numbers; the Scandinavian/Siberian alpina winters; and the Greenland arctica occurs on passage in small numbers in spring and autumn. An estimated 600 pairs breed in England (Brown & Grice 2005), mainly on the wetter bogs of the uplands of the Pennines and Bowland Fells. Wintering Dunlins are most abundant on the larger and muddier estuaries, where they feed on a wide range of small invertebrates including ragworms and spire-shells. In common with other intertidally-feeding waders, they roost on saltmarshes, shingle, sand spits and coastal farmland at high tide. The wintering population peaked in the mid-1990s but has since fallen, with numbers present during the winter of 2004/05 the lowest since the late 1980s (Banks et al. 2006). For this reason, as well as having an unfavourable conservation status in Europe, highly aggregated breeding and wintering populations and 41% of the East Atlantic Flyway population present in Britain during the winter, the species is of conservation concern. The schinzii race is listed on Annex I of the Birds Directive.
- 6.170 A rare and localised breeding bird in England, no individual SSSI supports nationally important numbers. The North and South Pennines Moors SPAs hold approximately 470 pairs (Stroud et al. 2001) which amounts to almost 80% of the estimated English population. Both SPAs include breeding Dunlins as an interest feature. There are no known important breeding populations outside designated sites.
- 6.171 The great majority of the Dunlin population wintering in Britain occurs in England, which holds all of Britain's internationally important sites and nearly all of the nationally important sites for this species (Collier et al. 2005). There are 21 WeBS sites of at least national importance for wintering Dunlin, covering 43 SSSIs (**Table 174**). An estimated 85% of the wintering population in England occurs on SSSIs, with many including the species as an interest feature at the SSSI/SPA level. There are no nationally important populations on undesignated sites.

Table 70 Ruff *Philomachus pugnax*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 male (1998-2002)	4 males (2004)	91-100%
Non-breeding	50* (1994-99)	622 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC2	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

- 6.172 Ruffs breed from northwest Europe right across the sub-arctic and temperate regions of Eurasia. They are an extremely rare breeding bird in Britain, an uncommon and localised wintering species and a more numerous passage visitor. England supports virtually all of Britain's tiny breeding population. Breeding birds require lowland wet grassland with access to abundant soil invertebrates, a habitat which has been severely reduced in extent by drainage and agricultural intensification. In Europe, Ruffs winter from the Mediterranean to South Africa, with smaller numbers in Western Europe, including England which lies on the northern edge of the species wintering range. Wintering birds are most numerous on the east coast from the Humber to the Thames Estuary, and a few inland locations including the Ouse and Nene Washes in Cambridgeshire/Norfolk, the Lower Derwent Valley in North and East Yorkshire and parts of Lancashire and Cheshire. The largest numbers occur during autumn passage, when birds are very widely distributed, though the majority are found on the coasts of the south and east. The Ruff is of conservation concern in the UK because of its small breeding population and localised non-breeding distribution, and has an unfavourable conservation status in Europe due to a recent population decline.
- 6.173 No more than eight females have been confirmed to breed in England in any one year since 1973 (Brown & Grice 2005). **Table 175a** shows the distribution of breeding locations and the numbers of lekking males present in England from 2000-2005. The locations are widely distributed from the southeast to the northwest, and few sites appear to support lekking males for more than a year. All are within SSSIs and it is estimated that over 90% occur in designated sites. Six SSSIs include breeding Ruffs as an interest feature.
- 6.174 Non-breeding Ruffs are generally found as singles or in small groups of up to twenty birds on wet grasslands and shallow lagoons throughout their wintering range. **Tables 175b and 175c** list those sites which regularly support more than 50 birds during wintering and passage periods respectively. All these nationally important sites are within SSSIs, and all except four include non-breeding Ruffs as an interest feature at the SSSI/SPA level. It is estimated that over 90% of non-breeding Ruffs occur in designated sites.

Table 71 Snipe *Gallinago gallinago*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	530 pairs (1985-99)	4,400-8,800 pairs (1983)	41-50%
Non-breeding	1,000 (1987-92)	20,000 (estimate)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected in the close season	Migratory	Amber, SPEC3	No

- 6.175 Breeding right across the Palearctic, the Snipe is a widespread though declining species in Britain, breeding in damp lowland meadows, grazing marshes, wet moorlands and rushy pastures. They require moist soils to allow them to probe for earthworms and other terrestrial invertebrates. Northern European birds are highly migratory, wintering in southern Europe and North Africa, and wintering numbers in Britain are supplemented by birds from Iceland, northwest Europe, Scandinavia and western Russia. Snipe are found more widely during the winter, utilising coastal areas and any at least temporarily damp habitats inland, favouring the fringes of reservoirs and gravel pits, wet grasslands with standing water, reedbeds and coastal lagoons. Breeding Snipe have undergone a dramatic range contraction in the last few decades, with 90% of the birds recorded on lowland wet grassland in England and Wales in 2002 occurring on just 3% of the sites visited, with numbers falling overall by 62% in a twenty-year period (Wilson et al. 2005). Losses in upland areas have not been quantified but may be equally significant. These declines are a result of agricultural intensification, particularly increased drainage, leading to the loss of wet grasslands essential for breeding Snipe. As a consequence of recent population declines, the Snipe is a species of conservation concern in both the UK and elsewhere in Europe.
- 6.176 With the exception of those breeding on lowland wet grasslands, there is little detailed information on the numbers and distribution of breeding Snipe in England. **Table 176a** lists those sites which meet the SSSI selection guidelines for breeding snipe identified by the 2002 survey of breeding waders on lowland wet grasslands. This survey found only 760 pairs on lowland wet grasslands in England, 94% of which occupied SSSIs, with the majority on just two sites: the Nene and Ouse Washes in Cambridgeshire and Norfolk. With the contraction of range in the lowlands, and the majority of other breeding birds inhabiting moorland and adjacent rough pastures, (with around 1,500 pairs within upland SSSIs), it is estimated that up to 50% of breeding Snipe occur within designated sites.
- 6.177 Due to their secretive habits, wintering Snipe are often difficult to detect and WeBS monitors only a fraction of the total wintering population. **Table 176b** lists those WeBS sites which support at least 200 birds. Only one site supports nationally important numbers: the Somerset Levels, which held a peak of over 1,800 birds in 2000/01 (Collier et al. 2005). All but two sites, Maer Lake in Cornwall and Marston Sewage Treatment Works in Lincolnshire, are within SSSIs. Of the SSSIs, Snipe are an interest feature at the SSSI/SPA level for the majority of sites. There is no reliable estimate of wintering numbers in England, although it is likely that a large proportion of the total occurs within SSSIs.

Table 72 Black-tailed Godwit *Limosa limosa*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Breeding	5 pairs (1998-2002)	52-56 pairs (2004)	91-100%
Non-breeding	150* (1994-99)	16,346 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Red, SPEC2	Yes

* Note that the formal 1% GB Population is less recent than the England estimate

- 6.178 Breeding widely in the Palearctic eastwards to Russia, the Black-tailed Godwit is a rare breeding bird and a common and widespread passage and winter visitor to Britain. The birds which breed in England, in common with most other European birds, winter in Iberia and West Africa. Extinct as a breeding bird for much of the 19th Century, Black-tailed Godwits have bred regularly on the Ouse Washes since the 1950s, with populations now established on a few other wet grassland sites. The majority of non-breeding birds originate from the growing Icelandic breeding population, although a small proportion of passage birds occurring mainly in the east and south of England breed in Europe. The non-breeding population in Britain has increased greatly since the 1980s and reached around 30,000 birds in the winter of 2002/03. The species is of conservation concern in the UK due to the historical decline and small size of the breeding population and the highly aggregated nature of its non-breeding population. It also has an unfavourable conservation status in Europe due to a large population decline in recent times.
- 6.179 Particularly associated with lowland wet grasslands, Black-tailed Godwits breed regularly on only a handful of sites in Britain, nearly all of which are in England (**Table 177a**). Although the Ouse Washes in the fens of Cambridgeshire and Norfolk have been the main breeding area since the species' recolonisation, repeated spring flooding here has reduced productivity and numbers in recent decades. As a consequence, a satellite population, which established on the nearby Nene Washes in the late 1970s, has now replaced the Ouse Washes as the stronghold. The Nene Washes now supports the bulk of the British breeding population. The only other sites which have regularly held proven breeding attempts in recent times are the Swale Estuary in Kent and the Ribble Estuary in Lancashire, both SSSIs. The species is an interest feature at the SSSI/SPA level on all sites, although it is notified as a breeding species on only the Ouse and Nene Washes SSSIs.
- 6.180 Throughout the winter the main British concentrations are on the muddy estuaries of England, particularly on the south coast, on the Stour and Hamford Water in eastern England and on the Ribble and Dee in northwest England. Large numbers also occur inland on the Ouse Washes. Interchange of individuals between sites throughout the winter has been observed, including between the east coast estuaries of Suffolk and Essex. Conversely, some birds, for example at Langstone Harbour, show little movement during the winter and are highly site-faithful. Black-tailed Godwits are highly aggregated in winter and are well covered by the SSSI network. There are 34 WeBS sites of national importance for the species, covering 62 individual SSSIs which hold nearly the entire wintering population (**Table 177b**). Of these SSSIs, the species is an interest feature at the SSSI/SPA level on 54. There are two undesignated sites which support nationally important numbers (using existing 1% levels), both in Cambridgeshire.

Table 73 Bar-tailed Godwit *Limosa lapponica*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Non-breeding	620 (1994-99)	41,950 (1999-2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Amber, Non-SPEC	No

6.181 Bar-tailed Godwits are a non-breeding species in Britain, occurring here during the winter and on passage from their breeding grounds, which extend from northeast Europe to western Siberia. They are widely distributed in Britain, occurring on estuaries and sandy intertidal flats where they follow the receding tide, feeding on ragworms, lugworms, crustaceans and molluscs. At high tide birds form large flocks and roost on undisturbed sandflats, sandbanks and saltmarshes, often flying a considerable distance to reach suitable areas. Although numbers wintering in Britain are affected by weather conditions elsewhere in the wintering range, and are therefore highly variable, the overall trend is stable. With more than half of the British wintering population occurring on only three sites and more than 20% of the biogeographic population present in the UK, the species is of conservation concern.

6.182 Thirteen WeBS sites support nationally important numbers of Bar-tailed Godwits, encompassing 33 individual sites, all of which occur within SSSIs (**Table 178**). Of the SSSIs, 22 include Bar-tailed Godwits as an interest feature at the SSSI/SPA level. It is estimated that greater than 90% of the population wintering in England occurs in designated sites, with a large proportion of these present on the Wash in the east and around the Ribble Estuary and the Sefton Coast in the northwest.

Table 74 Whimbrel *Numenius phaeopus*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	50* (1997-2001)	2000 (1997-2001)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Amber, Non-SPEC	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

6.183 Whimbrels breed throughout the arctic and subarctic zones of the Palearctic and North America. Breeding birds are largely confined to Shetland in Britain but the species is a widespread and locally numerous passage visitor to England. Birds occurring in England are migrants travelling to and from their breeding grounds in Iceland, Scandinavia and western Russia and their main wintering grounds in West Africa. Passage Whimbrels in England occur on estuaries, saltmarshes, coastal grasslands and rocky shores where they take a wide variety of invertebrate prey. The species is of conservation concern in the UK due to its highly aggregated breeding and non-breeding distributions.

6.184 Spring passage Whimbrels are concentrated in the southwest, particularly on the Severn Estuary, while autumn birds tend to be more widely distributed at sites along the south and east coasts. **Table 179** lists eight WeBS site supporting more than 50 birds during the passage period. The 21 individual sites are all within SSSIs, with 12 including the species as an interest feature at the SSSI/SPA level. The size of the passage population in England is estimated to be at least 2,000

individuals and, given the high proportion of coastal habitats within SSSIs, perhaps up to 70% occur within designated sites.

Table 75 Curlew *Numenius arquata*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,100 prs(1985-99)	30,000-40,000 prs (2005)	21-30%
Non-breeding	1,500 (1994-99)	55,000 (1997-2003)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	Yes

- 6.185 Curlews breed widely from Europe to central Siberia and breed and winter in internationally important numbers in Britain. The size of the population breeding in England is unknown but it has been estimated that 30,000 to 40,000 pairs are present, with the great majority of these in the north (Brown & Grice 2005). Curlews nest in a wide range of habitats, including heather moorland, meadows and unimproved pastures, lowland heaths and arable farmland. Breeding adults feed on earthworms and insect larvae taken from agricultural land, along with other prey including beetles, lizards, frogs, small fish and birds. Britain's wintering Curlews are a combination of local breeders and birds from Scandinavia. They favour estuaries, with smaller numbers on open coasts and inland wetlands. Feeding birds take a wide variety of intertidal invertebrates, especially ragworms, as well as bivalves, and crustaceans such as shore crabs. Some flocks also roost and forage for earthworms on adjacent farmland at high tide. Curlews have declined greatly in Europe, most probably due to habitat loss, and have an unfavourable conservation status at the European level. Despite this decline, the numbers wintering in England and Britain as a whole have increased since the 1970s and are currently stable (Collier et al. 2005), although breeding birds declined by 19% between 1994 and 2005 (and by a third on lowland wet grassland between 1982 and 2002). Both breeding and wintering numbers in Britain represent a considerable proportion of the European total (50-60% and 35% respectively) and are additional reasons for the species' status as a bird of conservation concern.
- 6.186 Curlews remain a widespread breeding species in England and no individual SSSI supports nationally important numbers. The North Pennine Moors SPA supports an estimated 5,152 pairs, representing over 10% of the population in England, and the South Pennines SPA holds a further 1,000 birds, with both including the species as an interest feature at the SSSI/SPA level. In the lowlands, a 2002 survey of waders breeding on lowland wet grasslands found 693 pairs, with 104 occupying SSSIs. **Table 180a** lists 53 lowland sites which hold regionally important numbers, of which 17 are within SSSIs. It is estimated that up to 30% of the English population occurs on SSSIs, mainly in upland areas and the New Forest.
- 6.187 The great majority of Curlews wintering in England are found on the coast, especially on the larger estuaries with extensive mudflats. There are 14 WeBS sites of at least national importance for wintering Curlews (**Table 180b**). These cover 34 SSSIs, holding approximately 84% of the wintering population in England, with 24 sites including wintering Curlews as an interest feature at the SSSI/SPA level. There are no known undesignated sites of national importance. In common with several other coastal waterbirds, Curlews exploit non-intertidal habitats during high tide and severe weather, including grazing marshes and arable land. At many locations little or none of these alternative foraging areas are included within the boundaries of designated sites.

Table 76 Spotted Redshank *Tringa erythropus*

	1% GB Population	Most recent English population estimate	Coverage by designated sites
Non-breeding	50* (1994-99)	120 (1994-99)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

6.188 Spotted Redshanks breed from Scandinavia across much of sub-arctic Russia. The majority winters in equatorial Africa with small numbers staying in western Europe. Non-breeding birds occur in Britain with small numbers present during the winter and higher numbers during the passage periods. During these times they favour muddy estuaries, lagoons and inland lakes and flooded gravel pits, where they feed on invertebrates such as ragworms, shore crabs and other crustaceans. The species is of conservation concern in the UK due to its highly aggregated distribution and has an unfavourable status in Europe due to a recent decline.

6.189 Non-breeding Spotted Redshanks are widely distributed in England though always scarce or uncommon. **Tables 181a and 181b** list the most important WeBS sites for wintering and passage birds respectively. All 32 individual sites are within SSSIs and many include the species as an interest feature at the SPA assemblage level. It is estimated that up to 80% of Spotted Redshanks in England occur within designated sites.

Table 77 Redshank *Tringa tetanus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	390 pairs (1985-98)	10-12,000 pairs (2005)	61-70%
Non-breeding	1,200 (1994-99)	57,692 (1999-2004)	81-90%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	No

6.190 Redshanks breed across the Palearctic, with about half of the species' breeding range in Europe. The largest European breeding populations are in Iceland, Norway, Belarus, Britain and the Netherlands. The britannica race is confined to Britain and Ireland. Redshanks are widespread throughout much of Britain when breeding and predominantly coastal outside the breeding season. They nest on tussocky upland grasslands, lowland wet meadows, coastal grazing marshes and saltmarshes, with the largest numbers in England in the coastal areas of the south, southeast and East Anglia, and in the Pennine uplands. The breeding population in Britain has suffered a more-or-less sustained decline since the early 19th century as a result of drainage of wetland habitats and, later in the 20th century, due to agricultural intensification and the reclamation of saltmarshes. The species is also in widespread decline elsewhere in Europe, which supports three-quarters of the world population.

6.191 The breeding population is relatively sedentary, with birds moving to the coast during the winter but remaining in Britain. These resident birds are joined by large numbers of winter migrants from Iceland and elsewhere in Europe, with Britain supporting internationally important numbers at this time. Approximately 70% of the British wintering population occurs on estuaries, with smaller

numbers on the non-estuarine coast and at widely scattered inland sites including flooded gravel pits and unimproved grasslands. Birds are extremely site-faithful, both to wintering and breeding areas. Winter numbers have been broadly stable since the early 1970s though there has been some redistribution, with numbers declining in the southwest and increasing in the south and southeast. Redshanks are of conservation concern at a UK level because of the international importance of their wintering population and the decline in their breeding population. They also have an unfavourable conservation status in Europe due to a recent population decline.

- 6.192 The majority of breeding birds occur on three main habitats in England: saltmarsh, upland rough pastures and lowland wet grasslands. It is estimated that approximately 50% of breeding Redshanks inhabit saltmarshes. As the great majority of saltmarshes in England occur within coastal SSSIs, virtually all saltmarsh-breeding Redshanks will occur within designated sites. A further 1,560, or approximately 13% of breeding birds, occur on lowland wet grasslands and **Table 182a** lists 55 sites of regional importance. Thirty-three of these fall within SSSIs and two-thirds of the Redshanks using this habitat are within sites designated for waterfowl interest. The bulk of the remaining breeding Redshanks occur on upland rough grazings and moorland, although the numbers inhabiting the moorland SSSIs will generally be low (with the exception of those sites including enclosed grassland habitats). It is estimated that up to 65% of breeding Redshanks in England occur within SSSIs, the majority of which include the species as an interest feature, at least as a wintering bird, at the SSSI/SPA level. There are no known sites of national importance for breeding Redshanks.
- 6.193 There are 26 WeBS site of national importance for non-breeding Redshanks, distributed around much of the English coastline with the exception of the southwest (**Table 182b**). These encompass 53 individual sites, all of which are SSSI and the majority of which include Redshanks as an interest feature at the SSSI/SPA level. It is estimated that up to 90% of non-breeding Redshanks in England occupy designated sites. There are no known undesignated sites of national importance for either passage or wintering birds.

Table 78 Greenshank *Tringa nebularia*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	50* (1994-99)	1,000-10,000 (2005)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

- 6.194 The Greenshank breeds across the Palearctic from Scotland to eastern Siberia. In Britain it nests only on the blanket bogs of northern Scotland and occurs as a widespread passage migrant and uncommon winter visitor elsewhere. The British breeding birds are thought to make up the majority of Britain's wintering population, whereas the much more numerous spring and autumn passage populations derive from birds migrating between their Scandinavian and Siberian breeding grounds and their wintering areas in southern Europe and West Africa. In England, most birds winter along the south coast where they favour estuaries, coastal lagoons and wet grasslands where they feed on a wide range of invertebrates including shrimps, ragworms and snails.
- 6.195 **Tables 183a and 183b** list those WeBS sites which hold important numbers of Greenshanks during the winter and passage periods respectively. All the constituent sites are SSSIs and many include non-breeding Greenshanks as an interest feature at the SSSI/SPA assemblage level. Given that much of their preferred habitats in England fall within designated sites, it is estimated that up to 80% of non-breeding Greenshanks occur within SSSIs.

Table 79 Common Sandpiper *Actitis hypoleucos*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	120 pairs (2000)	4,500 pairs (2005)	11-20%
Non-breeding	50* (1996-2000)	900 (2003/04)	41-50%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	SPEC3	No

*50 is normally used as a minimum qualifying threshold for non-breeding populations

6.196 The Common Sandpiper breeds across the Palearctic from Iberia, Britain, Ireland and Fennoscandia to the Pacific coast. The species is reasonably widespread breeding bird and passage migrant in Britain, with the majority of birds wintering in West Africa. In Britain breeding birds favour upland streams, rivers, reservoirs and lakes with stony shores, with the majority located north of a line from the Severn Estuary to Flamborough Head, East Yorkshire. They feed mainly on beetles, flies and other invertebrates taken from between stones or from low vegetation. Passage birds occur in small numbers at a diversity of inland and coastal sites and are particularly numerous during the autumn passage. The species has an unfavourable status in Europe due to a recent population decline.

6.197 Common Sandpipers breed at relatively low densities across a wide area of the northern uplands in England. Although a proportion will occur within upland SSSIs, particularly those within the South and North Pennine Moors SPAs, many more are likely to be present on rivers and reservoirs outside the designated sites. No individual site supports nationally important numbers of this dispersed species. It is estimated that no more than 20% of breeding Common Sandpipers occur within SSSIs, though those birds that do occur on SSSIs will often be included as an interest feature as part of the upland breeding bird assemblage.

6.198 **Table 184** lists four WeBS sites which supported over 50 birds during the passage periods in 2003. All the constituent sites are within SSSIs and most include Common Sandpipers as an interest feature at the SSSI/SPA level. Given the dispersed nature of non-breeding birds, over a wide range of habitats both inland and coastal, it is considered likely that less than 50% occur within designated sites.

Table 80 Turnstone *Arenaria interpres*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	500 (1994-99)	10,000-100,000 (2005)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.199 Turnstones breed on arctic shores from Canada and Greenland to Scandinavia and Siberia. Although not a breeding species in Britain, non-breeding birds are widespread around the British coastline. The birds occurring in Britain originate from two separate breeding populations: the majority of wintering birds are from Canada and Greenland whereas birds responsible for a peak in the autumn are migrating from Scandinavia and Siberia to their wintering grounds in western Africa. Maximum numbers at many sites therefore occur during the autumn when both passage and early arriving over-wintering birds are present. In Britain, Turnstones favour estuaries, sand

and shingle beaches and open rocky shores, where they search for a diverse range of prey beneath stones and seaweed, including shore crabs, mussels, sandhoppers and periwinkles. They are extremely site-faithful between years, and show limited movement even at the scale of an individual estuary. Despite a steady decline in wintering numbers over the last 15 years (perhaps due to birds 'short-stopping', ie wintering closer to their breeding areas), Britain still holds internationally important numbers of Turnstones, supporting approximately 53% of the western Europe/northwest African wintering population. The species is of conservation concern in Britain due to the importance of this wintering population.

6.200 Turnstones are widely dispersed during the winter, and a large proportion occurs on non-estuarine coasts and outside WeBS sites (approximately 4,500 during the last non-estuarine wader survey in 1997/98). Thus the lists of sites given in **Tables 185a and 185b** give a far from complete picture of their distribution. **Table 185a** list eight WeBS sites of national importance for wintering birds, encompassing 19 individual sites of which all are SSSIs. All except three of the SSSIs include wintering Turnstones as an interest feature at the SSSI/SPA level. A considerable proportion of the wintering population also occurs within the non-estuarine Northumberland Shore and Durham Coast SSSIs, both of which include wintering Turnstones as an interest feature. Table 65b lists four sites of at least national importance for passage Turnstones. These encompass eight individual sites, all SSSIs and including non-breeding Turnstones as an interest feature at the SSSI/SPA level. It is estimated that up to 60% of the non-breeding Turnstone population occurs within designated sites.

Table 81 Mediterranean Gull *Larus melanocephalus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (1999-2002)	182-236 pairs (2004)	91-100%
Non-breeding	unknown	278 (2003-06)	11-20%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, Non-SPEC	No

6.201 Breeding entirely within Europe, the Mediterranean Gull's range expanded greatly during the latter half of the 20th century, and the species now breeds in small numbers in Britain (less than 0.1% of the world population). In Britain, Mediterranean Gulls nest in small numbers amongst other gulls (usually Black-headed Gulls) or terns. They nest on sparsely vegetated low-lying islands within coastal lagoons or estuaries and breeding success is often low due to tidal inundation. Mediterranean Gulls have a tendency to move between breeding sites from one year to the next and they occasionally hybridise with Black-headed Gulls. Breeding birds feed mainly on terrestrial invertebrates, particularly earthworms, and at other times on marine fish and molluscs. The species winters largely on coastal waters of the Black Sea, the Mediterranean and southwest Europe. In Britain, non-breeding birds favour coastal areas and are particularly concentrated at locations on the south and southeast coasts of England. The species is of conservation concern in the UK due to the small size of its breeding population.

6.202 Most colonies in England are on the south and southeast coasts, with outliers as far north as Lancashire. **Table 186a** list the most important sites where breeding attempts are regularly recorded. All except one of these colonies are within SSSIs, although only at four sites is the species recognized as interest feature at the SSSI/SPA level (and these do not include two of the largest colonies at Langstone Harbour in Hampshire and in the Medway Estuary, Kent). It is

estimated that 95% of Mediterranean Gulls breed within SSSIs, although only around 12% benefit from formal protection as an interest feature.

6.203 Mediterranean Gulls are widely dispersed throughout England during the winter, and individual birds can occur on the coast or at inland waterbodies almost anywhere, particularly in association with other feeding and roosting gulls. However, only a handful of locations support more than 1 or 2 birds and by far the largest of these is found on the coast off Folkestone (**Table 186b**). It is estimated that around 20% of wintering Mediterranean Gulls in England occur within SSSIs, though none currently include wintering birds as an interest feature.

Table 82 Black-headed Gull *Larus ridibundus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,300 prs(1998-2002)	82,728 prs (1998-2002)	81-90%
Non-breeding	17,000* (1993)	1,854,876 (2003-06)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

* Note that the formal GB population estimate is less recent than the England estimate

6.204 The Black-headed Gull is Britain's most widespread breeding seabird, with numbers shared equally between the coast and inland. The species breeds throughout the temperate latitudes of the Palearctic and Britain holds up to 6% of the world breeding population. Black-headed Gulls breed in colonies ranging in size from a few to over 10,000 pairs, favouring open ground in wetlands, bogs, marshes, lakes, reservoirs and gravel pits. The majority of Britain's breeding birds are resident, with numbers being greatly increased during the winter by immigrants from northern and eastern Europe. The British breeding population has grown greatly during the 20th century, probably as a result of decreased persecution and increased food availability from fishery discards, domestic refuse and increased tillage due to the intensification of farming. However, since the 1970s numbers in England and Wales have declined, as they have elsewhere in northern Europe. For this reason, and because a large proportion of the population is found at relatively few sites, the species is of conservation concern in the UK.

6.205 England supports about 65% of the British population of breeding Black-headed Gulls. Breeding birds are widely distributed across England, with the largest colonies on the south and southeast coasts and at both coastal and inland locations in the northwest. **Table 187a** lists 17 nationally important Black-headed Gull colonies of which 14 are within SSSIs. However, only six of these nationally important colonies are included as a SSSI interest feature. A further five SSSIs which include the species as an interest feature but hold less than nationally important numbers are also listed. It is estimated that over 80% of the breeding Black-headed Gulls in England are within designated sites, though only around 42% are formally protected as an interest feature.

6.206 Black-headed Gulls are almost ubiquitous in England during the winter, occurring in a wide range of habitats including estuaries, coastal sand and mudflats, reservoirs and gravel pits and farmland. Applying the latest British population estimate for wintering Black-headed Gulls of 2,155,147 birds (Banks et al. 2007), 14 sites are at or very near national importance and all except four are within SSSIs (**Table 187b**). However, only one designated site currently includes the species as an interest feature. It is estimated that at least 22% of wintering Black-headed Gulls occur within SSSIs, although only around 1% are protected as an interest feature.

Table 83 Common Gull *Larus canus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	480 pairs (1998-2002)	44 pairs (1998-2002)	91-100%
Non-breeding	4,300* (1993)	469,863 (2003-06)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	No

* Note that the formal GB population estimate is less recent than the England estimate

- 6.207 Common Gulls breed across the Palearctic and North America, with 80-90% of the world's breeding population in Europe and 7-12% breeding in Britain. They breed both colonially and solitarily on coasts and inland sites, nesting on offshore islands, moorland, gravel pits and reservoirs and, increasingly, on man-made structures including urban rooftops. Virtually the entire British population breeds in Scotland, with only insignificant numbers in England. Common Gulls are migrants or partial migrants, wintering as far south in Europe as the Bay of Biscay, and are abundant and widespread in Britain at this time, occurring inland, on estuaries and at sea. Inland birds feed on earthworms and other terrestrial invertebrates and coastal birds favour sandier shores and estuaries where they take molluscs and other intertidal prey as well as fishery discards. The species is of conservation concern both in Europe and the UK due to a recent population decline and the high level of aggregation of its breeding population.
- 6.208 Very small numbers of Common Gulls breed in England, mainly on the coasts of Suffolk and Kent and on the moorlands of the North Pennines. With only 44 breeding pairs recorded during the last survey (Mitchell et al. 2005) there are no colonies of any numerical significance in England. With all known breeding occurring within SSSIs, coverage for this species is considered complete.
- 6.209 Common Gulls occur very widely in England during the winter, with concentrations found on inland waterbodies in the London area and the Midlands north to the Solway Estuary and Northumberland. An estimate of nearly 700,000 birds was recorded in Britain during a recent survey, of which around 67% occur in England (Banks et al. 2007). Twenty sites of national importance (when applying the new population estimate) have been identified, all except six occurring within designated sites (**Table 188**). It is estimated that at least 36% of England's wintering Common Gulls occur within SSSIs, though none are formally protected as interest features.

Table 84 Lesser Black-backed Gull *Larus fuscus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,100 prs(1998-2002)	64,180 prs (1998-2002)	81-90%
Non-breeding	610* (1993)	114,369 (2003-06)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

* Note that the formal GB population estimate is less recent than the England estimate

- 6.210 The Lesser Black-backed Gull breeds in north and west Europe from Iceland to the Taimyr Peninsula in Siberia and south to Spain and Portugal. The species breeds widely around the coast of Britain and around 22% of the population breeds inland, although rarely does it occur further than 20km from the coast or an estuary (Mitchell et al. 2005). Lesser Black-backed Gulls nest colonially, often with other gull species, on a variety of habitats including offshore islands, inland freshwater bodies, coastal cliffs, saltmarshes, moorland and on rooftops. Outside the breeding season British birds migrate to Iberia and western North Africa, although they have become less migratory in recent decades, and can now be found within much of their breeding range throughout the year. In common with many other seabirds, Lesser Black-backed Gulls have increased in numbers throughout their range during much of the 20th century, largely as a result of reduced persecution and increased food availability in the form of fishery discards and refuse tips. Exceptions to this general increase are found in the northern isles of Scotland where some major declines have occurred. With over 80% of the British breeding population restricted to five broad areas, and some 35-41% of the world population breeding in Britain, the species is of conservation concern in the UK.
- 6.211 England supports nearly 60% of the British breeding population and 36% of the world population of the *graellsii* race of Lesser Black-backed Gulls. Major concentrations breed around Morecambe Bay, the Severn Estuary (mostly on rooftops in urban areas) and in East Anglia. Breeding Lesser Black-backed Gulls are an interest feature on 18 SSSIs at the SSSI/SPA level (**Table 189a**). Eight SSSIs are nationally important for breeding Lesser Black-backed Gulls, with by far the most important colonies located on South Walney Island in Cumbria and Tarnbrook Fell in the Bowland Fells, Lancashire, which together supported at least 12% of the world population, and 21% of the *graellsii* race during 2001. Two nationally important colonies are within SSSIs which exclude the species as an interest feature: The Wash in Lincolnshire and Norfolk and the Upper Solway Flats and Marshes in Cumbria. It is estimated that 88% of the English breeding population occurs within SSSIs and 82% is included as an interest feature at the SSSI/SPA level.
- 6.212 Recent surveys of wintering Lesser Black-backed Gulls have resulted in an updated estimate of 124,654 birds wintering in Britain, with the great majority (92%) occurring in England (Banks et al. 2007). Many birds winter on inland reservoirs and gravel pits in the Midlands and southern England. Based on the new population estimate, 33 sites support nationally important numbers, of which half are SSSIs (**Table 189b**). However, of these SSSIs, only two include the species as an interest feature. It is estimated that a minimum of 28% of the Lesser Black-backed Gulls wintering in England occur within SSSIs, though only around 4% receives formal protection as an interest feature.

Table 85 Herring Gull *Larus argentatus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,300 prs(1998-2002)	45,365 prs (1998-2002)	61-70%
Non-breeding	3,800 (1993)	362,821 (2003-06)	11-20%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times.	Migratory	Amber, Non-SPEC	Yes

- 6.213 Herring Gulls breed throughout much of the arctic and temperate latitudes of the northern hemisphere. In Britain, where 18-20% of the European population occurs, they are widespread around the coast, with the larger concentrations in northern and western Scotland and northwest England. Although they prefer to breed on rocky coastlines and offshore islands, a range of other habitats are used including shingle banks, inland lakes and moorland and, increasingly, rooftops

in urban areas. Herring Gulls are opportunistic feeders, foraging over intertidal and subtidal areas and also taking fishery offal and waste from landfill sites. Outside the breeding season they are common along most of the coastline and also occur inland. Herring Gull numbers increased greatly during most of the 20th century, in common with many other seabirds, largely as a result of decreased persecution and increased food availability. However, since the 1970s the population has stabilised or even decreased in parts of the species' range, with the coastal population of Britain being halved between 1970 and 2002. Reduced food available from fishery operations, sewage outlets and refuse tips and reduced breeding output due to introduced mammalian predators may all be factors in this decline. The species is of conservation concern in the UK as a result of its highly aggregated breeding distribution and the recent population decline.

- 6.214 England supports around 34% of the British breeding population of Herring Gulls, with concentrations in Cumbria, Yorkshire, the southwest and Suffolk. Only three locations support nationally important breeding populations: South Walney Island and the Upper Solway Estuary, both in Cumbria, and the Wash in Lincolnshire and Norfolk. All three are within SSSIs, although only the South Walney colony is formally protected as an interest feature (**Table 190a**). It is estimated that around 65% of breeding Herring Gulls in England occur within designated sites, with 24% receiving formal protection as an interest feature.
- 6.215 A revised and improved estimate of 729,801 Herring Gulls winter in Britain, of which around 50% occur in England. The greatest numbers of Herring Gulls present in England during the winter are found on the Ribble Estuary, Lancashire, and off Torbay, Devon. Seven sites support nationally important numbers (applying the a threshold of 7,300 birds), of which five are SSSIs (**Table 190b**). Only the Ribble Estuary includes the species as an interest feature (at the SPA level). Around 20% of the English wintering population occurs within SSSIs, although only about 5% are formally protected as an interest feature.

Table 86 Great Black-backed Gull *Larus marinus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	170 prs (1998-2002)	1,476 prs (1998-2002)	61-70%
Non-breeding	430* (1993)	53,361 birds (2003-06)	21-30%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

* Note that the formal GB population estimate is less recent than the England estimate

- 6.216 One of Britain's least numerous seabirds, Great Black-backed Gulls breed right across the North Atlantic and adjacent seas, from eastern North America and Baffin Island to Norway and Svalbard. Britain holds about 10% of the world total, with 90% of these in Scotland, where the largest numbers are found on the Outer and Inner Hebrides and the Northern Isles. Almost exclusively coastal, Great Black-backed Gulls prefer to nest on well-vegetated, rocky coastlines with stacks and cliffs. They disperse relatively short distances after breeding, usually to suitable feeding areas within 100km of the breeding colony. The species has undergone a widespread expansion of its breeding range and numbers in Britain since its near-extinction in the late 19th century. Since the 1970s the population appears to have stabilised, although some localised decreases and increases have occurred.
- 6.217 England supports some 9% of the British breeding Great Black-backed Gull population, with the great majority breeding on the Isles of Scilly and smaller numbers nesting on the coasts of Devon and Cornwall. Twelve SSSIs include the species as an interest feature at the SSSI/SPA level, all within the Isles of Scilly SPA (**Table 191a**). There are no nationally important colonies outside

designated sites. It is estimated that 70% of breeding birds in England occur within SSSIs, with around 50% included as an interest feature.

6.218 It has recently been estimated that nearly 76,000 Great Black-backed Gulls winter in Britain (Banks et al. 2007), of which 70% occur in England. Birds winter widely in England on inland gravel pits and reservoirs and east coast estuaries from Kent to Northumberland. Twenty-one nationally important populations have been identified (applying the latest GB population estimate), of which 14 occur on SSSIs (**Table 191b**). It is estimated that some 25% of wintering Great Black-backed Gulls in England occur within SSSIs, though only about 4% are formally protected as an interest feature.

Table 87 Kittiwake *Rissa tridactyla*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	3,700 pairs (1998-2002)	76,281 pairs (1998-2002)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.219 The most numerous and pelagic of the world's gulls, Kittiwakes breed widely across the arctic and temperate latitudes of the northern hemisphere. In the northeast Atlantic they breed in Iceland, the Faroes and Norway south to Spain and Portugal, with Britain supporting 7-9% of the world population (Mitchell et al. 2005). The largest colonies in Britain are situated along the northeast coasts of England, in eastern Scotland, Orkney and Shetland, with Scotland supporting 77% of the British total. Colonies on sheer cliffs can support several tens of thousands of birds and tend to be present over many decades. Kittiwakes feed mainly on small pelagic shoaling fish and planktonic, crustaceans, and sometimes take fishing offal and discards. Outside the breeding season birds are oceanic and disperse into the North Sea and North Atlantic. The species increased greatly in Britain during the first half of the 20th century, at least partly in response to decreased persecution for food, feathers and sport. Kittiwake colonies have since had mixed fortunes, with increases continuing in some regions while others have experienced significant declines, particularly in northern Scotland. The species is of conservation concern in the UK due to its highly aggregated breeding distribution.

6.220 England supports around 21% of Britain's breeding Kittiwakes, with the majority found on cliffs in the northeast and with smaller numbers along the coasts of the south and southwest. Thirteen SSSIs include the species as an interest feature at the SSSI/SPA level, although only Flamborough Head in East Yorkshire (with over 40,000 pairs and one of the largest colonies in Britain) and the Farne Islands support nationally important numbers (**Table 192**). It is estimated that 78% of England's Kittiwakes are within SSSIs and that 67% benefit from formal protection as an interest feature at the SSSI/SPA level. Two nationally important colonies are currently outside designated sites: Hunt Cliff in Cleveland and Cayton Bay to Filey in North Yorkshire.

Table 88 Sandwich Tern *Sterna sandvicensis*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	110 pairs (2000)	9,018 pairs (1998-2002)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Amber, SPEC2	No

6.221 Sandwich Terns breed around the Atlantic Ocean and adjacent seas and, in Europe, breed in Britain and Ireland and on the coasts of the North, Baltic, Mediterranean, Black and Caspian Seas. Britain holds 14-16% of the European population and the bulk of these (85%) breed around the coast of England. Sandwich Terns are amongst the most gregarious of all seabirds and the population is restricted to a small number of large colonies where nests occur at a very high density. As a consequence of this highly aggregated breeding distribution, Sandwich Terns are considered to be of conservation concern in the UK. They breed on offshore islands, small islets in lagoons and estuaries, spits and undisturbed beaches and require extensive shallow waters within foraging range of their colonies. Breeding birds feed on sandeels and clupeid fish and can travel over 15km from their colonies on foraging trips (Allcorn et al. 2003). Important numbers of Sandwich Terns are also present during the late summer, when British post-breeding adults and juveniles are joined by migrants from the Netherlands before departing for their wintering grounds in west and southwest Africa. Sandwich Terns increased in Britain during the 20th century as a result of increased protection, although the species has an unfavourable conservation status at the European level due to a recent decline.

6.222 **Table 193a** lists nationally important sites and those designated sites which include the species as an interest feature. These include the three largest colonies in Britain and Ireland on Scolt Head in Norfolk and the Farne Islands and Coquet Island in Northumberland. All the most important sites are within SSSIs and, with the exception of the colony in the Medway Estuary, all are included as SSSI/SPA interest features. All Sandwich Terns in England breed within SSSIs and around 96% are formally protected as an interest feature.

6.223 Peak numbers during the post-breeding and autumn passage periods occur from June to August in England. **Table 193b** lists the most important sites for passage Sandwich Terns (there is currently no formally accepted national threshold). All are within SSSIs although only two sites include the species as an interest feature, and only one relates to birds on passage.

Table 89 Roseate Tern *Sterna dougallii*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (2000)	76 pairs (2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Red, SPEC3	Yes

6.224 Roseate Terns have a widespread but extremely patchy global distribution, breeding on all continents except Antarctica. Birds breeding in Britain and Ireland are at the northern edge of the species' range and amount to less than 3% of the European total. They nest with other tern species, usually on small islands, and the nests are hidden in long vegetation, among boulders,

in rabbit burrows or provided nest boxes. Adults feed largely on small fish, especially sandeels. Post-breeding Roseate Terns migrate to the West African coast, with the majority of British birds wintering on the coast of Ghana. One of the rarest and most restricted breeding seabirds in Britain and Ireland, with most of the population breeding in just three colonies, the Roseate Tern is of high conservation concern in the UK. Predation, loss of nesting habitat due to disturbance and competition with gulls, and high mortality due to trapping on the African wintering grounds, are probably to blame for a rapid population decline during the late 20th century. The species is also declining in Europe where it has an unfavourable conservation status and is considered near-threatened in a global context (with only 120,000-130,000 breeding pairs).

6.225 England supports a small but important breeding population of Roseate Terns, amounting to nearly 70% of the British total. Virtually all England's breeding birds are restricted to a single, relatively large colony on Coquet Island in Northumberland (**Table 194**). Here the population has grown following intensive management effort including reducing the potential for competition with gulls and providing nest boxes. Other sites generally support single birds, often irregularly, and two SSSIs in the Isles of Scilly (Pentle Bay, Merrick & Round Islands and Samson), which are notified for the species, have not held breeding birds since the 1990s. It is estimated that coverage of breeding Roseate Terns by designated sites is virtually complete, with the main site on Coquet Island including the species as an interest feature.

Table 90 Common Tern *Sterna hirundo*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	100 pairs (2000)	4,674 pairs (1998-2002)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Non-SPEC	No

6.226 Common Terns breed throughout the temperate and subtropical latitudes of the northern hemisphere and Britain holds 3-5% of the European population. During the last national census, 46% of Britain's Common Terns nested in England (Mitchell et al. 2005), with concentrations occurring in the northeast, East Anglia and the south. The majority of Common Terns breed around the coast, with only 8% nesting inland in Britain. Inland nesting birds in England are associated with gravel pits and reservoirs along major river valleys in the southeast and the Midlands. They nest on open ground with scattered vegetation on offshore islands, shingle spits, saltmarshes and coastal lagoons, as well as artificial structures including buildings and rafts. As with other terns, Common Terns may move between colonies from year to year, perhaps in response to predation or habitat change. They feed on a wide variety of prey items including marine and freshwater fish, aquatic invertebrates and terrestrial insects. The wintering grounds are in west and southern Africa. The British population has been broadly stable over the last three decades, although trends have varied regionally. Declines in England are probably due to increased fox predation.

6.227 **Table 195** lists 28 SSSIs which include Common Terns as an interest feature, including one of the largest colonies in Britain at Coquet Island, Northumberland. An additional, undesignated nationally important colony occurs at Redcar Ore Terminal, adjacent to South Gare and Coatham Sands SSSI in Cleveland. It is estimated that 79% of England's breeding Common Terns are within SSSIs.

Table 91 Arctic Tern *Sterna paradisea*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	530 pairs (2000)	3,602 pairs (1998-2002)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Amber, Non-SPEC	No

6.228 Although Britain's most abundant breeding tern, the Arctic Tern is one of England's scarcer breeding seabirds and only 6% of the British population occurs here, with the great majority found in Northumberland. The species breeds throughout the higher latitudes of the northern hemisphere and, in Europe, as far south as Brittany. Britain supports up to 11% of the European population. Birds breeding in Britain favour coastal areas on sparsely vegetated islands, undisturbed beaches and coastal heaths. They nest colonially, often in association with other terns, particularly the Common Tern. Breeding birds feed on sandeels, herring and sprats along with smaller numbers of crustaceans and terrestrial invertebrates and it has been estimated that birds forage up to 20km from the colony. Following breeding, Arctic Terns undertake one of the longest migrations of all birds, travelling down the west African coast to winter around the Antarctic pack-ice. In common with other tern species, Arctic Tern numbers increased during much of the 20th century following the introduction of legal protection against hunting and egg-collecting. However, the population declined once more in the 1980s following the collapse of sandeel stocks in northern Scotland and predation by introduced American Minks, and species is thus of conservation concern in the UK.

6.229 **Table 196** lists those sites supporting nationally important colonies and SSSIs which include Arctic Terns as an interest feature. All breeding Arctic Terns in England are within SSSIs which include the species as an interest feature.

Table 92 Little Tern *Sterna albifrons*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	20 pairs (2000)	1,494 pairs (2004)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC3	No

6.230 Little Terns breed widely throughout the Western Palearctic, Asia and Australia, with Britain holding 8.6-11.2% of the European population. Some 80% of the British population occurs in England, where birds are found mainly in the south and east. Little Terns nest exclusively on the coast, favouring sand and shingle beaches, spits and inshore islets close to intertidal and inshore foraging areas where they feed on small fish and invertebrates. Like other terns, they readily switch breeding sites both within and between years. Their wintering areas are largely unknown, though it is likely that British birds winter with other western European birds off the West African coast. Following a recent population peak in the 1970s, Little Tern numbers declined to an all-time low during the last national census (Mitchell et al. 2005), with the most severe decline on the south coast. The species is thus of conservation concern in the UK. The decline is coincident with reduced breeding success, which has been at least partly attributed to increased levels of human

disturbance and mammalian and avian predation. The European breeding population also has an unfavourable status due to a long-term population decline.

6.231 Two-thirds of the English population breed along the East Anglian coast, particularly in Norfolk, which holds the largest British colony at Great Yarmouth North Denes. **Table 197** lists nationally important breeding locations and designated sites which include the species as an interest feature at the SSSI/SPA level. All 16 nationally important sites are within SSSIs which include the species as an interest feature at the SSSI/SPA level. It is estimated that 96% of breeding Little Terns in England occur within SSSIs.

Table 93 Guillemot *Uria aalge*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	13,000 individuals (1998-2002)	91,986 individuals (1998-2002)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

6.232 The Guillemot is one of the most abundant seabirds in the northern Atlantic and Pacific Oceans and the most numerous in Britain. In the northeast Atlantic, the breeding range extends from Portugal in the south to the Baltic and Spitsbergen in the north. The main concentrations in Britain, as with many other cliff-nesting seabirds, are in the north and west of Scotland. They generally nest on sheer cliffs and the tops of stacks and islands and are extremely gregarious, often breeding in colonies of many tens of thousands. Guillemots feed mainly offshore on a range of small, pelagic shoaling fish, especially sandeels and sprats. They tend to disperse rather than migrate after breeding and many adults remain within a few hundred kilometres of their colonies throughout the year. The British breeding population has increased greatly since the 1960s, though the rate of increase appears to have slowed in the last two decades. The cause of this increase is unknown, but may be related to oceanographic changes or an increased abundance of small fish due to commercial fishing activities. Britain supports 30-32% of the North Atlantic population of breeding Guillemots and the species is thus of conservation concern in the UK.

6.233 Guillemot population estimates are based on numbers of individuals rather than breeding pairs. England supports approximately 7% of the British population, with the largest colonies located in the northeast and smaller numbers in the southwest. **Table 198** lists eleven SSSIs notified for breeding Guillemots at the SSSI/SPA level. Of these, by far the most important are the Farne Islands in Northumberland and Flamborough Head in East Yorkshire, both of which support nationally important numbers. No other SSSI or undesignated site supports nationally important numbers. It is estimated that 98% of England's breeding Guillemots occur within SSSIs.

Table 94 Razorbill *Alca torda*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,600 individuals (1998-2002)	8,316 individuals (1998-2002)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

- 6.234 Razorbills occur in the temperate North Atlantic and adjacent Arctic Ocean, breeding in the northeast Atlantic from Brittany in the south to Svalbard in the north. It is estimated that Britain supports around 18% of the world population, with the largest colonies located in Scotland. Razorbills breed on small ledges on rocky cliffs, usually in association with colonies of other seabirds. They feed their young on sandeels, sprats and herring, which they catch underwater at depths of up to 120m or more. England supports around 7% of Britain's breeding Razorbills, with the great majority of these located on Flamborough Head in Northumberland. British breeding birds winter offshore along the Atlantic coast of Europe and North Africa and in the western Mediterranean. Overall numbers in Britain appear to have increased since the 1960s, though substantial increases at east coast colonies have been offset to some extent by declines elsewhere. Razorbills are of conservation concern in the UK due to the international importance of the British breeding population and because a large proportion of the population is restricted to relatively few breeding sites.
- 6.235 As with Guillemots, Razorbills populations are assessed by counting individual birds occupying apparently suitable breeding ledges. Nine SSSIs include breeding Razorbills as an interest feature at the SSSI/SPA level (**Table 199**), with only Flamborough Head supporting nationally important numbers. There are no nationally important undesignated sites and it is estimated that 97% of Razorbills breeding in England occur within SSSIs.

Table 95 Black Guillemot *Cephus grille*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	380 individuals (1998-2003)	7 individuals (1998-2002)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	No

- 6.236 Black Guillemots have a circumpolar distribution and are concentrated around the North Atlantic, Barents Sea and the Baltic, and Britain holds just 4-14 % of the world population. They generally nest in rock crevices and under boulders on small rocky islands and low-lying coasts. Unlike other auks, they feed mainly on intertidal species including zooplankton, crustaceans, fish and molluscs, and remain in the vicinity of their breeding sites throughout the year. Virtually all Britain's Black Guillemots breed in Scotland, with about 50% in Orkney and Shetland alone. The tiny English breeding population of 7-15 birds is confined to St Bees Head in Cumbria. The species has an unfavourable conservation status in Europe due to a recent population decline and is thus of conservation concern in the UK.
- 6.237 Black Guillemots are extremely difficult to census accurately during the breeding season as their nests are usually well concealed. For this reason, the latest survey relied on counts of adult birds prior to the breeding season when they congregate close inshore for courtship and mating. Hence population estimates for breeding birds refer to individuals rather than pairs. The single breeding site in England is a SSSI which includes the species as an interest feature. Consequently, coverage by designated sites in England is complete.

Table 96 Puffin *Fratercula arctica*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	5,800 pairs(1998-2002)	75,732 pairs (1998-2002)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC2	No

6.238 The Atlantic Puffin is found in the north Atlantic and adjacent Arctic Ocean from northwest Greenland and Spitsbergen in the north to Brittany and the Bay of Fundy in the south. Britain holds 9-11% of the world population, with strongholds in north and west Scotland. Puffins are highly colonial, typically nesting in underground burrows on offshore islands. During the winter they disperse widely from their breeding grounds, with birds from northwest Britain occurring from the north Atlantic to the Canary Islands and the Mediterranean, and birds from the east coast remaining largely within the North Sea. During this time it is thought that birds occur at a very low density across vast areas of sea. The commonest prey items during the breeding season are sandeels, sprats and herrings, with squid, crustaceans and polychaete worms taken at other times of the year. Puffin numbers have increased substantially in England since the 1980s, especially so on the Farne and Coquet Islands in Northumberland, though they have declined in the southwest. In common with many other seabird species, Puffins are of conservation concern because a very large proportion of their British population is restricted to relatively few, very large colonies. Additionally, the species has an unfavourable conservation status in Europe as it underwent a large decline during the late 20th century and its numbers remain depleted. Threats to Puffins include recent decreases in summer food availability due to the over-exploitation of fish stocks (especially sandeels) and nest predation by introduced rats.

6.239 Ten SSSIs in England include breeding Puffins as an interest feature at the SSSI/SPA level, including the Farne Islands in Northumberland which is by far the most important English site (**Table 200**). Coquet Island, again in Northumberland, is the only other nationally important site, although this SSSI does not include Puffins as an interest feature. It is estimated that virtually the entire breeding population of Puffins occurring in England is covered by designated sites, though only 77% receives formal protection.

Table 97 Short-eared Owl *Asio flammeus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	25 pairs (1988-91)	300-1,000 pairs (1988-91)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Amber, SPEC3	No

6.240 Short-eared Owls have a very wide global distribution, including North and South America, Eurasia and the Caribbean. The bulk of the European population (outside Russia) breeds in Scandinavia and Britain. Short-eared Owls are scarce breeding birds of open country in Britain, nesting on upland heather moorland, sand dunes, tall grasslands, lowland heath and newly-planted or clear-felled conifer plantations. In England they are primarily a bird of upland moorland, breeding in the Pennines, the Bowland and Staffordshire Fells, and the on North York

Moors. They take a variety of small mammal prey, particularly Short-tailed Voles. Numbers may vary considerably from year to year, perhaps due to the presence of large numbers of non-breeding birds (linked to cyclical variations in prey availability) or because site-fidelity is low. Wintering birds are much more widespread and include migrants from Iceland, Scandinavia and northeast Europe. They forage over estuaries, saltmarshes, coastal and inland wetlands, farmland and downland at this time and roost alone or communally on the ground in tall grass or low scrub. Birds wintering in England are particularly numerous in the coastal lowlands of the northwest, east and southeast, in Broadland, the East Anglia fens and on the southern lowland heaths. The species of conservation concern in Europe, and therefore in the UK, due to population declines in Russia and Eastern Europe.

- 6.241 There has been no national census of Short-eared Owls in England and it is difficult to estimate the numbers present on designated sites. Furthermore, as the species is likely to be overlooked by surveys focused on other breeding upland birds, existing estimates are likely to be considerably lower than actual numbers. However, given that a large proportion of the species' upland moorland habitat is within SSSIs, it is probable that as much as 80% of the English population occurs within designated sites. The species will be recognized as an interest feature on the majority of SSSIs, either at the SPA level or as a component of the upland breeding bird species assemblage.

Table 98 Nightjar *Caprimulgus europaeus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	35 males* (1992)	4,200 (2004)	51-60%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Red, SPEC3	Yes

* Note that the formal GB population estimate is less recent than the England estimate

- 6.242 The Eurasian Nightjar breeds from Britain, Ireland, Iberia and northwest Africa eastwards across temperate Eurasia to Mongolia. The species has undergone a general decline in both range and numbers in Britain and elsewhere in Europe, and the species is thus of conservation concern at both UK and European levels. In Britain the vast majority of Nightjars breed in England, on lowland heathland, in woodland clearings and young or clear-felled forestry plantations, with smaller numbers in coppiced woodland and on the periphery of raised bogs. They nest on bare or sparsely vegetated ground in open areas or in scattered scrub. Nightjars are crepuscular and nocturnal, feeding aerially on insects such as moths and beetles. They forage over a wide range of habitats, including heathland, deciduous and mixed woodland, orchards, gardens and riparian and other wetland habitats. Numbers declined greatly during the 20th century as a result of habitat loss to agriculture and built development. Since a low point in the early 1980s, the British Nightjar population has gradually increased to around 4,600 'churring' males in 2004, a recovery which is largely attributable to increased nesting habitat on restored heathland and the creation of extensive areas of forestry clear-fell in the 1980s and 1990s. However, numbers remain well below historical levels and only a fraction of their former range is currently occupied. The species is therefore of conservation concern in the UK. Similarly, the species has an unfavourable conservation status in Europe due to population declines.
- 6.243 Nightjars are concentrated in southwest and southeast England, with significant populations elsewhere restricted to the Suffolk Sandlings, the Breckland forests of Suffolk and Norfolk, Sherwood Forest in Nottinghamshire, Thorne & Hatfield Moors in South Yorkshire and the plantations of the North York Moors in North Yorkshire. **Table 201** lists those sites which held 46 churring males (based on the revised GB estimate) during the 2004 national survey (either individually or collectively as part of a wider SPA) or which include breeding Nightjars as an interest feature at the SSSI/SPA level. It is estimated that around 58% of breeding Nightjars in

England occur within SSSIs and that some 54% are protected as an interest feature at the SSSI/SPA level.

Table 99 Woodlark *Lullula arborea*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	15 pairs* (1997)	3,083 pairs (2006)	31-40%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Red, SPEC2	Yes

* Note that the formal GB population estimate is less recent than the England estimate

6.244 The Woodlark is almost entirely restricted to the western Palearctic with the bulk of the European population breeding in Iberia. Following a 19th century range contraction and population decline, Woodlarks are now a scarce and localised breeding species in Britain, though a partial recovery has taken place since the 1980s with the colonisation of conifer plantation clear-fells and restored heathland. Virtually the entire British breeding population is found in England, where numbers have increased from c.240 pairs in 1986 to over 3000 in 2006. Breeding birds require a mosaic of short vegetation and bare ground for foraging, longer vegetation for nesting and isolated or scattered trees for song-posts. Traditionally breeding on lowland heathland, downland, rough pasture and woodland clearings, around a third of the British population now nests in clear-felled and replanted conifer plantations, with smaller numbers on arable (especially set-aside). Woodlarks feed on insects and spiders during the breeding season and a mixture of seeds and invertebrates at other times. British Woodlarks appear to be partial migrants, generally wintering in the southwest and the near continent, and are vulnerable to severe winter weather which can have devastating effects on local populations. The species is of high conservation concern both in the UK and Europe due to historical population declines.

6.245 The Woodlark is most numerous in the southern counties between Dorset and Sussex, in the Breckland of Norfolk and Suffolk and on the Suffolk coast, with smaller populations in Devon, the East Midlands and Yorkshire. **Table 202** lists all SSSIs which include breeding Woodlarks as an interest feature at the SSSI/SPA level and/or those which support nationally important numbers (based on the revised British estimate of 3,085 pairs). Around 37% of breeding Woodlarks in England occur within SSSIs, and the majority of these are afforded formal protection as SSSI/SPA interest features. Despite recent declines, Breckland is still the most important area for the species, with the SPA holding around 11% of English population.

Table 100 Sand Martin *Riparia riparia*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1,600 nests (1988-91)	135,000 nests (1988-91)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	No

6.246 Birds feed aerially on insects, especially over water, and colonies are usually associated with waterbodies. Traditionally nesting in river banks and sandy sea cliffs, they are now commonly seen nesting in artificial banks, particularly active faces at sand and gravel quarries. British birds,

along with those from elsewhere in western Europe, winter in the African Sahel and, in common with other species wintering in this region, their numbers have been affected by prolonged drought. Their numbers and range in Britain has declined significantly over the last few decades, though the decline has been poorly quantified. As a result of this decline the species is of conservation concern both in the UK and Europe.

- 6.247 Only one site includes breeding Sand Martins as an interest feature: the River Eden and Tributaries SSSI in Cumbria which supports the largest colony in that county. Although other colonies are likely to be included within SSSIs notified for other features, in particular watercourses with steep banks and quarry faces with important geological exposures, coverage of this species by designated sites is considered to be very low.

Table 101 Swallow *Hirundo rustica*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	6,800 pairs (2000)	452,000 (1988-91)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, SPEC3	No

- 6.248 The Swallow breeds widely over much of Eurasia, North America and parts of North Africa. It is a ubiquitous summer visitor to Britain and is commonly seen hunting for aerial insects over both fields and water. Swallows nest alone or in small groups, historically using caves, cliffs and tree hollows, and now almost exclusively nesting in man-made structures, particularly bridges and farm buildings. After breeding, and before they migrate to winter in southern Africa, birds roost communally in tall vegetation, usually in reedbeds or unharvested crops. Roosts of hundreds or even thousand of birds can occur, in association with other species including Sand Martins and Yellow Wagtails. Populations of Swallows have declined in many European countries, almost certainly as a result of the intensification of farming, and they are considered to be of conservation concern in both Europe and the UK.

- 6.249 Swallows are a highly dispersed species and only aggregate in large numbers at autumnal roosts. The largest of these roosts, and any which exceed 1% of the British breeding population, can be selected for SSSI status under the 'important aggregations of non-breeding birds' category of the SSSI guidelines. Currently only two SSSIs for roosting Swallows exist, both designated for the largest Swallow roosts at the county level: Ford Green Reedbed in Staffordshire and Swan Pool and the Swag in the West Midlands.

Table 102 House Martin *Delichon urbica*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	3,800 prs (2000)	200,000-400,000 prs (1988-91)	<1%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Amber, Non-SPEC	No

- 6.250 House Martins breed across the Palearctic, from Britain and Ireland eastwards to Japan. They breed widely throughout Britain, with the highest densities in villages and small towns in rural

East Anglia, the southeast, southwest and the West Midlands. Traditionally nesting on cliff-faces, the majority of nests are now on man-made structures, particularly the eaves of houses and under bridges. House Martins breed colonially and the numbers present at individual colonies varies from year to year, with birds temporarily abandoning some sites. Evidence suggesting a significant decline in numbers during the last four decades is responsible for the species being considered of conservation concern in the UK.

- 6.251 House Martin colonies on cliffs are sufficiently unusual to be considered for SSSI selection under the 'rare species and features' category of the SSSI guidelines. Currently, four SSSIs have been designated for this feature: Tintagel Cliffs in Cornwall, Dover to Kingsdown Cliffs in Kent, Malham-Arncliffe in North Yorkshire and Studland Cliffs in Dorset. Overall coverage of cliff-nesting House Martins by designated sites is unknown but is likely to be negligible.

Table 103 Cetti's Warbler *Cettia cetti*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	6 males* (1998-2002)	1,023 males (2004)	71-80%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Non-SPEC	No

* Note that the formal GB population estimate is less recent than the England estimate

- 6.252 The Cetti's Warbler breeds in Europe, northwest Africa and eastern Asia. The species has recently colonised England following a northwards range expansion across continental Europe. Since the first records of breeding in Kent in the early 1970s, the population has risen to several hundred pairs ranging across England from Cornwall to Norfolk. Cetti's Warblers favour marshy scrub and damp willow carr, nesting along river banks and in flooded gravel pits and reedbeds with scattered scrub. They feed on small insects, snails, spiders and earthworms. Although at least some young birds disperse over considerable distances, Cetti's Warblers are resident and are thus vulnerable to hard weather during the winter when the availability of their insect prey is much reduced.
- 6.253 Although Cetti's Warblers remain most numerous in the counties of southern England, particularly Devon, Somerset, Dorset and Hampshire, numbers in Norfolk have increased dramatically in recent years. Much of their preferred nesting habitat is within designated sites, particularly along the south coast, in the Somerset Levels and in the Norfolk Broads. It is therefore conservatively estimated that up to 80% of the breeding population occupies SSSIs. Many sites include the species as an interest feature, either specifically or as part of a lowland fen or lowland open water breeding bird assemblage.

Table 104 Savi's Warbler *Locustella luscinioides*

	1% GB Population	England population estimate	Coverage by designated sites
Non-breeding	1 pair (1998-2002)	2-8 pairs (2000-2005)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Red, Non-SPEC	Yes

- 6.254 The Savi's Warbler breeds locally across the western Palearctic from England to western Kazakhstan, with the bulk of the European population occurring in the south and east. The species is an extremely rare passage migrant and breeding bird in Britain, breeding only in eastern England. Breeding birds favour large, wet reedbeds with isolated bushes or patches of scrub and their food consists largely of caterpillars and flies. Following extinction in the 1800s, the species recolonised England in the 1950s and 1960s as birds expanded their range elsewhere in Europe. Singing males occur with varying regularity at several reedbed sites, usually in East Anglia and the southeast, though proof of breeding is rarely established. The more regularly frequented sites are in the Norfolk Broads, on the Suffolk coast and in the Stour Valley in Kent. Numbers have declined since the 1990s and breeding has been confirmed on just one occasion since 2000. The Savi's Warbler is considered to be of conservation concern in the UK due to its rarity and recent population decline.
- 6.255 Given the apparent requirement of Savi's Warblers for extensive reedbeds, it is perhaps not surprising that all recent attempts at breeding have taken place on designated sites (**Table 203**). It is therefore concluded that coverage for this species is complete.

Table 105 Aquatic Warbler *Acrocephalus paludicola*

	1% GB Population	England population estimate	Coverage by designated sites
Non-Breeding	1 (1996-2000)	17 (2003)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Annex I	Red, SPEC1	Yes

- 6.256 The globally threatened and declining Aquatic Warbler breeds only in the marshes and hay meadows of central and eastern Europe. The whole population winters in West Africa and birds occur sparsely as an autumn passage migrant in wetlands in southern England. Passage birds are found in reedbeds and other wetlands with abundant rushes and sedges where they feed on large invertebrates such as dragonflies and spiders. As they are unobtrusive at this time, it is likely that many are overlooked and the majority of records come from ringing sites. As the intensity of trapping is variable across the different sites and between years, ringing effort has an impact on the total numbers recorded each year. Despite these limitations it appears that the numbers of birds occurring on passage in England have declined in recent years as the area and quality of their breeding habitats diminishes. Due to its globally threatened status, the species is of high conservation concern both in the UK and Europe.
- 6.257 Most birds are found in coastal reedbeds between Cornwall and Kent, particularly those of Marazion Marsh in Cornwall, Icklesham in Kent and Titchfield Haven in Hampshire. The most important passage areas are within SSSIs (**Table 204**) and it is therefore concluded that coverage of habitats used by passage Aquatic Warblers is virtually complete, though the species is included as an interest feature on only two sites.

Table 106 Marsh Warbler *Acrocephalus palustris*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	1 pair (1998-2002)	2-7 pairs (2004)	100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Migratory	Red, Non-SPEC	Yes

6.258 Largely confined to Europe, the Marsh Warbler is one of Britain's rarest breeding birds. The species is on the north-western edge of its range in Britain and has probably always been scarce, though numbers have declined since the early 20th century, perhaps due to changes in habitat quality and edge of range effects. Numbers breeding in England vary between years which may be linked to the numbers of overshooting spring migrants from the continent. In England breeding birds use tall vegetation such as willowherbs, nettles and hogweed, in association with scrub and, formerly, managed osier beds. Birds feed on invertebrates, especially insects and spiders. The species is of conservation concern in the UK due to its recent rapid population decline and range contraction and because of the small size of its breeding population.

6.259 Given the sporadic and transient nature of the breeding population in England, it is perhaps debatable that site designation for this species is appropriate. Indeed the only SSSI designated for the species, at its former stronghold in the Avon Valley in Worcestershire, has not supported breeding birds since the late 1990s. A sizeable Marsh Warbler population has since established in Kent, although numbers here have decreased recently. This population is located within a SSSI which includes breeding birds generally as an interest feature. Thus the coverage of this species is currently complete, though this situation may change given the transient status of breeding populations in England.

Table 107 Reed Warbler *Acrocephalus scirpaceus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	910 pairs (2000)	36,000-75,000 pairs (2005)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Non-SPEC	No

6.260 The Reed Warbler breeds across the temperate latitudes of the western Palearctic. It is a widespread and numerous summer visitor to England, though more patchily distributed and localised in the southwest and north of a line between the Humber and the Mersey. The species is most numerous in the fens and around the coasts of East Anglia, Kent and Sussex, especially in wetlands with extensive common reed and other tall vegetation and low-lying farmland with abundant reed-fringed wet ditches. Reed Warblers are semi-colonial and high densities can occur in ideal habitat conditions. European breeding Reed Warblers spend the winter in sub-Saharan Africa.

6.261 Only two SSSIs include breeding Reed Warblers as a specified interest feature: Hornsea Mere in East Yorkshire and Radipole Lake in Dorset. Additionally, many wetland SSSIs include the species as a component of the lowland fen and lowland open water breeding bird assemblages

(Appendix 3). Despite this, it is estimated that less than 10% of the English population of this widespread and dispersed species occurs on SSSIs.

Table 108 Dartford Warbler *Sylvia undata*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	15 pairs* (1994)	3,135 pairs (2006)	61-70%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	Annex I	Amber, SPEC2	No

* Note that the formal GB population estimate is less recent than the England estimate

6.262 The Dartford Warbler breeds only in lowland, dwarf-shrub vegetation of the western Mediterranean, western France, the Channel Islands, England and Wales. In England the species is a locally distributed, uncommon resident largely confined to lowland heathlands in the south and, to a lesser extent, in East Anglia. Birds prefer gorse thickets or bushes scattered across extensive areas of tall heather and are almost wholly insectivorous, taking spiders, beetles, bugs and caterpillars. Although young birds disperse during the autumn, adults generally remain on the breeding grounds throughout the year. English birds are at the northern limit of the species' range and are therefore very vulnerable to harsh winter weather. The run of relatively mild winters over the last four decades, combined with the protection and restoration of their preferred heathland habitats, are considered to be the most important factors driving a recent rapid population increase and range expansion. The numbers breeding in England increased from 420 pairs in 1984 to over 3000 in 2006. The progressive destruction of the species' preferred habitat of maquis in Spain, where 85% of the world population occurs, has led to a long-term population decline and the bird is of conservation concern in both Europe and the UK.

6.263 As virtually all lowland heathland supporting Dartford Warblers is within designated sites, it is no surprise that a large proportion of the English populations occurs on SSSIs. **Table 205** lists all designated sites which include the species as an interest feature at the SSSI/SPA level and/or sites which support nationally important numbers (based on the 2006 British population estimate of 3,208 pairs). Around 68% of England's Dartford Warblers occur on SSSIs, with the majority protected as an interest feature at the SSSI/SPA level.

Table 109 Bearded Tit *Panurus biarmicus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	5 pairs (2002)	490-538 pairs (2002)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	No	Amber, Non-SPEC	No

6.264 Bearded Tits are widely distributed, being found from southern Sweden to Spain in Europe and eastwards to China. Breeding birds are almost wholly restricted to freshwater and brackish reedbeds, with tidal reedbeds also being used during the winter. They feed on the seeds of reed, sedges, nettles and willowherbs except during the breeding season, when they are primarily insectivorous, feeding on aquatic fly larvae, beetles, spiders and snails. Their dependence on reed seed in winter makes them vulnerable to seed shortage and prolonged snow and ice cover, so high mortality can occur during periods of severe weather. Although usually sedentary, some

birds leave their breeding sites during the winter and may move several hundred kilometres to other reedbeds or waterside vegetation. Birds from elsewhere in Europe, particularly the Netherlands, also winter in English reedbeds. In common with many other fen species, Bearded Tits declined in both range and numbers during the 19th century as a result of habitat loss to agriculture. The species is of conservation concern in the UK because its small population is aggregated across a few key sites.

6.265 Virtually all Britain's breeding Bearded Tits are found in England, with only a few pairs in Scotland. Birds are concentrated in the coastal reedbeds of East Anglia, north Kent, Hampshire and Dorset, with northern outliers on the Humber Estuary and at Leighton Moss in Lancashire. All the most important sites, holding ten or more pairs, are within SSSIs and are managed as nature reserves. Bearded Tits are a specific interest feature on eleven SSSIs and included as an interest feature as part of the lowland fen breeding bird assemblage on others (Appendix 3). It is estimated that coverage by designated sites of breeding Bearded Tits is virtually complete.

Table 110 Twite *Carduelis flavirostris*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	100 pairs (1999)	200-400 pairs (2005)	91-100%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Protected at all times	Migratory	Red, Non-SPEC	Yes

6.266 The Twite has a disjunct global population, occurring in northwest Europe and from the Caucasus to China. The European population is centred on Scandinavia, Britain and Ireland. Most British birds breed in Scotland, but with a significant and isolated population present in England. The English population breeds in the Pennines, with the majority located to the south of Skipton in North Yorkshire. English Twites favour open moorland for nesting and adjacent flower-rich meadows and pastures for foraging on grass and weed seeds. They nest in tall heather and bracken, especially near the moorland edge, although they can also nest in purple moor grass, freshly burnt heather, cotton grass and rushes. Foraging fields may be up to 3.5km from nest sites in the South Pennines. Most of England's breeding birds winter on the coastal saltmarshes between the Humber and the Thames estuaries, with some birds travelling as far as the Netherlands, Belgium and France. Wintering birds form flocks and feed on the seeds of saltmarsh plants, particularly Glasswort, Annual Sea-blight, Sea Lavender and Sea Aster. The British population has undergone a long-term decline since the 1800s, most likely due to changes in habitat extent and quality in both the breeding and wintering areas, and the species is therefore considered to be of high conservation concern in the UK.

6.267 The main English nesting areas and virtually all of the coastal wintering areas are within designated sites. Although the species is only cited specifically as an interest feature on two sites (the South Pennines for breeding birds and Dengie in Essex for wintering birds), the species is included as part of the upland breeding bird assemblage on other SSSIs in the Pennines and much of the wintering habitat is within coastal SSSIs. It is therefore estimated that coverage is nearly complete for this species, with the exception of the upland meadows and pastures important for foraging birds which, generally speaking, are excluded from upland SSSIs.

Table 111 Cirl Bunting *Emberiza cirlus*

	1% GB Population	England population estimate	Coverage by designated sites
Breeding	7 pairs (2003)	697 pairs (2003)	1-10%
Wildlife & Countryside Act	Birds Directive	Conservation Status	BAP priority species
Specially protected at all times	No	Red, Non-SPEC	Yes

- 6.268 The Cirl Bunting is a resident of the Mediterranean, extending northwards to northern France, southern Britain and Germany and eastwards to Asia Minor. Once widespread across southern England, the species is now a rare resident confined to coastal south Devon. Cirl Buntings require mixed farmland with a mosaic of small fields, including well-developed hedgerows or scrub for nesting and unimproved, insect-rich grasslands when feeding their young. Adult birds feed on weed seeds, cereal grains and invertebrates taken from the ground and low vegetation, while the chicks are fed almost entirely on insects, particularly grasshoppers. During the winter they gather in small flocks and feed on weedy stubbles, fallow fields and farmyards, rarely more than 2km from their breeding grounds. The bird's decline in England probably began in the 1940s with numbers collapsing from the mid-1960s as a result of changes to agriculture, particularly the loss of winter stubbles to autumn-sown crops, the loss of insect-rich grasslands, and the removal or too frequent cutting of hedgerows. More recently, habitat loss due to housing development has the potential to threaten the remaining population. The Cirl Bunting has been the subject of a dedicated recovery programme by RSPB and Natural England since the early 1990s which has used agri-environment schemes to provide breeding and wintering habitats in south Devon. This has led to a sustained recovery of the population from 118 pairs in 1989 to nearly 700 in 2003, though the species is still confined to south Devon.
- 6.269 The majority of Cirl Buntings in England breed on or near the coast between Plymouth and Exeter in south Devon. Very little of their farmland habitat is protected by designated sites with only incidental coverage of relatively small areas of coastal grassland designated primarily for their vegetation. It is therefore likely that only feeding habitats, and perhaps some hedgerow/scrub nesting habitats, are protected in parts of the species' range, and that there is no coverage of winter feeding areas on arable land. Overall, less than 10% of the breeding population is likely to occur within SSSIs, with none receiving recognition as a specific SSSI interest feature, although some may be included a part of the scrub breeding bird assemblage (eg Prawle Point and Start Point SSSI).

Table 112 Red-throated Diver - non-breeding

Site	count	% England	WeBS Site	Interest feature
Thames Estuary (off shore)	4,302*	39.1	NA	Not SSSI
Greater Wash (North Norfolk to Flamborough Head) (offshore)	1,482*	13.5	NA	Not SSSI
Liverpool Bay	1,405*	12.8	NA	Not SSSI
North Devon coast (Hartland Pt)	320**	2.9	NA	Not SSSI
Minsmere-Walberswick Heaths & Marshes	296	2.7	Minsmere	No
Dungeness, Romney Marsh & Rye Bay	202	1.8	Lade Sands	No

Source: WeBS (1999-2004) except * derived from corrected counts from aerial surveys (Webb et al. 2004a; Wilson et al. 2007) and ** peak count from shore-based survey (1979-91)

Table 113 Little Grebe - non-breeding

Site	5YPM	% England	WeBS Site	Interest
Foulness	324	3.2	Thames Estuary	20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes				20000
Benfleet & Southend Marshes				20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Dungeness, Romney Marsh & Rye Bay	119	1.2	Lade Sands, Rye Harbour & Pett Level	SSSI
The Swale	118	1.2	Swale Estuary	SPA
Holme Pierrepont GP, Nottinghamshire	107	1.1	Holme Pierrepont GP	Not SSSI
Chichester Harbour	104	1.0	Chichester Harbour	20000

Source: WeBS (1999-2004)

Table 114 Great Crested Grebe - non-breeding

Site	count	% England	WeBS Site	Interest feature
Dungeness, Romney Marsh & Rye Bay	1,109	7.4	Lade Sands, Rye Harbour & Pett Level	SSSI
Rutland Water	710	4.7	Rutland Water	SPA
Chew Valley Lake	474	3.2	Chew Valley Lake	SSSI
Queen Mary Reservoir, Surrey	398	2.7	Queen Mary Res.	Not SSSI
Thames Estuary (offshore)	346*	2.3	NA	Not SSSI
Grafham Water	328	2.2	Grafham Water	SSSI
Cotswold Water Park (west), Gloucestershire	275	1.8	Cotswold Water Park (west)	Not SSSI
Minsmere-Walberswick	267	1.8	Minsmere	No
Pitsford Reservoir	250	1.7	Pitsford Reservoir	No
Sandwich Bay to Hacklinge Marshes	242	1.6	Pegwell Bay	No
Bewl Water, East Sussex	241	1.6	Bewl Water	Not SSSI
Lune Estuary	222	1.5	Morecambe Bay	20000
Morecambe Bay				20000
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000
Draycote Water, Warwickshire	209	1.5	Draycote Water	Not SSSI
The Swale	192	1.3	Swale Estuary	20000
Upper Solway Flats & Marshes	189	1.3	Solway Estuary	20000
Amwell Quarry	189	1.3	Lee Valley GP	No
Rye Meads				No
Turnford & Cheshunt Pits				No
Stour Estuary	185	1.2	Stour Estuary	SSSI
Cattawade Marshes				No
Blithfield Reservoir	176	1.2	Blithfield Res.	No
Dorset Coast	163**	1.1	NA	Not SSSI
Exe Estuary	163**	1.1	NA	No
Abberton Reservoir	160	1.1	Abberton Res.	SPA

Source: WeBS (1999-2004) except * derived from corrected aerial survey counts (Wilson et al. 2007) & ** from other shore-based surveys (WeBS 2000-05)

Table 115 Red-necked Grebe - non-breeding

Site	count	% England	WeBS Site	Interest feature
South Cornwall Coast	35*	35.0	NA	Not SSSI
Lindisfarne	4	4.0	Lindisfarne	20000
Northumberland Shore				No
North Norfolk Coast	5	5.0	North Norfolk Coast	20000

Source: WeBS (1999-2004) except * peak from other shore-based survey (1999/2000)

Table 116 Slavonian Grebe - non-breeding

Site	count	% Eng	WeBS Site	Interest feature
South Cornwall Coast	57*	21.1	NA	Not SSSI
Thames Estuary	32*	11.9	NA	Not SSSI
Lindisfarne	23*	8.5	Lindisfarne	20000
Northumberland Shore				No
Exe Estuary	20*	7.4	NA	SPA
Blackwater Estuary	18	6.7	Blackwater Estuary	20000
Dengie				20000
Dorset Coast	18*	6.7	NA	Not SSSI
The Solent	16*		NA	Not SSSI
Pagham Harbour	15	5.6	Pagham Hbr	No
Greater Wash	14*	5.2	NA	Not SSSI

Source: WeBS (1999-2004) except * peaks and peak means from other shore-based surveys (1994/95)

Table 117a Black-necked Grebe - breeding

Site	Interest feature	2000	2001	2002	2003	2004
Chew Valley Lake, Avon	No	1	1	-	-	-
Woolston Eyes, Cheshire	SSSI	10	15	20	11	11
Capheaton, Northumberland	Not SSSI	14	7	9	5	-
Hillfield Park Reservoir, Hertfordshire	Not SSSI	3	3	-	5	8
North Duffield Carrs	No	-	-	-	0	10
Holme Pierrepont, Nottinghamshire	Not SSSI	7	5	2	3	4
Confidential site, Nottinghamshire	Not SSSI	1	1	1	0	1
Wallsend Swallow Pond, Northumberland	Not SSSI	-	-	-	5	6
Shell (Carrington) Nature Reserve, Gt. Manchester	Not SSSI	1	-	3	5	4
Farnham GP, North Yorkshire	Not SSSI	-	-	-	1	2
Kirby-on-Bain GP, Lincolnshire	Not SSSI	-	-	-	1	1
Lindisfarne	No	1	-	-	3	-

Source: RBBP, County Bird Reports – possible, probable & confirmed pairs

Table 117b Black-necked Grebe - non-breeding

Site	count	% Site	WeBS Site	Interest feature	Season
South Cornwall Coast	35*	24.3	NA	Not SSSI	
Poole Bay & Harbour	22**	15.3	NA	20000 (part)	
Chingford Reservoirs	16	11.1	William Girling Reservoir	No	
Langstone Harbour	15	10.4	Langstone Harbour	20000	Wintering
Woolston Eyes	13	9.0	Woolston Eyes	SSSI	Breeding
Malpas Estuary	13	9.0	Fal Complex	No	
Upper Fal Estuary & Woods				No	
South Devon Coast	11*	7.6	NA	Not SSSI	

Source: WeBS (1999-2004) except * peaks or mean peaks from shore-based counts (1999/2000 & 2000-05) and ** peak from boat- and shore-based counts (2005/06)

Table 118 Fulmar - breeding

SSSI	Pairs	Interest feature
Flamborough Head, East Yorkshire	1366	SSSI
Hunstanton Cliffs, Norfolk	65	SSSI
St Bees Head, Cumbria	65	SSSI
Eastern Isles, Isles of Scilly	40	SPA
Pentle Bay, Merrick & Round Islands, Isles of Scilly	33	SPA
Chapel Down, Isles of Scilly	32	SPA
Norrard Rocks, Isles of Scilly	28	SPA
Pentire Peninsula, Cornwall	27*	SSSI
Dover to Kingsdown Cliffs, Kent	21	SSSI
Annet, Isles of Scilly	21	SPA
St Helen's, Isles of Scilly	16	SSSI
Weybourne Cliffs, Norfolk	11	SSSI
White Island, Isles of Scilly	5	SPA
Western Rocks, Isles of Scilly	2	SPA

Source: Seabird 2000 except * from Seabird Colony Register 1986

Table 119 Manx Shearwater - breeding

SSSI	Pairs	Interest feature
Lundy, Devon	166	SSSI
Annet, Isles of Scilly	123	SSSI
Shipman Head & Shipman Down (Bryher), Isles of Scilly	12	SPA
Gugh, Isles of Scilly	22	SPA
Pentle Bay, Merrick & Round Islands, Isles of Scilly	34	SPA
Big Pool & Browarth Point (St Agnes), Isles of Scilly	5	SPA
St Helen's, Isles of Scilly	5	SPA

Source: Seabird 2000

Table 120 Storm-petrel - breeding

SSSI	Pairs	Interest feature
Annet	938	SSSI
Western Rocks	283	SPA
Pentle Bay, Merrick & Round Islands	183	SSSI
Norrard Rocks	51	SPA
St Helen's	20	SPA

Source: Seabird 2000

Table 121a Cormorant - breeding

Site	Pairs	Interest feature	Season
Abberton Reservoir, Essex	370	SSSI	Breeding
Lee Valley, Greater London	252	No	
Northumbria Coast, Tyne & Wear	248	No	
Dungeness, Romney Marsh & Rye Bay	208 ³	SSSI	Breeding & Wintering
Farne Islands, Northumberland	144	SPA	Breeding
Little Paxton GP, Cambridgeshire	129	No	
Rutland Water, Leicestershire	127 ¹	20000	Wintering
Stodmarsh, Kent	110 ²	No	
Deeping GP, Lincolnshire	100	SSSI	Breeding
Besthorpe, Nottinghamshire	98	Not SSSI	
Headon Warren & West High Down, Isle of Wight	90	No	
Drakelow Wildfowl Reserve, Derbyshire	87*	Not SSSI	
Wembury Point, Devon	84	No	
Orwell Estuary, Essex	30	SSSI	Breeding
Norrard Rocks, Isles of Scilly	26	SSSI	Breeding

Source Seabirds 2000 except ¹from BTO Research Report 433 (2005), ²from County Bird Report (2001) and ³unpublished data 2001-05

Table 121b Cormorant - non-breeding

Site	5YPM	% Site	WeBS Site	Interest feature
South Walney & Piel Channel Flats				SSSI
Wyre Estuary	884	6.7	Morecambe Bay	SSSI
Lune Estuary				20000
Morecambe Bay				20000
Dee Estuary				SSSI
Inner Marsh Farm	698	5.3	Dee Estuary	No
North Wirral Foreshore				No
Sefton Coast	669	5.1	Alt Estuary	SPA
Benfleet & Southend Marshes				20000
Foulness				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	658	5.0	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Dungeness, Romney Marsh & Rye Bay	593	4.5	Dungeness GP & Rye Harbour	SSSI
Upper Solway Flats & Marshes	555	4.2	Solway Estuary	20000
Walthamstow Reservoirs	552	4.2	Walthamstow Reservoirs	SSSI
Cowpen Marsh				SPA
Seal Sands				SPA
Seaton Dunes & Common	548	4.2	Tees Estuary	SPA
South Gare & Coatham Sands				SPA
Tees & Hartlepool Foreshore & Wetlands				SPA
Abberton Reservoir	544	4.1	Abberton Reservoir	SSSI
Rutland Water	518	3.9	Rutland Water	SPA
Queen Mary Reservoir	496	3.8	Queen Mary Res	Not SSSI

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Poole Harbour				SSSI
Studland & Godlingston Heaths	445	3.4	Poole Harbour	SPA
The Moors				SPA
Wareham Meadows				SPA
The Wash	409	3.1	The Wash	20000
Gibraltar Point				20000
Hanningfield Reservoir	389	3.0	Hanningfield Reservoir	No
North Norfolk Coast	384	2.9	North Norfolk Coast	SSSI
Stiffkey Valley				No
Besthorpe & Girton GP	367	2.8	Besthorpe & Girton GP	Not SSSI
Ribble Estuary				SPA
Sefton Coast	358	2.7	Ribble Estuary	SPA
Newton Marsh				No
Little Paxton Pits	333	2.5	Little Paxton GP	No
Wraysbury & Hythe End GP	327	2.5	Wraysbury GP	No
Wraysbury No 1 GP				No
Bure Broads & Marshes	321	2.4	Ranworth & Cockshoot Broads	No
Blackwater Estuary	304	2.3	Blackwater Estuary	SSSI
Dengie				SSSI
Staines Moor	286	2.2	Staines Res.	No
Ouse Washes	265	2.0	Ouse Washes	SSSI
Colne Estuary	263	2.0	Colne Estuary	SPA
Queen Mother Reservoir	259	2.0	Queen Mother Reservoir	Not SSSI
Pagham Harbour	254	1.9	Pagham Harbour	No
Herne Bay	250	1.9	Herne Bay	Not SSSI
Wraysbury Reservoir	244	1.9	Wraysbury Res.	SSSI
Amwell Quarry				No
Rye Meads	243	1.8	Lee Valley GP	No
Turnford & Cheshunt Pits				No
Medway Estuary & Marshes	241	1.8	Medway Estuary	SPA

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Ness House Thorpeness Offshore	239	1.8	Ness House Thorpeness	Not SSSI
Rostherne Mere	237	1.8	Rostherne Mere	No

Source: WeBS (1999-2004)

Table 122 Shag - breeding

SSSI	Pairs	Interest feature
Farne Islands, Northumberland	1287	SPA
Western Rocks, Isle of Scilly	331	SSSI
Norrard Rocks, Isle of Scilly	273	SPA
Eastern Isles, Isle of Scilly	222	SPA
Annet, Isle of Scilly	193	SPA
Gerrans Bay to Camel Cove, Cornwall	124	SSSI
Samson, Isle of Scilly	43	SPA
Flamborough Head, East Yorkshire	32	SSSI
St Helen's, Isle of Scilly	22	SPA
Shipman Head & Shipman Down, Isle of Scilly	4	SPA
Pentle Bay, Merrick & Round Islands, Isle of Scilly	3	SPA
St Bees Head, Cumbria	0	SSSI

Source: Seabird 2000

Table 123 Bittern - breeding

SSSI	Interest feature	2002	2003	2004	2005	2006
Minsmere-Walberswick, Suffolk	SSSI	12	12	15	14	13
Pakefield to Easton Bavents, Suffolk	SSSI	1	4	3	4	5
Leiston-Aldburgh, Suffolk	No	1	2	1	2	2
North Norfolk Coast, Norfolk	SSSI	-	1	2	2	3
Yare Broads & Marshes, Norfolk	SPA	1	1	1	1	1
Upper Thurne Broad, Norfolk	SSSI	3	7	8	3	3
Ant Broads & Marshes, Norfolk	SPA	4	3	6	3	5
Bure Broads & Marshes, Norfolk	SPA	1	1	2	1	1
Leighton Moss, Lancashire	SSSI	2	1	1	1	1
Humber Estuary, Lincolnshire	SSSI	2	4	5	6	5
Sea Bank Clay Pits, Lincolnshire	No	-	1	1	1	1
Kingfisher Bridge, Cambridgeshire	Not SSSI	-	1	1	1	1
Ely Beet Pits, Cambridgeshire	Not SSSI	1	1	1	1	0
Dungeness, Romney Marsh & Rye Bay, Kent	SPA	1	1	2	-	-

Source: Bittern Monitoring Report 2006. All figures refer to booming males

Table 124a Little Egret - breeding

Site	Pairs	Interest feature
Foulness, Essex	51	20000
Poole Harbour, Dorset	47	20000
Northward Hill, Kent	45	No
Fort Elson, Portsmouth Harbour, Hampshire	25	Not SSSI
Kingsbridge Estuary, Devon	18	Not SSSI
Sudbourne, Suffolk	17	Not SSSI
Graveney, Kent	10	Not SSSI

Source: RBBP 2004

Table 124b Little Egret - non-breeding

Site	5YPM	% Site	WeBS Site	Interest feature
Medway Estuary & Marshes	260	10.0	Medway Estuary	20000
Chichester Harbour	238	9.2	Chichester Harbour	20000
Holehaven Creek				No
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes				20000
Foulness	167	6.4	Thames Estuary	20000
Benfleet & Southend Marshes				20000
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Poole Harbour	163	6.3	Poole Harbour	20000
Tamar-Tavy Estuary	135	5.2	Tamar Complex	SPA
Portsmouth Harbour	99	3.8	Portsmouth Hbr	No
Exe Estuary	95	3.7	Exe Estuary	20000
Dawlish Warren				No
Salcombe to Kingsbridge Estuary	87	3.3	Kingsbridge Est.	No
North Norfolk Coast	86	3.3	North Norfolk Coast	20000
Stiffkey Valley				No
Langstone Harbour	76	2.9	Langstone Hbr	20000
Pagham Harbour	69	2.7	Pagham Harbour	No
Taw-Torridge Estuary	69	2.7	Taw-Torridge Est.	No
Camel Estuary	62	2.4	Camel Estuary	Not SSSI
Colne Estuary	57	2.2	Colne Estuary	20000
The Swale	53	2.0	Swale Estuary	20000
Upper Fal Estuary & Woods	49	1.9	Fal Complex	No
River Avon System	46	1.8	River Avon: Salisbury-F'bridge	No
Hurst Castle & Lymington River Estuary	44	1.7	North West Solent	20000
Sowley Pond				20000

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Bridgwater Bay				20000
Severn Estuary	40	1.5	Severn Estuary	20000
Upper Severn Estuary				20000
Berrow Dunes				No
Hythe To Calshot Marshes				20000
Lee-On-The Solent To Itchen Est.				20000
Lincegrove & Hackett's Marshes				20000
Eling & Bury Marshes	40	1.5	Southampton Water	20000
Lower Test Valley				20000
Titchfield Haven				20000
Upper Hamble Estuary & Woods				20000
Newtown Harbour	38	1.5	Newtown Estuary	20000
Orwell Estuary	37	1.4	Orwell Estuary	20000
Lower Fal & Helford Intertidal	36	1.4	Helford Estuary	No
Blackwater Estuary	34	1.3	Blackwater Estuary	20000
Dengie				20000
Chesil Beach & the Fleet	33	1.3	Fleet & Wey	No
Avon Estuary, Devon	27	1.0	Avon Estuary	Not SSSI
Stour Estuary	27	1.0	Stour Estuary	20000
Cattawade Marshes				No
The Wash	27	1.0	The Wash	20000
Gibraltar Point				20000
Crouch & Roach Estuaries	26	1.0	Crouch-Roach Estuary	20000
Avon Valley (Bickton To Christchurch)	26	1.0	River Avon: Ringwood-Christchurch	No

Source: WeBS (1999-2004)

Table 125 Grey Heron - breeding (2003)

Site	County	count	Rank in county	Interest feature
Brockley Wood/Cleeve Wood	Avon	52	1	Not SSSI
Chew Valley Lake	Avon	33	2	No
Southill Lake & Woods	Beds	49	1	SSSI
Fortrey's Hall, Mepal	Cambs	44	1	Not SSSI
Marbury Mere (Budworth Mere)	Cheshire	154	1	Not SSSI
Comber Mere	Cheshire	47	3	SSSI
Oak Mere	Cheshire	20	8	SSSI
Tabley Mere	Cheshire	19	9	SSSI
Merthen Wood	Cornwall	10	2	No
Dallam Tower Wood, Milnthorpe	Cumbria	62	1	Not SSSI
King's Newton	Derbys	43	1	Not SSSI
Powderham Castle, Kenton	Devon	41	1	Not SSSI
Confidential Site	Dorset	47	1	Not SSSI
Leasam Heronry Wood	E Sussex	20	2	SSSI
Waltham Abbey	Essex	8	3	SSSI
Bovingdon Hall Woods	Essex	15	1	No
Elmore Court, near Gloucester	Glos	28	1	Not SSSI
Walthamstow Reservoirs	Gr London	90	1	SSSI
Confidential Site	Gr Manchester	110	1	Not SSSI
Fort Elson, Gosport	Hants	82	1	Not SSSI
Sowley Pond	Hants	8	8	SSSI
Confidential Site	Herefs & Worcs	30	1	Not SSSI
Grimley Brick Pits	Herefs & Worcs	27	3	SSSI
Berrington Pool	Herefs & Worcs	23	4	SSSI
Brocket Park, Lemsford, near Welwyn Garden City	Herts	31	1	Not SSSI
Tring Reservoirs	Herts	24	2	No

Table continued...

Site	County	count	Rank in county	Interest feature
Confidential Site	Humbs	31	1	Not SSSI
Northward Hill	Kent	150	1	SSSI
Rough Hey Wood	Lancs	50	1	SSSI
Watermead Park, Birstall GP	Leics	53	1	Not SSSI
Briery Wood Heronry, Belvoir	Leics	8	7	SSSI
Troy Wood	Lincs	50	1	SSSI
Deeping GP	Lincs	25	4	SSSI
Thornton Manor Lake, Wirral	Merseyside	28	1	Not SSSI
Confidential Site	N Yorks	39	1	Not SSSI
Sleightholme Dale	N Yorks	12	7	SSSI
Roman Wall Loughs	N'land	4	>5	No
Great Witchingham Wildlife Park	Norfolk	75	1	Not SSSI
Islington Heronry	Norfolk	52	2	SSSI
Hilgay Heronry	Norfolk	14	10	SSSI
Titchmarsh Duck Decoy	Northants	35	1	SSSI
Confidential Site	Notts	61	1	Not SSSI
Nuneham Courtenay (Furze Brake)	Oxon	53	1	Not SSSI
Denaby Ings	S Yorks	12	2	No
Fivehead Woods & Meadow	Somerset	112	1	SSSI
Confidential Site	Staffs	100	1	Not SSSI
Goat Lodge	Staffs	65	2	SSSI
Aqualate Mere	Staffs	44	4	SSSI
Breckland Farmland	Suffolk	29	1	No
Thursley	Surrey	34	1	No
WWT reserve, Washington	Tyne & Wear	31	1	Not SSSI
Parham Park	W Sussex	23	1	No
Bretton Lakes, near Wakefield	W Yorks	56	1	Not SSSI
Combe Pool	Warks	61	1	SSSI
Pit 68/74, Cotswold Water Pk	Wilts	51	1	Not SSSI

Source: BTO Research Report 429. Nationally important colonies shown in bold

Table 126 Mute Swan - non-breeding

Site	5YPM	% England	WeBS Site	Interest feature	Season
Lodmoor				No	
Radipole Lake	1,203	7.9	Fleet & Wey	No	
Chesil & The Fleet				SSSI	Breeding
Bridgwater Bay				20000	Wintering
Catcott Edington & Chilton Moors				20000	Wintering
Curry & Hay Moors				20000	Wintering
King's Sedgemoor				20000	Wintering
Moorlinch				20000	Wintering
Shapwick Heath				20000	Wintering
Southlake Moor				20000	Wintering
Tealham & Tadhams Moors	1,121	7.4	Somerset Levels	20000	Wintering
West Moor				20000	Wintering
West Sedgemoor				20000	Wintering
Westhay Heath				20000	Wintering
Westhay Moor				20000	Wintering
Wet Moor				20000	Wintering
Bridgwater Bay				20000	Wintering
Catcott Edington & Chilton Moors				20000	Wintering
Ouse Washes	762	5.0	Ouse Washes	SSSI	Wintering
Rutland Water	578	3.8	Rutland Water	No	
Tweed Catchment Rivers - England: Lower Tweed & Whiteadder	496	3.3	Tweed Estuary	SSSI	Wintering
Avon Valley - Salisbury to Fordingbridge	395	2.6	Avon Valley - Salisbury to Fordingbridge	Not SSSI	
Hornsea Mere	388	2.6	Hornsea Mere	No	

Source: WeBS 1999-2004

Table 127 Bewick's Swan - non-breeding

Site	5YPM	% Site	WeBS Site	Interest feature
Ouse Washes	5517	71.6	Ouse Washes	SSSI
Nene Washes	726	9.4	Nene Washes	SSSI
Upper Severn Estuary				SSSI
Severn Estuary	275	3.6	Severn Estuary	SPA
Bridgwater Bay				SPA
Berrow Dunes				No
Martin Mere, Burscough				SSSI
Ribble Estuary	263	3.4	Martin Mere & Ribble Estuary	SSSI
Newton Marsh				No
St Benet's Levels	231	3.0	St Benet's Levels	Not SSSI
Breydon Water	173	2.2	Breydon Water & Berney Marshes	SSSI
Halvergate Marshes				SSSI
Old Romney	172	2.2	Old Romney	Not SSSI
Curry & Hay Moors				SSSI
Moorlinch				SSSI
Southlake Moor				SSSI
Tealham & Tadham Moors				SSSI
Wet Moor				SSSI
Bridgwater Bay				SPA
Catcott Edington & Chilton Moors	146	1.9	Somerset Levels	SPA
King's Sedgemoor				SPA
Shapwick Heath				SPA
West Moor				SPA
West Sedgemoor				SPA
Westhay Heath				SPA
Westhay Moor				SPA

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Dungeness, Romney Marsh & Rye Bay	124	1.6	Walland Marsh	SSSI
Dee Estuary				20000
Inner Marsh Farm	83	1.1	Dee Estuary	No
North Wirral Foreshore				No

Source: WeBS 1999-2004

Table 128 Whooper Swan - non-breeding

Site	5YPM	% Site	WeBS Site	Interest feature
Ouse Washes	2,636	47.1	Ouse Washes	SPA
Martin Mere, Burscough				SPA
Ribble Estuary	1,623	29.0	Martin Mere & Ribble Estuary	SPA
Newton Marsh				No
Upper Solway Flats & Marshes	343	6.1	Solway Estuary	SPA
Glasson Moss				No
Nene Washes	201	3.6	Nene Washes	20000
Kirkbride, Cumbria	153	2.7	Kirkbride	Not SSSI
The Laythes Farm, Cumbria	139	2.5	The Laythes Farm	Not SSSI
River Eden & Tributaries	127	2.3	River Eden - Cargo to M6	SSSI
Tweed Catchment Rivers - England: Lower Tweed & Whiteadder	97	1.7	Norham/Horncliffe	No
Caistron Quarry, Northamptonshire	93	1.7	Caistron Quarry	Not SSSI
Brighton Meadows				20000
Derwent Ings	81	1.4	Lower Derwent Ings	20000
River Derwent				20000
Melbourne & Thornton Ings				20000
Warkworth Lane Ponds, Northamptonshire	75	1.3	Warkworth Lane Ponds	Not SSSI
Lindisfarne	67	1.2	Lindisfarne	SPA
Northumberland Shore				No

Source: WeBS 1999-2004

Table 129 Bean Goose - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Cantley Marshes	220	88.7	Middle Yare Marshes	SSSI
Yare Broads & Marshes				SSSI
Chesil & The Fleet				No
Lodmoor	8	3.2	Fleet & Wey	No
Radipole Lake				No
Brighton Meadows				SPA
Derwent Ings	7	2.8	Lower Derwent Ings	SPA
Melbourne & Thornton Ings				SPA
River Derwent				SPA
Medway Estuary & Marshes	7	2.8	Medway Est.	20000
Ouse Washes	6	2.4	Ouse Washes	SPA

Source: WeBS 1999-2004

Table 130 Pink-footed Goose - non-breeding

SSSI	5YPM	% site	WeBS Site	Interest feature
	50,516	25.8	Scolt Head	SSSI
North Norfolk Coast	38,298	19.5	Holkham Bay	SSSI
	3,065	1.6	Thornham	SSSI
Martin Mere, Burscough				SSSI
Ribble Estuary	27,738	14.1	Southwest Lancashire	SSSI
Sefton Coast				SPA
Newton Marsh				No
The Wash	27,420	13.9	Snettisham	SSSI
	5,000	2.6	Holbeach St Matthew	SSSI
Lune Estuary				SSSI
Morecambe Bay	11,048	5.6	Morecambe Bay	SPA
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
Halvergate Marshes	8,136	4.2	Breydon Water & Berney Marshes	20000
Breydon Water				20000

Table continued...

SSSI	5YPM	% site	WeBS Site	Interest feature
Lindisfarne	6,290*	3.3	Lindisfarne	20000
Northumberland Shore				No
Upper Solway Flats & Marshes	6,165	3.1	Solway Estuary	SSSI
Glasson Moss				No
Humber Estuary	4,473	2.3	Humber Estuary	20000
North Killingholme Haven Pits				No
Saltfleetby - Theddlethorpe Dunes				No
Upper Thurne Broads & Marshes	4,369	2.2	Horseley Mere	No
	2,868	1.5	Heigham Holmes	No
Holburn Lake & Moss	3,193	1.6	Holburn Moss	No

Source: WeBS 1999-2004 except * unpublished NNR data

Table 131 European White-fronted Goose - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Upper Severn Estuary	1,189	29.3	Severn Estuary	SSSI
Bridgwater Bay				SPA
Severn Estuary				SPA
Berrow Dunes	655	16.1	Swale Estuary	No
The Swale				SPA
Upper Thurne Broads & Marshes				SPA
North Norfolk Coast	370	9.1	North Norfolk Coast	SSSI
Stiffkey Valley				No
Dungeness, Romney Marsh & Rye Bay	319	7.9	Dungeness GP	SSSI
	229	5.6	Walland Marsh	
Leiston – Aldeburgh	275	6.8	North Warren & Thorpeness Mere	SSSI
Halvergate Marshes	182	4.5	Breydon Water & Berney Marshes	SSSI
Breydon Water				20000
Alde-Ore Estuary	153	3.8	Alde Complex	No

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Cantley Marshes	147	3.6	Middle Yare Marshes	SSSI
Yare Broads & Marshes				SPA
Minsmere-Walberswick Heaths & Marshes	124	3.1	Minsmere	SPA

Source: WeBS 1999-2004

Table 132 Icelandic Greylag Goose – non-breeding

Site	5YPM	% England	WeBS Site	Interest feature
River Eden & Tributaries, Cumbria	930	31.0	River Eamont/Eden: Honeypot-Edenhall	No
Lindisfarne, Northumberland	866*	28.9	Lindisfarne	20000
East Chevington Pools, Northumberland	862	28.7	East Chevington Pools	Not SSSI

Source: WeBS 1999-2004 except * unpublished NNR data

Table 133 Dark-bellied Brent Goose - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
The Wash	21,060	22.0	The Wash	SSSI
Gibraltar Point				20000
North Norfolk Coast	9,231	9.6	North Norfolk Coast	SSSI
Stiffkey Valley				No
Benfleet & Southend Marshes				SSSI
Foulness				SSSI
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	8,958	9.4	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Chichester Harbour	7,959	8.3	Chichester Hbr	SSSI
Blackwater Estuary	7,577	7.9	Blackwater Estuary	SSSI
Dengie				SSSI
Langstone Harbour	5,462	5.7	Langstone Hbr	SSSI

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Crouch & Roach Estuaries	3,880	4.1	Crouch-Roach	SSSI
Hamford Water			Hamford Water	SSSI
Colne Estuary	3,165	3.3	Colne Estuary	SSSI
Pagham Harbour	2,320	2.4	Pagham Harbour	SSSI
Deben Estuary	2,146	2.2	Deben Estuary	SSSI
Portsmouth Harbour	2,130	2.2	Portsmouth Hbr	SSSI
Hythe To Calshot Marshes				SSSI
Lee-On-The Solent To Itchen Est.				SSSI
Eling & Bury Marshes				SPA
Lincegrove & Hackett's Marshes	2,111	2.2	Southampton Water	SPA
Lower Test Valley				SPA
Titchfield Haven				SPA
Upper Hamble Estuary & Woods				SPA
Dibden Bay				No
Humber Estuary				SSSI
North Killingholme Haven Pits	2,076	2.2	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
The Swale	1,920	2.0	Swale Estuary	SPA
Hurst Castle & Lymington River Est	1,874	2.0	North West Solent	SPA
Sowley Pond				SPA
Newtown Harbour	1,746	1.8	Newtown Estuary	SSSI
Dengie	1,730	1.8	Dengie Flats	SSSI
Sandbeach Meadows				SSSI
Stour Estuary	1,713	1.8	Stour Estuary	SSSI
Cattawade Marshes				No
Poole Harbour	1,531	1.6	Poole Harbour	SSSI
Exe Estuary	1,483	1.5	Exe Estuary	SSSI
Dawlish Warren				SPA
Orwell Estuary	1,433	1.5	Orwell Estuary	SSSI
North Solent	1,431	1.5	Beaulieu Estuary	SSSI

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Chesil & The Fleet	1,428	1.5	Fleet & Wey	SSSI
Medway Estuary & Marshes	1,325	1.4	Medway Estuary	SSSI

Source: WeBS 1999-2004

Table 134 Shelduck - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Mersey Estuary	13,705	17.0	Mersey Estuary	SSSI
Dee Estuary				SSSI
Inner Marsh Farm	10,748	13.3	Dee Estuary	No
North Wirral Foreshore				No
The Wash	8,928	11.0	The Wash	SSSI
Gibraltar Point				20000
Morecambe Bay				SSSI
South Walney & Piel Channel Flats	6,939	8.6	Morecambe Bay	SSSI
Lune Estuary				SPA
Wyre Estuary				SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	5,255	6.5	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
Upper Solway Flats & Marshes	3,838	4.7	Solway Estuary	SSSI
Bridgwater Bay				SSSI
Severn Estuary	3,283	4.1	Severn Estuary	SSSI
Upper Severn Estuary				SPA
Berrow Dunes				No
Foulness				SSSI
Mucking Flats & Marshes				SSSI
South Thames Estuary & Marshes				SSSI
Benfleet & Southend Marshes	3,122	3.9	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Ribble Estuary	3,116	3.9	Ribble Estuary	SSSI
Sefton Coast				SPA
Medway Estuary & Marshes	2,627	3.3	Medway Est.	SSSI
Blackwater Estuary	2,611	3.2	Blackwater Estuary	SSSI
Dengie				20000
The Swale	2,345	2.9	Swale Estuary	SPA
Poole Harbour	2,137	2.6	Poole Harbour	SSSI
Stour Estuary	1,888	2.3	Stour Estuary	SSSI
Cattawade Marshes				No
Hamford Water	1,753	2.2	Hamford Water	SSSI
Lindisfarne	1,534	1.9	Lindisfarne	SSSI
Northumberland Shore				No
North Norfolk Coast	1,254	1.6	North Norfolk Coast	SSSI
Stiffkey Valley				No
Alde-Ore Estuary	1,197	1.5	Alde Complex	SSSI
Martin Mere, Burscough	1,038	1.3	Martin Mere	20000
Chichester Harbour	975	1.2	Chichester Hbr	SSSI
Colne Estuary	885	1.1	Colne Estuary	SPA
Crouch & Roach Estuaries	836	1.0	Crouch-Roach Estuary	SSSI
Deben Estuary	813	1.0	Deben Estuary	SSSI

Source: WeBS 1999-2004

Table 135 Wigeon - non-breeding

Site	5YPM	% Eng	WeBS Site	Interest feature
Ribble Estuary				SSSI
Sefton Coast	69,396	23.1	Ribble Estuary	SPA
Newton Marsh				No
Bridgwater Bay				SSSI
Curry & Hay Moors				SSSI
Southlake Moor				SSSI
Tealham & Tadham Moors				SSSI
Catcott Edington & Chilton				20000
King's Sedgemoor				20000
Moorlinch	31,509	10.5	Somerset Levels	20000
Shapwick Heath				20000
West Moor				20000
West Sedgemoor				20000
Westhay Heath				20000
Westhay Moor				20000
Wet Moor				20000
Ouse Washes	25,313	8.4	Ouse Washes	SSSI
North Norfolk Coast	18,972	6.3	North Norfolk Coast	SSSI
Stiffkey Valley				No
The Swale	17,253	5.7	Swale Estuary	SSSI
Breydon Water	16,868	5.6	Breydon Water & Berney Marshes	SSSI
Halvergate Marshes				SSSI
Lindisfarne	19,712*	6.5	Lindisfarne	SSSI
Northumberland Shore				No
Derwent Ings				SSSI
Melbourne & Thornton Ings	8,600	2.9	Lower Derwent Ings	SSSI
Brighton Meadows				SPA
River Derwent				SPA

Table continued...

Site	5YPM	% Eng	WeBS Site	Interest feature
Nene Washes	8,582	2.9	Nene Washes	SSSI
Blackwater Estuary	7,209	2.4	Blackwater Estuary	20000
Dengie				20000
Alde-Ore Estuary	6,964	2.3	Alde Complex	SSSI
Bridgwater Bay	6,529	2.2	Severn Estuary	SSSI
Severn Estuary				SSSI
Upper Severn Estuary				SSSI
Berrow Dunes				No
Mersey Estuary	6,497	2.2	Mersey Estuary	SSSI
Lune Estuary	6,336	2.1	Morecambe Bay	20000
Morecambe Bay				20000
S Walney & Piel Channel Flats				20000
Wyre Estuary				20000
Foulness				20000
Benfleet & Southend Marshes				20000
Mucking Flats & Marshes				20000
South Thames Est.& Marshes	5,861	1.9	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon				No
Avon Valley (Bickton To Christchurch)	5,670	1.9	River Avon - Ringwood to Christchurch	SSSI
Upper Solway Flats & Marshes	5,497	1.8	Solway Estuary	SSSI
Glasson Moss				No
Cantley Marshes	5,271	1.8	Middle Yare Marshes	SSSI
Yare Broads & Marshes				SSSI
Pulborough Brooks				SSSI
Amberley Wild Brooks	4,967	1.7	Arun Valley	20000
Waltham Brook				20000
Arundel Park				No

Table continued...

Site	5YPM	% Eng	WeBS Site	Interest feature
Dungeness, Romney Marsh & Rye Bay	4,433	1.5	Dungeness GP, Rye Harbour & Pett Level	SSSI
Dee Estuary				SSSI
Inner Marsh Farm	4,402	1.5	Dee Estuary	No
North Wirral Foreshore				No
Chesil & The Fleet				SSSI
Lodmoor	4,151	1.4	Fleet & Wey	No
Radipole Lake				No
Cassington & Yarnton GP, Oxfordshire	4,144	1.4	Cassington & Yarnton	Not SSSI

Source: WeBS 1999-2004 except * unpublished NNR data

Table 136a Gadwall - breeding

SSSI	Interest feature	2000	2001	2002	2003	2004
Shapwick Heath, Catcott Edington & Chilton Moor, Westhay Moor, Tealham & Tatham Moors, Somerset	SPA	-	-	27	21	20
Dungeness, Romney Marsh & Rye Bay*	SSSI	-	47	38	50	46
Ouse Washes, Norfolk & Cambridgeshire	SSSI	8	-	14	7	13
North Norfolk Coast, Norfolk	SPA	20+	13	-	20+	25
Woolston Eyes, Cheshire	No	21	21	9	16	4+

Source: County Bird Reports and *unpublished data. Confirmed breeding only

Table 136b Gadwall - non-breeding

Site	5YPM	% Eng	WeBS Site	Interest feature
Rutland Water	1041	6.8	Rutland Water	SSSI
Avon Valley (Bickton to Christchurch)	712	4.7	River Avon – Fordingbridge Ringwood	SSSI
Bridgwater Bay				SPA
Catcott Edington & Chilton Moors				SPA
Curry & Hay Moors				SPA
King's Sedgemoor				SPA
Moorlinch				SPA
Shapwick Heath				SPA
Southlake Moor	679	4.4	Somerset Levels	SPA
Tealham & Tadham Moors				SPA
West Moor				SPA
West Sedgemoor				SPA
Westhay Heath				SPA
Westhay Moor				SPA
Wet Moor				SPA
Bridgwater Bay				SPA
Amwell Quarry				SSSI
Rye Meads	675	4.4	Lee Valley GP	SSSI
Turnford & Cheshunt Pits				SSSI
South Thames Estuary & Marshes				SSSI
Mucking Flats & Marshes				20000
Benfleet & Southend Marshes				20000
Foulness				20000
Holehaven Creek	664	4.3	Thames Estuary	No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
South Thames Estuary & Marshes				SSSI
Mucking Flats & Marshes				20000

Table continued...

Site	5YPM	% Eng	WeBS Site	Interest feature
Ouse Washes	661	4.3	Ouse Washes	SSSI
Wraysbury & Hythe End GP	628	4.1	Wraysbury GP	SSSI
Wraysbury No 1 GP				SSSI
Abberton Reservoir	543	3.5	Abberton Reservoir	SSSI
Upper Nene Valley GP	469	3.1	Thrapston GP	SSSI
Pitsford Reservoir	421	2.8	Pitsford Reservoir	No
Bure Broads & Marshes	373	2.4	Hoveton Great Broad	SPA
Chichester GP	359	2.3	Chichester GP	Not SSSI
Upper Thurne Broads & Marshes	316	2.1	Horsey Mere	SSSI
Cotswold Water Park (West)	304	2.0	Cotswold Water Park (West)	Not SSSI
Chew Valley Lake	291	1.9	Chew Valley Lake	SSSI
Fen Drayton GP	290	1.9	Fen Drayton GP	Not SSSI
Eversley Cross & Yateley GP	280	1.8	Eversley Cross & Yateley GP	Not SSSI
Little Paxton Pits	279	1.8	Little Paxton GP	SSSI
Dungeness, Romney Marsh & Rye Bay	278	1.8	Dungeness GP, Rye Harbour & Pett Level	SSSI
Abberton Reservoir	543	3.5	Abberton Reservoir	SSSI
Hornsea Mere	278	1.8	Hornsea Mere	SSSI
Orwell Estuary	277	1.8	Orwell Estuary	SSSI
Upper Severn Estuary	277	1.8	Severn Estuary	SSSI
Bridgwater Bay				SPA
Severn Estuary				SPA
Berrow Dunes				No
Stodmarsh	276	1.8	Stodmarsh NNR & Collards Lagoon	SPA
North Norfolk Coast	255	1.7	North Norfolk Coast	20000
Stiffkey Valley				No

Table continued...

Site	5YPM	% Eng	WeBS Site	Interest feature
Brighton Meadows				20000
River Derwent	255	1.7	Lower Derwent Ings	20000
Derwent Ings				20000
Melbourne & Thornton Ings				20000
Mid Colne Valley	253	1.7	Colne Valley GP	No
Lackford Lakes	250	1.6	Lackford GPs	SSSI
Thorpe Park No 1 GP	249	1.6	Thorpe Water Park	SSSI
Fairburn & Newton Ings	247	1.6	Fairburn Ings	SSSI
Burghfield Gravel Pits	244	1.6	Burghfield GP	Not SSSI
Minsmere-Walberswick	242	1.6	Minsmere	SPA
Sutton & Lound GP	234	1.5	Sutton & Lound GP	SSSI
Alton Water	232	1.5	Alton Water	Not SSSI
Lakenheath Fen	221	1.4	Lakenheath Fen	Not SSSI
Whitlingham Country Park	218	1.4	Whitlingham CP	Not SSSI
Buckden & Stirtloe Pits	217	1.4	Buckden & Stirtloe Pits	Not SSSI
Upper Thurne Broads & Marshes	214	1.4	Hickling Broad	SSSI
Dinton Pastures	213	1.4	Dinton Pastures	Not SSSI
Woolston Eyes	196	1.3	Woolston Eyes	SSSI
Meadow Lane GP, St Ives	195	1.3	Meadow Lane GP	Not SSSI
Blagdon Lake	192	1.2	Blagdon Lake	No
Alde-Ore Estuary	191	1.2	Alde Complex	20000
Ravensthorpe Reservoir	189	1.2	Ravensthorpe Res	Not SSSI
Brent Reservoir	185	1.2	Brent Reservoir	No
Upper Nene Valley GP	182	1.2	Earls Barton GP	SSSI
Middleton Pool	179	1.2	Middle Tame Valley GP	No
Blatherwyke Lake	179	1.2	Blatherwyke Lake	Not SSSI
Higham Ferrers GP	175	1.1	Ditchford GP	SSSI

Source: WeBS 1999-2004

Table 137 Teal - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Bridgwater Bay				SSSI
Catcott Edington & Chilton Moors				SSSI
Tealham & Tadham Moors				SSSI
Curry & Hay Moors				SPA
King's Sedgemoor				SPA
Moorlinch				SPA
Shapwick Heath	23,451	18.7	Somerset Levels	SPA
Southlake Moor				SPA
Shapwick Heath				SPA
West Moor				SPA
West Sedgemoor				SPA
Westhay Heath				SPA
Westhay Moor				SPA
Wet Moor				SPA
Mersey Estuary	10,871	8.7	Mersey Estuary	SSSI
Inner Thames Marshes				SSSI
South Thames Estuary & Marshes				SSSI
Benfleet & Southend Marshes				20000
Foulness	7,712	6.2	Thames Estuary	20000
Mucking Flats & Marshes				20000
Holehaven Creek				No
West Thurrock Lagoon & Marshes				No
Ribble Estuary				SPA
Sefton Coast	6,206	5.0	Ribble Estuary	SPA
Newton Marsh				No

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Dee Estuary				SSSI
Inner Marsh Farm	5,503	4.4	Dee Estuary	SSSI
North Wirral Foreshore				No
Hamford Water	4,657	3.7	Hamford Water	SSSI
North Norfolk Coast	4,655	3.7	North Norfolk Coast	20000
Stiffkey Valley				No
Martin Mere, Burscough	4,544	3.6	Martin Mere	SSSI
Bridgwater Bay				SSSI
Severn Estuary	4,539	3.6	Severn Estuary	SPA
Upper Severn Estuary				SPA
Berrow Dunes				No
The Swale	4,450	3.6	Swale Estuary	SSSI
Ouse Washes	4,187	3.3	Ouse Washes	SSSI
Derwent Ings				SSSI
Melbourne & Thornton Ings	4,100	3.3	Lower Derwent Ings	SSSI
Brighton Meadows				SPA
River Derwent				SPA
Halvergate Marshes	3,796	3.0	Breydon Water & Berney Marshes	SPA
Breydon Water				20000
Avon Valley (Bickton To Christchurch)	3,510	2.8	River Avon - Ringwood	No
Blackwater Estuary	3,426	2.7	Blackwater Estuary	SSSI
Dengie				20000
Humber Estuary				SSSI
North Killingholme Haven Pits	3,045	2.4	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
Amberley Wild Brooks				SSSI
Pulborough Brooks	2,951	2.4	Arun Valley	SSSI
Waltham Brooks				SSSI
Arundel Park				No

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Upper Solway Flats & Marshes	2,813	2.2	Solway Estuary	20000
Glasson Moss				No
Alde-Ore Estuary	2,712	2.2	Alde Complex	SSSI
Abberton Reservoir	2,634	2.1	Abberton Res.	SSSI
Wyre Estuary	2,453	2.0	Morecambe Bay	SSSI
Lune Estuary				20000
Morecambe Bay				20000
South Walney & Piel Channel Flats				20000
Woolston Eyes	2,292	1.8	Woolston Eyes	SSSI
Otmoor	2,245	1.8	Otmoor	No
Nene Washes	2,171	1.7	Nene Washes	SSSI
Upper Thurne Broads & Marshes	2,143	1.7	Horseley Mere	SSSI
Gibraltar Point	2,117	1.7	The Wash	20000
The Wash				20000
Minsmere-Walberswick Heaths & Marshes	2,104	1.7	Minsmere	SPA

Source: WeBS 1999-2004

Table 138 Mallard - non-breeding

SSSI	5YPM	% England	WeBS Site	Interest feature
Derwent Ings	4,250	4.0	Lower Derwent Valley	SSSI
Brighton Meadows				SPA
Melbourne & Thornton Ings				SPA
River Derwent				SPA
Ouse Washes	3,970	3.8	Ouse Washes	SSSI

Source: WeBS 1999-2004

Table 139a Pintail - breeding

SSSI	Interest feature	2000	2001	2002	2003	2004
Inner Marsh Farm, Cheshire	No	-	-	-	-	3
Derwent Ings, North Yorkshire*	SPA	2	2	-	-	-
Ouse Washes, Cambridgeshire & Norfolk	SPA	-	1	-	2	-
Nene Washes, Cambridgeshire	SSSI	2	1	-	-	1

Source: RBBP except * from Ralston 2005. Records generally refer to possible/probable breeding pairs only

Table 139b Pintail - non-breeding

Site	5YPM	% sites	WeBS Site	Interest feature	Season
Dee Estuary				SSSI	Wintering
Inner Marsh Farm	5,639	16.4	Dee Estuary	SSSI	Wintering
North Wirral Foreshore				No	
Upper Solway Flats	4,299	12.5	Solway Estuary	SSSI	Wintering
Glasson Moss				No	
Morecambe Bay				SSSI	Wintering
Wyre Estuary				SSSI	Wintering
Lune Estuary	3,518	10.2	Morecambe Bay	SPA	Wintering
South Walney & Piel Channel Flats				SPA	Wintering
Ouse Washes	2,606	7.6	Ouse Washes	SSSI	Wintering
Nene Washes	2,295	6.7	Nene Washes	SSSI	Breeding Wintering
Ribble Estuary				SPA	Wintering
Sefton Coast	1,230	3.6	Ribble Estuary	SPA	Wintering
Newton Marsh				No	

Table continued...

Site	5YPM	% sites	WeBS Site	Interest feature	Season
West Moor				SSSI	Wintering
West Sedgemoor				SSSI	Wintering
Westhay Heath				SSSI	Wintering
Westhay Moor				SSSI	Wintering
Wet Moor				SSSI	Wintering
Bridgwater Bay				20000	Wintering
Catcott Edington & Chilton Moors	1,002	2.9	Somerset Levels	20000	Wintering
Curry & Hay Moors				20000	Wintering
King's Sedgemoor				20000	Wintering
Moorlinch				20000	Wintering
Shapwick Heath				20000	Wintering
Southlake Moor				20000	Wintering
Tealham & Tadham Moors				20000	Wintering
Medway Estuary & Marshes	1,118	3.3	Medway Estuary	SSSI	Wintering
North Norfolk Coast				SPA	Wintering
Stiffkey Valley	1,173	3.4	North Norfolk Coast	No	
Dee Flood Meadows	873	2.5	Dee Flood Meadows	Not SSSI	
Avon Valley (Bickton To Christchurch)	863	2.5	River Avon - Ringwood to Christchurch	No	
Upper Severn Estuary				SSSI	Wintering
Bridgwater Bay				SPA	Wintering
Severn Estuary	858	2.5	Severn Estuary	SPA	Wintering
Berrow Dunes				No	
The Swale	851	2.5	The Swale	SPA	Wintering
Duddon Estuary	782	2.3	Duddon Est.	SSSI	Wintering
The Wash				SSSI	Wintering
Gibraltar Point	625	1.8	The Wash	20000	Wintering
Stour Estuary				SSSI	Wintering
Cattawade Marshes	606	1.8	Stour Estuary	No	

Table continued...

Site	5YPM	% sites	WeBS Site	Interest feature	Season
Pulborough Brooks				SSSI	Wintering
Amberley Wild Brooks	592	1.7	Arun Valley	20000	Wintering
Waltham Brooks				20000	Wintering
Arundel Park				No	
Alde-Ore Estuary	534	1.6	Alde Complex	20000	Wintering
Ashleworth Ham	501	1.5	Ashleworth Ham	No	
Blackwater Estuary	480	1.4	Blackwater Estuary	SPA	Wintering
Dengie				20000	Wintering
Martin Mere, Burscough	448	1.3	Martin Mere	SSSI	Wintering
Coombe Hill Canal	435	1.3	Coombe Hill Canal	Not SSSI	
Pagham Harbour	428	1.2	Pagham Hbr	SSSI	Wintering
Mersey Estuary	419	1.2	Mersey Estuary	SSSI	Wintering
Breydon Water	364	1.1	Breydon Water & Berney Marshes	20000	Wintering
Halvergate Marshes				20000	Wintering
Brighton Meadows				20000	Wintering
Derwent Ings	347	1.0	Lower Derwent Ings	20000	Wintering
River Derwent				20000	Wintering
Melbourne & Thornton Ings				SSSI	Breeding
Otmoor	346	1.0	Otmoor	Not SSSI	
South Thames Estuary & Marshes				SSSI	Breeding Wintering
Mucking Flats & Marshes				SPA	Wintering
Benfleet & Southend Marshes				20000	Wintering
Foulness	335	1.0	Thames Estuary	20000	Wintering
Holehaven Creek				No	
Inner Thames Marshes				No	
West Thurrock Lagoon & Marshes				No	
Orwell Estuary	293	0.9	Orwell Estuary	SSSI	Wintering

Table continued...

Site	5YPM	% sites	WeBS Site	Interest feature	Season
Poole Harbour				SSSI	Wintering
The Moors				20000	Wintering
Wareham Meadows	291	0.9	Poole Harbour	20000	Wintering
Studland & Godlingston Heaths				No	
Minsmere-Walberswick	285	0.8	Blyth Estuary	No	

Source: WeBS 1999-2004

Table 140 Garganey - summer/passage

SSSI	5YPM	% Site	WeBS Site	Interest feature
Stodmarsh	12	16.4	Stodmarsh & Collards Lagoon	No
South Thames Estuary & Marshes				SSSI
Mucking Flats & Marshes				20000
Benfleet & Southend Marshes				20000
Foulness	8	11.0	Thames Estuary	20000
Holehaven Creek				20000
Inner Thames Marshes				20000
West Thurrock Lagoon & Marshes				20000
Wraysbury & Hythe End GP	8	11.0	Wraysbury Gravel Pits	No
Wraysbury No 1 GP				No
Ouse Washes	6	8.2	Ouse Washes	SSSI
Halvergate Marshes	5	6.8	Breydon Water/Berney Marshes	20000
Breydon Water				20000
Dungeness, Romney Marsh & Rye Bay	5	6.8	Dungeness GP	SSSI
	4	5.5	Rye Harbour & Pett Level	
North Norfolk Coast	5	6.8	North Norfolk Coast	20000
Dee Estuary	4	5.5	Dee Estuary	20000
Fairburn Ings	4	5.5	Fairburn Ings	No
Nene Washes	4	5.5	Nene Washes	SSSI
Upper Severn Estuary				20000
Bridgwater Bay	4	5.5	Severn Estuary	20000
Severn Estuary				20000
Berrow Dunes				20000
Tees & Hartlepool Foreshore & Wetlands				20000
Cowpen Marsh				20000
Seal Sands	4	5.5	Tees Estuary	20000
Seaton Dunes & Common				20000
South Gare & Coatham Sands				20000

Source: WeBS 1999-2004

Table 141a Shoveler - breeding

Site	Interest feature	1999	2000	2001	2002	2003	2004
Halvergate Marshes, Norfolk	SSSI	33	15	27	-	8	3+
North Norfolk Coast, Norfolk	SPA	54	80	60	40	72	71
Ouse Washes, Cambs	SSSI	221	72	60	116	80	16
Yare Broads & Marshes, Norfolk	No	-	-	-	9	18	39
Nene Washes, Cambs	SPA	122	175	140	87	72	85
The Swale, Kent	SPA	49	59	35	45	50	-
Leighton Moss, Lancs	SSSI	16	-	14	9	10	16
Ribble Estuary	SPA	6	8	5	9	11	7
Derwent Ings, North & East Yorkshire*	SSSI	-	60	-	-	-	-
Ham Wall, Somerset	Not SSSI	3	2	2	12	15	14
Dungeness, Romney Marsh & Rye Bay**	SSSI	-	-	18	18	17	19

Source: County Bird Reports except * Ralston 2005 & ** unpublished data

Table 141b Shoveler - non-breeding

Site	5YPM	% sites	WeBS Site	Interest feature
Bridgwater Bay				20000
Catcott Edington & Chilton Moors				20000
Curry & Hay Moors				20000
King's Sedgemoor				20000
Moorlinch				20000
Shapwick Heath				20000
Southlake Moor	1,224	10.4	Somerset Levels	20000
Tealham & Tatham Moors				20000
West Moor				20000
West Sedgemoor				20000
Westhay Heath				20000
Westhay Moor				20000
Wet Moor				20000
Ouse Washes	915	7.8	Ouse Washes	SSSI
Rutland Water	628	5.3	Rutland Water	SSSI
Chew Valley Lake	520	4.4	Chew Valley Lake	SSSI
South Thames Estuary & Marshes				SSSI
Mucking Flats & Marshes				20000
Benfleet & Southend Marshes				20000
Foulness	481	4.1	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Halvergate Marshes	478	4.1	Breydon Water & Berney Marshes	SSSI
Breydon Water				SPA
The Swale	473	4	Swale Estuary	SSSI

Table continued...

Site	5YPM	% sites	WeBS Site	Interest feature
Abberton Reservoir	415	3.5	Abberton Reservoir	SSSI
Dungeness, Romney Marsh & Rye Harbour	374	3.2	Dungeness GP	SSSI
	189	1.6	Rye Harbour & Pett Level	
Amwell Quarry				SSSI
Rye Meads	348	2.9	Lee Valley GP	SSSI
Turnford & Cheshunt Pits				SSSI
Upper Severn Estuary				SSSI
Bridgwater Bay	341	2.9	Severn Estuary	SPA
Severn Estuary				SPA
Berrow Dunes				No
Staines Moor				SSSI
Nene Washes	286	2.4	Nene Washes	SPA
Medway Estuary	280	2.4	Medway Est.	SSSI
Stodmarsh	268	2.3	Stodmarsh NNR & Collards Lagoon	SSSI
Alde-Ore Estuary	266	2.3	Alde Complex	20000
Cheyne Court	250	2.1	Walland Marsh	SSSI
Walland Marsh				No
Amberley Wild Brooks				SSSI
Pulborough Brooks	247	2.1	Arun Valley	SSSI
Waltham Brooks				SSSI
Arundel Park				No
Ribble Estuary				20000
Sefton Coast	235	2	Ribble Estuary	20000
Newton Marsh				No
Chichester GP	230	1.9	Chichester GP	Not SSSI
Wraysbury & Hythe End GP	226	1.9	Wraysbury GP	SPA
Wraysbury No 1 GP				SPA
Blithfield Reservoir	210	1.8	Blithfield Reservoir	No

Table continued...

Site	5YPM	% sites	WeBS Site	Interest feature
North Norfolk Coast	208	1.8	North Norfolk Coast	20000
Stiffkey Valley				No
Fairburn & Newton Ings	193	1.6	Fairburn Ings	SSSI
Avon Valley (Bickton To Christchurch)	186	1.6	River Avon - Fordingbridge to Ringwood	No
Tees & Hartlepool Foreshore & Wetlands	183	1.6	Tees Estuary	SSSI
Cowpen Marsh				SPA
Seal Sands				SPA
Seaton Dunes & Common				SPA
South Gare & Coatham Sands				SPA
Lune Estuary				20000
Morecambe Bay	177	1.5	Morecambe Bay	20000
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000
Upper Solway Flats & Marshes	174	1.5	Solway Estuary	20000
Fen Drayton GP	174	1.5	Fen Drayton Gravel Pits	Not SSSI
Minsmere-Walberswick Heaths & Marshes	172	1.5	Minsmere	SPA
Blagdon Lake	172	1.5	Blagdon Lake	No
Walthamstow Reservoirs	165	1.4	Walthamstow Reservoirs	SSSI
Kempton Park Reservoirs	160	1.4	Hampton & Kempton Reservoirs	SPA
Brent Reservoir	160	1.4	Brent Reservoir	No
Pitsford Reservoir	157	1.3	Pitsford Res.	SSSI
Yare Broads & Marshes	155	1.3	Middle Yare Marshes	SSSI
Cantley Marshes				SPA
Humber Estuary				20000
North Killingholme Haven Pits	150	1.3	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No

Source: WeBS 1999-2004

Table 142a Pochard - breeding

Site	Interest feature	1999	2000	2001	2002	2003	2004
Woolston Eyes, Cheshire	SSSI	22	20	15	11	15	15
Dungeness, Romney Marsh & Rye Bay, Kent	SSSI	6	8	16	18	23	23
The Swale, Kent	SSSI	28	-	50	41	36	-
Blackwater Estuary, Essex	SSSI	33	44	53	32	41	26
Foulness, Essex	SPA	-	22	11	23	3	18
Walthamstow Reservoir, Essex	SSSI	12	10	4	8	9	6
Colne Estuary, Essex	SPA	8	-	8	6	12	2
Shapwick Heath, Catcott Edington & Chilton Moor, Westhay Moor, Tealham & Tadham Moors, Somerset	SPA	9	5	3	3	18	-
Ham Wall, Somerset	Not SSSI	3	3	2	-	17	19
North Norfolk Coast	SPA	26	15	31	23	20	17
Leighton Moss, Lancashire	SSSI	6	6	9	8	8	9

Source: County Bird Reports. Total pairs or broods.

Table 142b Pochard - non-breeding

Site	5YPM	% England	WeBS Site	Interest feature
Ouse Washes	4,608	16.0	Ouse Washes	SSSI
Abberton Reservoir	4,556	15.8	Abberton Reservoir	SSSI
Middleton Pool	1,441	5.0	Middle Tame Valley GP	No
Nene Washes	1,419	4.9	Nene Washes	SSSI
Hornsea Mere	1,100	3.8	Hornsea Mere	SSSI
Upper Severn Estuary				SSSI
Bridgwater Bay				SPA
Severn Estuary	1,079	3.7	Severn Estuary	SPA
Berrow Dunes				No
Cotswold Water Park (West)	988	3.4	Cotswold Water Park (West)	Not SSSI
Chesil & The Fleet				No
Lodmoor	925	3.2	Fleet & Wey	No
Radipole Lake				No

Table continued...

Site	5YPM	% England	WeBS Site	Interest feature
Martin Mere, Burscough	788	2.7	WWT Martin Mere	SPA
Dungeness, Romney Marsh & Rye Bay	755	2.6	Dungeness GP	SSSI
Cotswold Water Park (East)	755	2.6	Cotswold Water Park (East)	Not SSSI
Lower Windrush Valley GP	734	2.6	Lower Windrush Valley GP	Not SSSI
Upper Thurne Broads & Marshes	668	2.3	Hickling Broad	SSSI
Woolston Eyes	607	2.1	Woolston Eyes	SSSI

Source: WeBS 1999-2004

Table 143 Tufted Duck - non-breeding

Site	5YPM	% Eng	WeBS Site	Interest feature
Rutland Water	5,213	11.3	Rutland Water	SPA
Abberton Reservoir	3,008	6.5	Abberton Res.	SPA
Middleton Pool	2,360	5.1	Middle Tame Valley GP	No
Hanningfield Reservoir	1,925	4.2	Hanningfield Res.	No
Pitsford Reservoir	1,689	3.7	Pitsford Reservoir	No
Walthamstow Reservoirs	1,672	3.6	Walthamstow Reservoirs	SSSI
Wraysbury & Hythe End GP	1,591	3.5	Wraysbury GP	SSSI
Wraysbury No 1 GP				No
Ouse Washes	1,427	3.1	Ouse Washes	SPA
Staines Moor	1,325	2.9	Staines Res.	SSSI
Rye Meads				SSSI
Amwell Quarry	1,166	2.5	Lee Valley GP	No
Turnford & Cheshunt Pits				No
Alton Water	1,068	2.3	Alton Water	Not SSSI
Chew Valley Lake	1,063	2.3	Chew Valley Lake	No
Besthorpe & Girton GP & Fleet	983	2.1	Besthorpe & Girton GP & Fleet	Not SSSI
Draycote Water	954	2.1	Draycote Water	Not SSSI
Tophill Low	920	2.0	Tophill Low Res.	SSSI

Source: WeBS 1999-2004

Table 144a Eider - breeding pairs

SSSI	Interest feature	2000	2001	2002	2003	2004
Farne Islands	SSSI	1,050	802	997	1,036	661
Coquet Island	SSSI	290	279	230	209	183
South Walney & Piel Channel Flats	SSSI	500	-	225	230	300

Source: County Bird Reports

Table 144b Eider - non-breeding

SSSI	5YPM	% Eng	WeBS Site	Interest feature	Season
South Walney & Piel Channel Flats				SSSI	Breeding Wintering
Morecambe Bay	6,713	54.1	Morecambe Bay	SSSI	Wintering
Lune Estuary				20000	Wintering
Wyre Estuary				20000	Wintering
Lindisfarne				SSSI	Wintering
Northumberland Shore	1,649	13.3	Lindisfarne	SSSI	Breeding
Farne Islands	1,317	10.6	Farne Islands	SSSI	Breeding
Gibraltar Point				20000	Wintering
The Wash	1,244	10.0	The Wash	20000	Wintering

Source: WeBS 1999-2004

Table 145 Common Scoter - non-breeding

Site	5YPM	% England	WeBS Site	Interest feature
Liverpool Bay	15,144*	50.5	NA	Not SSSI
North Norfolk Coast	3,678	12.3	North Norfolk Coast	20000
Dorset Coast	2,050**	6.8	NA	Not SSSI
The Wash				SSSI
Gibraltar Point	1,084	3.6	The Wash	20000
Sefton Coast	1,030	3.4	Alt Estuary	20000
Dee Estuary	813	2.7	Dee Estuary	20000

Source: WeBS 1999-2004, except * from aerial surveys (Webb et al. 2004b) and ** from other shore-based counts (1979-91)

Table 146 Goldeneye - non-breeding

SSSI	5YPM	% Eng	WeBS Site	Interest feature
Abberton Reservoir	524	5.2	Abberton Res.	SSSI
Rutland Water	419	4.2	Rutland Water	SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	406	4.1	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
Hornsea Mere	320	3.2	Hornsea Mere	SSSI
Stour Estuary	295	3.0	Stour Estuary	SPA
Cattawade Marshes				No
Tweed Catchment Rivers - England: Lower Tweed & Whiteadder	279	2.8	Tweed Estuary	SSSI
Morecambe Bay				SSSI
Lune Estuary	268	2.7	Morecambe Bay	20000
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000

Source: WeBS 1999-2004

Table 147 Smew - non-breeding

Site	5YPM	% Eng	WeBS Site	Interest feature
Wraysbury & Hythe End GP	59	16.9	Wraysbury GP	No
Wraysbury No 1 GP				No
Dungeness, Romney Marsh & Rye Bay	28	8.0	Dungeness GP	SSSI
Cotswold Water Park (West), Gloucestershire	26	7.4	Cotswold Water Park (West)	Not SSSI
Amwell Quarry				No
Rye Meads	24	6.9	Lee Valley GP	No
Turnford & Cheshunt Pits				No
Camber Sands & Rye Saltings				No
Pett Level	15	4.3	Rye Harbour & Pett Level	No
Rye Harbour				No

Table continued...

Site	5YPM	% Eng	WeBS Site	Interest feature
Fen Drayton GP, Cambs	13	3.7	Fen Drayton GP	Not SSSI
Upper Thurne Broads & Marshes	13	3.7	Horsey Mere	20000
			Hickling Broad	
Twyford GP, Berkshire	12	3.4	Twyford GP	Not SSSI
Thorpe Park No 1 GP	10	2.9	Thorpe Water Park	No
Cassington & Yarnton GP, Oxfordshire	10	2.9	Cassington & Yarnton GP	Not SSSI
Seaton GP & River, Kent	10	2.9	Seaton GP & River	Not SSSI
Rutland Water	9	2.6	Rutland Water	20000
Middleton Pool	7	2.0	Middle Tame Valley GP	No
Avon Valley (Bickton To Christchurch)	7	2.0	River Avon - Ringwood to Christchurch	No
Chew Valley Lake	6	1.7	Chew Valley Lake	No
Fairburn & Newton Ings	6	1.7	Fairburn Ings	No
Little Paxton Pits	6	1.7	Little Paxton GP	No
Bedfont & Ashford GP, Greater London	6	1.7	Bedfont & Ashford GP	Not SSSI
Hoveringham & Bleasby GP, Nottinghamshire	6	1.7	Hoveringham & Bleasby GP	Not SSSI
Little Mollands Farm Pits, Essex	6	1.7	Little Mollands Farm Pits	Not SSSI
Upper Nene Valley GP	6	1.7	Thrapston GP	No
	4	1.1	Earls Barton GP	
Eye Brook Reservoir	5	1.4	Eyebrook Reservoir	No
Meadow Lane GP St Ives, Cambridgeshire	5	1.4	Meadow Lane GP St Ives	Not SSSI
Abberton Reservoir	4	1.1	Abberton Reservoir	20000
Mid Colne Valley	4	1.1	Colne Valley GP	No
Pitsford Reservoir	4	1.1	Pitsford Reservoir	No
Leybourne & New Hythe GP, Kent	4	1.1	Leybourne & New Hythe GP	Not SSSI

Source: WeBS 1999-2004

Table 148 Red-breasted Merganser - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Poole Harbour	424	19.6	Poole Harbour	SSSI
Chesil & The Fleet				No
Lodmoor	392	18.1	Fleet & Wey	No
Radipole Lake				No
Morecambe Bay				SSSI
Lune Estuary				20000
South Walney & Piel Channel Flats	347	16.0	Morecambe Bay	20000
Wyre Estuary				20000
Duddon Estuary	199	9.2	Duddon Estuary	SSSI
Chichester Harbour	194	9.0	Chichester Harbour	SPA
Langstone Harbour	143	6.6	Langstone Harbour	SPA
Upper Solway Flats & Marshes	127	5.9	Solway Estuary	20000
Dawlish Warren				SPA
Exe Estuary	121	5.6	Exe Estuary	SPA
North Norfolk Coast	112	5.2	North Norfolk Coast	20000
Portsmouth Harbour	104	4.8	Portsmouth Harbour	No

Source: WeBS 1999-2004

Table 149 Marsh Harrier - breeding

SSSI	Pairs	% England	Interest feature
Humber Estuary, Lincs & East Yorkshire	23	6.1	SSSI
North Norfolk Coast, Norfolk	20	5.3	SPA
Minsmere-Walberswick Heaths & Marshes, Suffolk	19	5.0	SSSI
The Swale, Kent	19	5.0	No
Upper Thurne Broad & Marshes, Norfolk	17	4.5	SSSI
Strumpshaw Fen, Norfolk	6	1.6	No
Pakefield to Easton Bavents, Suffolk	6	1.6	SSSI
Colne Estuary, Essex	5	1.3	No
Bure Broads & Marshes, Norfolk	4	1.1	SPA
Yare Broads & Marshes, Norfolk	4	1.1	SSSI

Source: unpublished data from 2005 national survey

Table 150 Hen Harrier - non-breeding

Site	Count	SPA	Interest feature
The Swale	27	The Swale	No
Salisbury Plain	22	Salisbury Plain	SSSI
North Norfolk	15	North Norfolk	No
Upper Thurne Broads & Marshes	5	Broadland	SPA
Yare Broads & Marshes	0		SSSI
Cranborne Common	4	Dorset Heathlands	SPA
Holt Heath	2		SPA
Slepe Moor	1		SPA
Hyde Bog	2		SPA
Ouse Washes	8		Ouse Washes
New Forest	7	New Forest	SSSI
Stodmarsh	6	Stodmarsh	SSSI
Minsmere-Walberswick	6	Minsmere-Walberswick	SPA
Colne Estuary	5	Colne Estuary	SPA
Dengie	5	Dengie	SPA
Humber Estuary	4	Humber Estuary	SPA
Dungeness, Romney Marsh & Rye Bay	9	Dungeness	SSSI
Belton & Langley Marshes	7		Not SSSI

Source: Unpublished data from roost count survey 2005-06

Table 151 Merlin - breeding

SSSI	Pairs	SPA	Interest feature
Harbottle Moors	?	-	SSSI
Bowland Fells	20	Bowland Fells	SPA
Bollihope, Pikestone, Egglestone & Woodland Fells			SSSI
East Nidderdale Moors			SSSI
Lovely Seat-Stainton Moor			SPA
West Nidderdale, Barden & etc			SSSI
Allendale Moors			SPA
Appleby Fells			SPA
Moor House & Cross Fells			SPA
Upper Teesdale			SPA
Arkengarthdale, Gunnerside & Reeth Moors	136	North Pennine Moors	SPA
Bowes Moor			SPA
Cotherstone Moor			SPA
Geltsdale & Glendue Fells			SPA
Hexhamshire Moors			SPA
Lune Forest			SPA
Mallerstang-Swaledale Head			SPA
Muggleswick, Stanhope & Edmundbyers Commons			SSSI
Whitfield Moor, Plenmeller & Ashholme Commons			SPA
North York Moors	40	North York Moors	SSSI
Dark Peak			SSSI
Goyt Valley			SPA
Leek Moors	77	South Pennine Moors	SPA
South Pennine Moors			SSSI
East Peak District Moors			SSSI

Source: SPA citations and departmental briefs

Table 152 Peregrine - breeding

SSSI	Pairs	Interest feature
Harbottle Moor	3	SSSI
Whitfield Moors, Plenmeller & Ashholme Commons	1	SPA
Geltsdale & Glendue Fells	3	SPA
Hexhamshire Moors	1	SPA
Muggleswick Moors	2	SPA
Bollihope, Pikestone, Egglestone & Woodland Fells	3	SPA
Upper Teesdale	2	SPA
Moor House & Cross Fell	4	SPA
Appleby Fells	5	SPA
Lune Forest	1	SPA
Cotherstone Moor	1	SPA
Mallerstang-Swaledale Head	1	SPA
East Nidderdale Moors	2	SPA
West Nidderdale, Barden & Blubberhouses Moor	1	SPA
The Dark Peak	20	Assemblage
Goyt Valley	1	Assemblage

Source: unpublished data from 2002 national survey

Table 153 Black Grouse - lekking males

SSSI	Males	Interest feature
The Cheviot	2	Assemblage
Whitfield Moors, Plenmeller & Ashholme Commons	17	Assemblage
Geltsdale & Glendue Fells	5	Assemblage
Hexhamshire Moors	32	Assemblage
Muggleswick, Stanhope & Edmunbyers Commons & Blanchland Moors	18	Assemblage
Bollihope, Pikestone, Egglestone & Woodland Fells	40	Assemblage
Upper Teesdale	126	Assemblage
Teedale Allotments	8	Assemblage
Moor House & Cross Fell	21	Assemblage
Appleby Fells	4	Assemblage

Table continued...

SSSI	Males	Interest feature
Lune Forest	9	Assemblage
Cotherstone Moor	3	Assemblage
Mallerstang-Swaledale Head	3	Assemblage
Kielder & Emblehope Moors	1	Assemblage
Allendale Moors	80	Assemblage
Moor House & Cross Fell	21	Assemblage
Arkengarthdale, Gunnerside & Reeth Moors	9	Assemblage
Fairy Holes Cave	2	No
Low Gill Moor Wetlands	5	No

Source: Unpublished data, Game and Wildlife Conservancy Trust 2006

Table 154 Coot - non-breeding

Site	5YPM	% Site	WeBS Site	Interest feature
Abberton Reservoir	8396	16.6	Abberton Reservoir	SSSI
Cotswold Water Park	4061	8.0	Cotswold Water Park (W)	Not SSSI
Rutland Water	3681	7.3	Rutland Water	SPA
Amwell Quarry				No
Rye Meads	3204	6.3	Lee Valley GP	No
Turnford & Cheshunt Pits				No
Hanningfield Reservoir	3135	6.2	Hanningfield Reservoir	No
Upper Thurne Broads	3007	5.9	Hickling Broad	SPA
Cheddar Reservoir	2987	5.9	Cheddar Reservoir	No
Chew Valley Lake	2968	5.9	Chew Valley Lake	No
Chesil & The Fleet				No
Lodmoor	2580	5.1	Fleet & Wey	No
Radipole Lake				No
Cotswold Water Park	2493	4.9	Cotswold Water Park (E)	Not SSSI
Ouse Washes	2348	4.6	Ouse Washes	SSSI
Pitsford Reservoir	2253	4.5	Pitsford Reservoir	No
Lower Windrush Valley GP	2108	4.2	Lower Windrush Valley GP	Not SSSI
Middleton Pool	1890	3.7	Middle Tame Valley GP	No

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Alton Water	1884	3.7	Alton Water	Not SSSI
Little Paxton Pits	1819	3.6	Little Paxton GP	No
Dungeness, Romney Marsh & Rye Bay	1739	3.4	Dungeness GP	SSSI

Source: WeBS (1999-2004)

Table 155 Oystercatcher - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Lune Estuary				SSSI
Morecambe Bay	49,465	25.6	Morecambe Bay	SSSI
South Walney & Piel Channel Flats				SSSI
Wyre Estuary				SPA
Upper Solway Flats & Marshes	47,415	24.5	Solway Estuary	SSSI
Dee Estuary	21,992	11.4	Dee Estuary	SSSI
North Wirral Foreshore				No
Foulness				SSSI
Benfleet & Southend Marshes				SPA
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	20,347	10.5	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Ribble Estuary	18,729	9.7	Ribble Estuary	SSSI
Sefton Coast				SSSI
Gibraltar Point	14,795	7.6	The Wash	SSSI
The Wash				SSSI
Duddon Estuary	7,493	3.9	Duddon Estuary	SSSI
The Swale	5,630	2.9	Swale Estuary	SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	3,849	2.0	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
North Norfolk Coast	3,719	1.9	North Norfolk Coast	SSSI

Source: WeBS (1999-2004)

Table 156a Avocet - breeding

Site	Pairs	% England	Interest feature	Season
Humber Estuary, Lincolnshire & East Yorkshire	178	11.9	SSSI	Breeding & Wintering
Alde-Ore Estuary, Suffolk	141	9.4	SSSI	Breeding & Wintering
The Swale, Kent	128	8.5	SPA	Breeding & Wintering
The Wash, Norfolk & Lincolnshire	90	6.0	SPA	Wintering
Minsmere-Walberswick Heaths & Marshes, Suffolk	86	5.7	SSSI	Breeding & Wintering
South Thames Estuary & Marshes, Kent	86	5.7	SSSI	Wintering
Medway Estuary & Marshes, Kent	76	5.1	SPA	Breeding & Wintering
North Norfolk Coast	62	4.1	SPA	Breeding & Wintering
Foulness, Essex	58	3.9	SSSI	Breeding & Wintering
Boyton Marsh, Suffolk	55	3.7	Not SSSI	
Hamford Water, Essex	54	3.6	SPA	Wintering
Hamford Water, Essex	54	3.6	SPA	Wintering
Freiston Shore, Lincolnshire	31	2.1	Not SSSI	
Orwell Estuary, Suffolk	27	1.8	SSSI	Breeding
Halvergate Marshes, Suffolk	26	1.7	SPA	Wintering
Blackwater Estuary, Essex	24	1.6	SPA	Wintering
Pakefield to Easton Barents, Suffolk	24	1.6	No	
Dungeness, Romney Marsh & Rye Bay	15*	1.0	SSSI	Breeding

Source: RBBP, County Bird Reports 2004 & *unpublished data

Table 156b Avocet - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Poole Harbour				SSSI
Studland & Godlingston Heaths	1341	17.2	Poole Harbour	SPA
The Moors				SPA
Wareham Meadows				SPA
Alde-Ore Estuary	1135	14.5	Alde Complex	SSSI

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Foulness				SSSI
Mucking Flats & Marshes				SPA
South Thames Estuary & Marshes				SSSI
Benfleet & Southend Marshes	855	11.0	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Medway Estuary & Marshes	607	7.8	Medway Estuary	SPA
Minsmere-Walberswick	494	6.3	Blyth Estuary	SSSI
	60	0.8	Minsmere	
Exe Estuary	445	5.7	Exe Estuary	SSSI
Dawlish Warren				SPA
The Swale	426	5.5	Swale Estuary	20000
Hamford Water	423	5.4	Hamford Water	SPA
Colne Estuary	364	4.7	Colne Estuary	20000
Tamar - Tavy Estuary				SSSI
Lynher Estuary	360	4.6	Tamar Complex	SPA
St John's Lake				SPA
North Norfolk Coast	348	4.5	North Norfolk Coast	SSSI
Stiffkey Valley				SSSI
Breydon Water	223	2.9	Breydon Water & Berney Marshes	SPA
Halvergate Marshes				SPA
Deben Estuary	211	2.7	Deben Estuary	SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	189	2.4	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
The Wash	169	2.2	The Wash	20000
Gibraltar Point				20000
Blackwater Estuary	156	2.0	Blackwater Estuary	20000
Dengie				20000

Source: WeBS (1999-2004)

Table 157 Stone-curlew - breeding

SSSI	Pairs	% England	Interest feature
Breckland Farmland	138	39.8	SSSI
Breckland Forest	9	2.6	SPA
Toyd Down & Quarry	0	-	SSSI
Little Heath, Barnham	1	0.3	SSSI
Cavenham - Icklingham Heaths	5	1.4	SSSI
Barnham Heath	2	0.6	SSSI
Weeting Heath	5	1.4	SSSI
Bridgham & Brettenham Heaths	2	0.6	SSSI
Deadman's Grave, Icklingham	2	0.6	SSSI
Thetford Heaths	5	1.4	SSSI
Berner's Heath	1	0.3	SPA
Foxhole Heath, Eriswell	4	1.2	SSSI
Lakenheath Warren	2	0.6	SSSI
Stanford Training Area	4	1.2	SSSI
Minsmere-Walberswick	3	0.9	No
Pakefield to Easton Bavents	2	0.6	No
Salisbury Plain	20	5.8	SSSI
Porton Down	17	4.9	SSSI

Source: RSPB/Natural England Stone-curlew project 2006

Table 158a Ringed Plover - breeding

SSSI	Interest feature	1999	2000	2001	2002	2003	2004
North Norfolk Coast	SPA	141	168	163	168*	153	147
Hamford Water, Essex	SSSI	11	-	10	16	17	17
Dengie, Essex	SSSI	-	12-15	-	-	-	1
Colne Estuary, Essex	SPA	34	-	20-25	25+	18+	17
North Solent, Hants	SSSI	8	10	2	-	-	1
Chesil & the Fleet, Dorset	SSSI	2+	4+	5	6+	6+	5
Foulness, Essex	SPA	-	28	7	5	-	4

Source: CBP except * from dedicated survey

Table 158b Ringed Plover - wintering

SSSI	5YPM	% Eng	WeBS Site	Interest feature	Season
Benfleet & Southend Marshes				SSSI	Wintering Passage
Mucking Flats & Marshes				SSSI	Wintering Passage
South Thames Estuary & Marshes				SSSI	Wintering Passage
Foulness	829	14.4	Thames Estuary	20000	Breeding
Holehaven Creek				No	
Inner Thames Marshes				No	
West Thurrock Lagoon & Marshes				No	
Hamford Water	637	11.0	Hamford Water	SSSI	Breeding Passage Wintering
Thanet Coast	459	7.9	Thanet Coast	SSSI	Wintering
North Norfolk Coast	388	6.7	North Norfolk Coast	SSSI	Breeding Passage Wintering
Langstone Harbour	376	6.5	Langstone Harbour	SSSI	Wintering Passage
Upper Solway Flats & Marshes	376	6.5	Solway Estuary	SSSI	Wintering Passage
Humber Estuary				SSSI	Wintering Passage
North Killingholme Haven Pits	374	6.5	Humber Estuary	No	
Saltfleetby - Theddlethorpe Dunes				No	
Lune Estuary				SSSI	Wintering Passage
Morecambe Bay				SSSI	Wintering Passage
South Walney & Piel Channel Flats	368	6.4	Morecambe Bay	SPA	Wintering Passage
Wyre Estuary				SPA	Wintering Passage
Medway Estuary & Marshes	351	6.1	Medway Estuary	SSSI	Wintering Passage

Source: WeBS (1999-2004)

Table 158c Ringed Plover - passage

SSSI	5YPM	Month	WeBS Site	Interest feature	Season
Ribble Estuary	4300	May	Ribble Estuary	20000	Passage
Sefton Coast				SSSI	Wintering
North Norfolk Coast	1744	Aug	North Norfolk Coast	SSSI	Breeding Passage Wintering
The Wash	1194	May	The Wash	20000	Passage Wintering
Gibraltar Point				SSSI	Wintering
Humber Estuary				SSSI	Wintering Passage
North Killingholme Haven Pits	1169	Aug	Humber Estuary	No	
Saltfleetby - Theddlethorpe Dunes				No	
Benfleet & Southend Marshes				SSSI	Wintering Passage
Mucking Flats & Marshes				SSSI	Wintering Passage
South Thames Estuary & Marshes				SPA	Wintering Passage
Foulness	1045	Oct	Thames Estuary	20000	Breeding
Holehaven Creek				No	
Inner Thames Marshes				No	
West Thurrock Lagoon & Marshes				No	
Sefton Coast	770	Aug	Alt Estuary	SSSI	Wintering
Dee Estuary	658	Aug	Dee Estuary	SSSI	Wintering
North Wirral Foreshore				No	
Bridgwater Bay				SSSI	Wintering
Severn Estuary	595	Aug	Severn Estuary	SSSI	Wintering
Upper Severn Estuary				20000	Passage

Table continued...

SSSI	5YPM	Month	WeBS Site	Interest feature	Season
Lune Estuary				SSSI	Passage Wintering
Morecambe Bay	561	Aug	Morecambe Bay	SSSI	Passage Wintering
South Walney & Piel Channel Flats				SPA	Passage Wintering
Wyre Estuary				SPA	Passage Wintering
Stour Estuary	556	Sep	Stour Estuary	SSSI	Wintering
Cattawade Marshes				No	
Blackwater Estuary	493	Sep	Blackwater Estuary	SSSI	Passage Wintering
Dengie				SSSI	Wintering
Colne Estuary	479	Oct	Colne Estuary	SSSI	Wintering
Hamford Water	455	Sep	Hamford Water	SSSI	Wintering
Seal Sands				20000	Passage
Seaton Dunes & Common				SSSI	Passage Wintering
South Gare & Coatham Sands	436	May	Tees Estuary	SSSI	Passage Wintering
Tees & Hartlepool Foreshore & Wetlands				20000	Passage
Lindisfarne (part)	433*	May	Lindisfarne	SPA	Wintering
The Swale	414	Oct	Swale Estuary	20000	Passage
Duddon Estuary	337	May	Duddon Estuary	SSSI	Passage Wintering

Source: WeBS (1999-2004) except * unpublished NNR data

Table 159a Golden Plover - breeding

SSSI	Pairs	% England	Interest feature
Bowland Fells	?	?	SPA
Bollihope, Pikestone, Egglestone & Woodland Fells	362	6.0	SPA
East Nidderdale Moors	115	1.9	SPA
Lovely Seat-Stainton Moor	278	4.6	SPA
West Nidderdale, Barden & Blubberhouses Moors	141	2.4	SPA
Allendale Moors	193	3.2	SPA
Appleby Fells	255	4.3	SPA
Moor House & Cross Fells	297	5.0	SPA
Upper Teesdale	602	10.0	SPA
Arkengarthdale, Gunnerside & Reeth Moors	247	4.1	SPA
Bowes Moor	162	2.7	SPA
Cotherstone Moor	45	0.8	SPA
Geltsdale & Glendue Fells	100	1.7	SPA
Hexhamshire Moors	330	5.5	SPA
Lune Forest	249	4.2	SPA
Mallerstang-Swaledale Head	200	3.3	SPA
Muggleswick, Stanhope & Edmundbyers Commons & Blanchland Moors	371	6.2	SPA
Whitfield Moor, Plenmeller & Ashholme Commons	184	3.1	SPA
North York Moors	526	8.8	SSSI
Dark Peak	490	8.2	SPA
Goyt Valley	?	?	SPA
Leek Moors	?	?	SPA
South Pennine Moors	230	3.8	SSSI
East Peak District Moors	?	?	SPA

Source: SPA data 2005-07

Table 159b Golden Plover - non-breeding

Site	5YPM	% Site	WeBS Site	Interest feature
Humber Estuary				SSSI
North Killingholme Haven Pits	37,674	19.9	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
The Wash	23,103	12.2	The Wash	20000
Gibraltar Point				20000
Blackwater Estuary	13,292	7.0	Blackwater Estuary	SPA
Dengie				20000
Breydon Water	10,689	5.7	Breydon Water & Berney Marshes	SPA
Halvergate Marshes				SPA
The Swale	8,781	4.6	Swale Estuary	20000
Minsmere-Walberswick Heaths & Marshes	6,755	3.6	Blyth Estuary	No
Sandwich Bay to Hacklinge Marshes	6,006	3.2	Pegwell Bay	No
Old Moor	5,800	3.1	Old Moor	Not SSSI
Lynemouth Ash Lagoons	5,700	3.0	Lynemouth Ash Lagoons	Not SSSI
Upper Solway Flats & Marshes	5,486	2.9	Solway Estuary	SSSI
Glasson Moss				No
Stour Estuary	5,392	2.9	Stour Estuary	20000
Cattawade Marshes				No
Foulness				20000
Benfleet & Southend Marshes				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	5,205	2.8	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Lune Estuary				20000
Morecambe Bay	5,176	2.7	Morecambe Bay	20000
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000
Catcott Edington & Chilton Moors				SSSI
Moorlinch				SSSI
Tealham & Tatham Moors				SSSI
Curry & Hay Moors				SPA
King's Sedgemoor				SPA
Shapwick Heath				SPA
Southlake Moor	5,103	2.7	Somerset Levels	SPA
West Moor				SPA
West Sedgemoor				SPA
Westhay Heath				SPA
Westhay Moor				SPA
Wet Moor				SPA
Bridgwater Bay				20000
Medway Estuary & Marshes	4,500	2.4	Medway Estuary	SPA
Dungeness, Romney Marsh & Rye Bay	3,977	2.1	Lade Sands, Rye Harbour & Pett Level	SSSI
Taw-Torridge Estuary	3,970	2.1	Taw-Torridge Estuary	No
Lindisfarne	3,844	2.0	Lindisfarne	SSSI
Northumberland Shore				SSSI
Clifford Hill GP	3,760	2.0	Clifford Hill GP	Not SSSI
North Norfolk Coast	3,741	2.0	North Norfolk Coast	20000
Stiffkey Valley				No
Newton Marsh				SSSI
Ribble Estuary	3,654	1.9	Ribble Estuary	SPA
Sefton Coast				SPA
Colne Estuary	3,622	1.9	Colne Estuary	20000

Table continued...

Site	5YPM	% Site	WeBS Site	Interest feature
Derwent Ings				SSSI
Brighton Meadows	3,400	1.8	Lower Derwent Ings	SPA
Melbourne & Thornton Ings				SPA
River Derwent				SPA
Mersey Estuary	3,320	1.8	Mersey Estuary	SSSI
Hamford Water	2,892	1.5	Hamford Water	No
Ouse Washes	2,825	1.5	Ouse Washes	20000
Northumberland Shore	2,733	1.4	St Mary`s Island	SSSI
Stanwick GP	2,692	1.4	Stanwick GP	Not SSSI

Source: WeBS (1999-2004)

Table 160 Grey Plover - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Gibraltar Point	8,309	16.4	The Wash	SSSI
The Wash				SSSI
Benfleet & Southend Marshes				SSSI
Foulness				SSSI
Mucking Flats & Marshes				SSSI
South Thames Estuary & Marshes	5,327	10.5	Thames Estuary	SSSI
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Sefton Coast	4,377	8.6	Ribble Estuary	SSSI
Ribble Estuary				SPA
Dengie	4,254	8.4	Dengie Flats	SSSI
Stour Estuary	3,203	6.3	Stour Estuary	SSSI
Blackwater Estuary	3,008	5.9	Blackwater Estuary	SSSI
Dengie				SSSI
Hamford Water	2,682	5.3	Hamford Water	SSSI
Chichester Harbour	2,144	4.2	Chichester Harbour	SSSI

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
The Swale	2,134	4.2	Swale Estuary	SSSI
Sefton Coast	2,022	4.0	Alt Estuary	SSSI
Medway Estuary & Marshes	1,990	3.9	Medway Estuary	SSSI
Humber Estuary				SSSI
North Killingholme Haven Pits	1,766	3.5	Humber Estuary	No
Saltfleetby – Theddlethorpe Dunes				No
Lindisfarne	1,500*	2.9	Lindisfarne	SSSI
Northumberland Shore				No
North Norfolk Coast	1,486	2.9	North Norfolk Coast	SSSI
Dee Estuary	1,440	2.8	Dee Estuary	SSSI
North Wirral Foreshore				No
Colne Estuary	1,195	2.4	Colne Estuary	SSSI
Langstone Harbour	1,093	2.2	Langstone Harbour	SSSI
Pagham Harbour	977	1.9	Pagham Harbour	SSSI
Lune Estuary				SSSI
Morecambe Bay	968	1.9	Morecambe Bay	SSSI
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
Orwell Estuary	593	1.2	Orwell Estuary	SSSI
Upper Solway Flats & Marshes	569	1.1	Solway Estuary	SSSI

Source: WeBS (1999-2004) except * unpublished NNR data

Table 161a Lapwing - breeding on lowland wet grassland

Site	Pairs	Interest feature	Season
Ouse Washes, Norfolk & Cambridgeshire	363	SSSI	Breeding
North Norfolk Coast	277	SPA	Wintering
The Swale, Kent	240	SPA	Wintering
Nene Washes, Cambridgeshire	174	No	
Cantley Marshes, Norfolk	101	No	
Rockliffe Marshes , Cumbria	97	SPA	Wintering
Chedgrave Marshes, Norfolk	89	Not SSSI	Wintering
Alconbury Airfield, Cambridgeshire	89*	Not SSSI	Wintering
Wath Ings/Broomhill Flash, South Yorkshire	76	Not SSSI	Wintering
Halvergate Marshes, Norfolk	74	SPA	Wintering
Martin Mere, Lancashire	73	No	
Heversham Moss, Cumbria	65	Not SSSI	Wintering
South Thames Estuary & Marshes, Kent	64	SPA	Wintering
Otmoor, Oxfordshire	61	No	
South Walney & Piel Channel Flats, Cumbria	45	SPA	Wintering
Meathop Marsh, Cumbria	45	Not SSSI	Wintering
Newton Marsh, Lancashire	42	No	
Lindisfarne, Northumberland	37	No	
Northward Hill RSPB Reserve, Kent	31	Not SSSI	Wintering
Dibden Bay, Hampshire	29	SSSI	Breeding

Source: Breeding waders of wet meadows survey 2002 except * from dedicated survey 2000

Table 161b Lapwing - non-breeding

SSSI	5YPM	% England	WeBS Site	Interest
The Wash	46,775	17.1	The Wash	20000
Gibraltar Point				20000
Catcott Edington & Chilton Moors				SSSI
Tealham & Tadham Moors				SSSI
Bridgwater Bay				SPA
Curry & Hay Moors				SPA
King's Sedgemoor				SPA
Moorlinch				SPA
Shapwick Heath	40,299	14.7	Somerset Levels	SPA
Southlake Moor				SPA
West Moor				SPA
West Sedgemoor				SPA
Westhay Heath				SPA
Westhay Moor				SPA
Wet Moor				SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	27,297	10.0	Humber Estuary	No
Saltfleetby – Theddlethorpe Dunes				No

Source: WeBS (1999-2004)

Table 162 Knot - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Lune Estuary				SSSI
Morecambe Bay	66,607	19.0	Morecambe Bay	SSSI
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
Gibraltar Point	62,823	17.9	The Wash	SSSI
The Wash				SSSI
Humber Estuary				SSSI
North Killingholme Haven Pits	36,018	10.3	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
Ribble Estuary	34,386	9.8	Ribble Estuary	SSSI
Sefton Coast				SSSI
Benfleet & Southend Marshes				SSSI
Foulness				SSSI
South Thames Estuary & Marshes				SSSI
Mucking Flats & Marshes	31931	9.1	Thames Estuary	SPA
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Sefton Coast	29,636	8.4	Alt Estuary	SSSI
Dee Estuary	26,397	7.5	Dee Estuary	SSSI
North Wirral Foreshore				SSSI
North Norfolk Coast	13,191	3.8	North Norfolk Coast	SSSI
Dengie	12,888	3.7	Dengie Flats	SSSI
Sandbeach Meadows				No
Upper Solway Flats & Marshes	9,168	2.6	Solway Estuary	SSSI
Stour Estuary	7,985	2.3	Stour Estuary	SSSI
Lindisfarne	4,313	1.2	Lindisfarne	20000
Northumberland Shore				No
Hamford Water	3,603	1.0	Hamford Water	20000

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Dengie	3,442	1.0	Blackwater Estuary	SSSI
Blackwater Estuary				20000
The Swale	3,210	0.9	Swale Estuary	SSSI
Medway Estuary & Marshes	2,855	0.8	Medway Estuary	20000
Seal Sands	2,812	0.8	Tees Estuary	SSSI
Seaton Dunes & Common				SSSI
South Gare & Coatham Sands				SSSI
Tees & Hartlepool Foreshore & Wetlands				SPA

Source: WeBS (1999-2004)

Table 163a Sanderling - wintering

SSSI	5YPM	% site	WeBS Site	Interest feature
Ribble Estuary	2,375	26.4	Ribble Estuary	SSSI
Sefton Coast				SSSI
Sefton Coast	1,210	13.4	Alt Estuary	SSSI
North Norfolk Coast	1,026	11.4	North Norfolk Coast	SSSI
Benfleet & Southend Marshes				20000
Foulness				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	537	6.0	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Thanet Coast	501	5.6	Thanet Coast	SSSI
Duddon Estuary	490	5.4	Duddon Estuary	SSSI
Humber Estuary				SSSI
North Killingholme Haven Pits	442	4.9	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
Gibraltar Point	415	4.6	The Wash	SSSI
The Wash				SSSI

Table continued...

SSSI	5YPM	% site	WeBS Site	Interest feature
Upper Solway Flats & Marshes	370	4.1	Solway Estuary	SSSI
Seaton Dunes & Common				SSSI
South Gare & Coatham Sands	322	3.6	Tees Estuary	SSSI
Tees & Hartlepool Foreshore & Wetlands				SSSI
Seal Sands				SPA
Dee Estuary	312	3.5	Dee Estuary	20000
North Wirral Foreshore				No
Lune Estuary				SSSI
Morecambe Bay	289	3.2	Morecambe Bay	SSSI
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000
Lindisfarne	252*	2.8	Lindisfarne	SPA
Durham Coast	250	2.8	Durham Coast	SSSI
Tees & Hartlepool Foreshore & Wetlands				SSSI
Sandwich Bay To Hacklinge Marshes	234	2.6	Pegwell Bay	SSSI
Dungeness, Romney Marsh & Rye Bay	229	2.5	Lade Sands	SSSI

Source: WeBS (1999-2004) except * unpublished NNR data

Table 163b Sanderling - passage

SSSI	5YPM	Month	WeBS Site	Interest feature	Season
Ribble Estuary	8,203	May	Ribble Estuary	SSSI	Wintering & Passage
Sefton Coast				SSSI	Wintering & Passage
Sefton Coast	6,894	Aug	Alt Estuary	SSSI	Wintering & Passage
North Norfolk Coast	1,029	Aug	North Norfolk Coast	SSSI	Wintering

Table continued...

SSSI	5YPM	Month	WeBS Site	Interest feature	Season
Benfleet & Southend Marshes				20000	Wintering
Foulness				20000	Wintering
Mucking Flats & Marshes				20000	Wintering
South Thames Estuary & Marshes	1,394	Oct	Thames Estuary	20000	Wintering
Holehaven Creek				No	
Inner Thames Marshes				No	
West Thurrock Lagoon & Marshes				No	
Humber Estuary				SSSI	Wintering & Passage
North Killingholme Haven Pits	594	Aug	Humber Estuary	No	
Saltfleetby – Theddlethorpe Dunes				No	
Gibraltar Point				SSSI	Wintering
The Wash	2563	Aug	The Wash	SSSI	Wintering & Passage
Upper Solway Flats & Marshes	577	May	Solway Estuary	SSSI	Wintering
Seaton Dunes & Common				SSSI	Wintering
South Gare & Coatham Sands				SSSI	Wintering
Tees & Hartlepool Foreshore & Wetlands	461	May	Tees Estuary	SSSI	Wintering
Seal Sands				SPA	Wintering
Lune Estuary				SSSI	Wintering & Passage
Morecambe Bay				SSSI	Wintering & Passage
South Walney & Piel Channel Flats	640	Aug	Morecambe Bay	20000	Wintering & Passage
Wyre Estuary				20000	Wintering & Passage

Source: WeBS (1999-2004)

Table 164 Purple Sandpiper - non-breeding

SSSI	5YPM	% England	WeBS Site	Interest feature
Farne Islands	201	18.4	Farne Islands	No
Northumberland Shore	151	13.9	Seahouses to Budle Point	SSSI
Durham Coast	122	11.2	Durham Coast	SSSI
South Gare & Coatham Sands	109	10.0	Tees Estuary	No

Source: WeBS (1999-2004)

Table 165 Dunlin - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Mersey Estuary	49,368	12.2	Mersey Est.	SSSI
Benfleet & Southend Marshes				SSSI
Foulness				SSSI
Mucking Flats & Marshes				SSSI
South Thames Estuary & Marshes	48,922	12.1	Thames Estuary	SSSI
West Thurrock Lagoon & Marshes				SSSI
Holehaven Creek				No
Inner Thames Marshes				No
The Wash	36,414	9	The Wash	SSSI
Gibraltar Point				20000
Dee Estuary				SSSI
North Wirral Foreshore	32,135	8	Dee Estuary	SSSI
Inner Marsh Farm				No
Bridgwater Bay				SSSI
Severn Estuary	23,312	5.8	Severn Estuary	SSSI
Upper Severn Estuary				SPA
Berrow Dunes				No

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Morecambe Bay				SSSI
Lune Estuary	22,413	5.6	Morecambe Bay	SPA
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	21,558	5.3	Humber Estuary	No
Saltfleetby-Theddlethorpe Dunes				No
Langstone Harbour	21,397	5.3	Langstone Harbour	SSSI
Blackwater Estuary	20,422	5.1	Blackwater Estuary	SSSI
Dengie				SSSI
Ribble Estuary				SSSI
Sefton Coast	20,304	5	Ribble Estuary	SSSI
Newton Marsh				No
Chichester Harbour	15,923	4	Chichester Harbour	SSSI
Upper Solway Flats & Marshes	15,801	3.9	Solway Est.	SSSI
Stour Estuary	13,918	3.5	Stour Estuary	SSSI
Cattawade Marshes				No
The Swale	9,916	2.5	Swale Estuary	SSSI
Dengie	9,254	2.3	Dengie Flats	SSSI
Sandbeach Meadows				No
Lindisfarne	8,551	2.1	Lindisfarne	SPA
Medway Estuary & Marshes	7,363	1.8	Medway Est.	SSSI
Colne Estuary	7,321	1.8	Colne Estuary	SSSI
Duddon Estuary	6,759	1.7	Duddon Estuary	SSSI
Poole Harbour	6,199	1.5	Poole Harbour	SSSI
Hamford Water	5,836	1.4	Hamford Water	SSSI

Source: WeBS (1999-2004)

Table 166a Ruff - breeding

SSSI	Interest feature	2000	2001	2002	2003	2004
Ribble Estuary, Lancs	SSSI	7	-	-	-	4
Nene Washes, Cambs	SSSI	-	16	-	-	-
Derwent Ings, North & East Yorks	SSSI	9	-	-	-	-
Ouse Washes, Cambs/Norfolk	SSSI	-	12	-	-	-
Halvergate Marshes, Norfolk	SSSI	-	-	-	1?	-
Minsmere-Walberswick Heaths, Suffolk	No	-	-	-	-	4
The Swale, Kent	No	4	-	-	-	-
Dungeness, Romney Marsh & Rye Bay, Kent	SSSI	1	-	-	-	-
Newton Marsh, Lancs	No	11	-	-	-	-

Source: RBBP; Most records refer to numbers of lekking males or possible pairs

Table 166b Ruff - wintering

SSSI	5YPM	% Sites	WeBS Site	Interest
Ouse Washes	280	19.3	Ouse Washes	SSSI
Martin Mere, Burscough	137	9.4	WWT Martin Mere	SSSI
North Norfolk Coast	113	7.8	North Norfolk Coast	SPA
Stiffkey Valley				No
Derwent Ings				SSSI
Brighton Meadows	111	7.6	Lower Derwent Ings	SPA
Melbourne & Thornton Ings				SPA
River Derwent				SPA
Nene Washes	104	7.2	Nene Washes	No
Halvergate Marshes	90	6.2	Breydon Water & Berney Marshes	SSSI
Breydon Water				SPA
Cantley Marshes				SPA
Yare Broads & Marshes	76	5.2	Middle Yare Marshes	SPA
The Swale	51	3.5	Swale Estuary	20000

Source WeBS (1999-2004)

Table 166c Ruff - passage

SSSI	5YPM	Month	WeBS Site	Interest feature
Ouse Washes	137	Sept	Ouse Washes	SSSI
Humber Estuary				SSSI
N. Killingholme Haven Pits	110	Aug	Humber Estuary	No
Saltfleetby-Theddlethorpe				No
Martin Mere, Burscough	54	Aug	WWT Martin Mere	SSSI
North Norfolk Coast	243	Oct	North Norfolk Coast	SPA
Stiffkey Valley				No
Halvergate Marshes	100	Jul	Breydon Water & Berney Marshes	SSSI
Breydon Water				SPA
The Wash	71	Aug	The Wash	20000
Gibraltar Point				20000
The Swale	54	Sep	Swale Estuary	20000
Rutland Water	52	Aug	Rutland Water	20000

Source: WeBS (1999-2004)

Table 167a Snipe - breeding on lowland wet grassland

Site	Pairs	Int. feature	Season
Ouse Washes	297	SSSI	Breeding
Nene Washes	162	No	
Derwent Ings	58	SPA	Wintering
Bassenthwaite Lake	39	No	
West Sedgemoor	23	SPA	Wintering
Melbourne & Thornton Ings	22	SPA	Wintering
North Norfolk Coast	14	SPA	Wintering
Tealham & Tadham Moors	10	SSSI	Wintering
Wath Ings/Broomhill Flash, South Yorks	8	Not SSSI	
Cantley Marshes	7	No	
King's Sedgemoor	6	SPA	Wintering
Ely Washes, Cambridgeshire	5	Not SSSI	
Prestwick Carr, Northumberland	4	Not SSSI	

Table continued...

Site	Pairs	Int. feature	Season
Otmoor	4	SSSI	Breeding
Amberley Wild Brooks	4	SPA	Wintering
Heslington Tillmire	4	No	
Thornill Moss & Meadows	3	No	
Martin Mere	3	SPA	Wintering
Broome Marshes-Wainford, Norfolk	3	Not SSSI	
Yare Broads & Marshes	3	No	
Cresswell Ponds	3	No	
West Holywell, Northumberland	3	Not SSSI	
Abram Flashes	3	No	
Chippenham Fen N.N.R.(A)	2	No	
Humber Estuary	2	SPA	Wintering
Stodmarsh	2	SPA	Breeding
River Idle Washlands	2	No	
South Stoke, Oxfordshire	2	Not SSSI	
Catcott Edington & Chilton Moors	2	SSSI	Wintering
Baswich Meadow	2	SSSI	
Doxey & V Tillington Marshes	2	SSSI	Breeding

Source: Breeding waders of wet meadows survey, 2002

Table 167b Snipe - non-breeding

SSSI	5YPM	% Eng	WeBS Site	Interest feature	Season
Bridgwater Bay				20000	Winter
Catcott Edington & Chilton Moors				SSSI	Winter
Curry & Hay Moors				20000	Winter
King's Sedgemoor				20000	Winter
Moorlinch				20000	Winter
Shapwick Heath				20000	Winter
Southlake Moor	1,817	9.1	Somerset Levels	20000	Winter
Tealham & Tadham Moors				SSSI	Winter
West Moor				20000	Winter
West Sedgemoor				20000	Winter
Westhay Heath				20000	Winter
Westhay Moor				20000	Winter
Wet Moor				20000	Winter
Brighton Meadows				20000	Winter
Derwent Ings	621	3.1	Lower Derwent Ings	20000	Winter
River Derwent				20000	Winter
Melbourne & Thornton Ings				20000	Winter
Ouse Washes	464	2.3	Ouse Washes	SPA	Breeding
Upper Severn Estuary				20000	Winter
Bridgwater Bay	458	12.3	Severn Estuary	20000	Winter
Severn Estuary				20000	Winter
Berrow Dunes				20000	Winter
North Norfolk Coast	355	1.8	North Norfolk Coast	20000	Winter
Stiffkey Valley				20000	Winter
Maer Lake, Cornwall	337	1.7	Maer Lake, Cornwall	Not SSSI	
Doxey & Tillington Marshes	287	1.4	Doxey Marshes	SSSI	Breeding
Yare Broads & Marshes	286	1.4	Middle Yare Marshes	No	
Cantley Marshes				No	

Table continued...

SSSI	5YPM	% Eng	WeBS Site	Interest feature	Season
Amberley Wild Brooks				20000	Winter
Pulborough Brooks	212	1.1	Arun Valley	20000	Winter
Waltham Brooks				20000	Winter
Arundel Park				20000	Winter
Marston Sewage Treatment Works, Lincolnshire	205	1.0	Marston Sewage Treatment Works	Not SSSI	

Source: WeBS (1999-2004)

Table 168a Black-tailed Godwit - breeding

SSSI	Interest feature	2000	2001	2002	2003	2004
The Swale, Kent	SPA	4	8-10	-	3	4
Nene Washes, Cambridgeshire	SSSI	24	28	-	32	42
Ouse Washes, Norfolk & Cambridgeshire	SSSI	2-3	7	-	4	2
Ribble Estuary, Lancashire	SSSI	5	2	-	2	2

Source: RBBP & County Bird Reports 2004; all pairs proven or probable

Table 168b Black-tailed Godwit - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
The Wash	4,073	12.1	The Wash	SSSI
Gibraltar Point				20000
Dee Estuary				SSSI
Inner Marsh Farm	3,596	10.7	Dee Estuary	SSSI
North Wirral Foreshore				No
Ouse Washes	2,455	7.3	Ouse Washes	SSSI
Stour Estuary	2,167	6.4	Stour Estuary	SSSI
Cattawade Marshes				No
Blackwater Estuary	2,088	6.2	Blackwater Estuary	SSSI
Dengie				SPA
Poole Harbour	2,025	6.0	Poole Harbour	SSSI
Newton Marsh				SSSI
Ribble Estuary	1,992	5.9	Ribble Estuary	SSSI
Sefton Coast				SPA

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Holehaven Creek				SSSI
Mucking Flats & Marshes				SSSI
South Thames Estuary & Marshes				SSSI
Foulness	1,660	4.9	Thames Estuary	20000
Benfleet & Southend Marshes				20000
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
The Swale	1,557	4.6	Swale Estuary	20000
Breydon Water	1,257	3.7	Breydon Water	SPA
Halvergate Marshes				SPA
Avon Valley (Bickton To Christchurch)	1,161	3.4	River Avon	SSSI
Humber Estuary				SSSI
North Killingholme Haven Pits	1,075	3.2	Humber Estuary	SSSI
Saltfleetby – Theddlethorpe Dunes				No
Dawlish Warren	940	2.8	Exe Estuary	SSSI
Exe Estuary				SSSI
Mersey Estuary	768	2.3	Mersey Estuary	SPA
Medway Estuary & Marshes	662	2.0	Medway Estuary	SSSI
Hythe To Calshot Marshes				SSSI
Lee-On-The Solent To Itchen Estuary				SSSI
Lincegrove & Hackett's Marshes				SSSI
Eling & Bury Marshes	661	2.0	Southampton Water	SPA
Lower Test Valley				SPA
Titchfield Haven				SPA
Upper Hamble Estuary & Woods				SPA
Chichester Harbour	613	1.8	Chichester Hbr	SSSI
Hamford Water	448	1.3	Hamford Water	SSSI
Pagham Harbour	410	1.2	Pagham Harbour	SSSI
Hurst Castle & Lymington River Estuary	383	1.1	North West Solent	SPA
Sowley Pond				SPA

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Colne Estuary	349	1.0	Colne Estuary	SSSI
North Solent	343	1.0	Beaulieu Estuary	SSSI
Langstone Harbour	334	1.0	Langstone Hbr	SSSI
Newtown Harbour	320	0.9	Newtown Estuary	SSSI
North Norfolk Coast	309	0.9	North Norfolk Coast	20000
Stiffkey Valley				No
Orwell Estuary	305	0.9	Orwell Estuary	SSSI
Alde-Ore Estuary	281	0.8	Alde Complex	No
Crouch & Roach Estuaries	261	0.8	Crouch-Roach Estuary	SSSI
Minsmere-Walberswick	258	0.8	Blyth Estuary	No
Lune Estuary				SSSI
Wyre Estuary	235	0.7	Morecambe Bay	SSSI
Morecambe Bay				20000
South Walney & Piel Channel				20000
Deben Estuary	229	0.7	Deben Estuary	SSSI
Meadow Lane GP, St Ives	200	0.6	Meadow Lane GP	Not SSSI
Portsmouth Harbour	178	0.5	Portsmouth Hbr	SSSI
Fen Drayton GP	156	0.5	Fen Drayton GP	Not SSSI

Source: WeBS (1999-2004)

Table 169 Bar-tailed Godwit - non-breeding

SSSI	5YPM	% Site	WeBS Site	Interest feature
Gibraltar Point	17738	27.9	The Wash	SSSI
The Wash				SSSI
Ribble Estuary				SSSI
Sefton Coast	9927	15.6	Ribble Estuary	SSSI
Newton Marsh				No
Sefton Coast	7970	12.6	Alt Estuary	SSSI

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Foulness				SSSI
Benfleet & Southend Marshes				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	5446	8.6	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Lindisfarne	4652	7.3	Lindisfarne	SSSI
Northumberland Shore				No
Morecambe Bay				SSSI
Lune Estuary	4300	6.8	Morecambe Bay	SPA
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
Humber Estuary				SSSI
North Killingholme Haven Pits	3229	5.1	Humber Estuary	No
Saltfleetby – Theddlethorpe Dunes				No
Dee Estuary				SSSI
North Wirral Foreshore	2944	4.6	Dee Estuary	SSSI
Inner Marsh Farm				No
Dengie	2384	3.8	Dengie Flats	SPA
Sandbeach Meadows				No
Upper Solway Flats & Marshes	1813	2.9	Solway Estuary	SSSI
Glasson Moss				No
North Norfolk Coast	1604	2.5	North Norfolk Coast	SSSI
Stiffkey Valley				No
Chichester Harbour	904	1.4	Chichester Harbour	SSSI
Hamford Water	626	1.0	Hamford Water	20000

Source: WeBS (1999-2004)

Table 170 Whimbrel - passage

SSSI	5YPM	Mth	WeBS Site	Int. feature
Bridgwater Bay				SSSI
Severn Estuary	204	Apr	Severn Estuary	SPA
Upper Severn Estuary				SPA
Berrow Dunes				No
Exe Estuary	134	Jul	Exe Estuary	20000
The Wash	72	Jul	The Wash	20000
Gibraltar Point				20000
Lynher Estuary				No
St John's Lake	64	Apr	Tamar Complex	No
Tamar - Tavy Estuary				No
North Norfolk Coast	55	May	North Norfolk Coast	20000
Stiffkey Valley				No
Breydon Water	55	Aug	Breydon Water/ Berney Marshes	No
Halvergate Marshes				No
Lune Estuary				20000
Morecambe Bay	54	Aug	Morecambe Bay	20000
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000
Humber Estuary				SSSI
North Killingholme Haven Pits	53	Jul	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No

Source: WeBS (1999-2004)

Table 171a Curlew - breeding on lowland wet grassland

Site	Pairs	Interest feature	Season
Derwent Ings, North & East Yorkshire	36	SPA	Wintering
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses, Shropshire	23	SSSI	Breeding
Melbourne & Thornton Ings, East Yorkshire	13	SPA	Wintering
Lythe Valley-West, Cumbria	11	Not SSSI	
Common Moss, Cumbria	11	Not SSSI	
Melling, Lancashire	10	Not SSSI	
West Sedgemoor, Somerset	9	SPA	Wintering
Otmoor, Oxfordshire (SSSI)	8	Not SSSI	
Warcop-Great Musgrave, Cumbria	8	Not SSSI	
Otmoor, Oxfordshire	8	No	
Great Musgrave-Kirkby Stephen, Cumbria	7	Not SSSI	
Levens Moss, Cumbria	7	Not SSSI	
Ulshaw Bridge, North Yorkshire	7	Not SSSI	
Thornhill Moss & Meadows Cumbria	6	No	
Stanford Training Area, Norfolk	5	No	
Upham Meadow & Summer Leasow, Glos	5	SSSI	Breeding
Prestwick Carr, Northumberland	5	Not SSSI	
Burroway Meadows, Oxfordshire	5	Not SSSI	
King's Sedgemoor, Somerset	4	SPA	Wintering
Black Dub, Cumbria	4	Not SSSI	
Heversham Moss, Cumbria	4	Not SSSI	
Aughton Road, Lancashire	4	Not SSSI	
Wharfe Ings, North Yorkshire	4	Not SSSI	
Chimney, Oxfordshire	4	Not SSSI	
Upper Solway Flats & Marshes, Cumbria	3	SPA	Wintering
Moorlinch, Somerset	3	No	
Meathop Marsh, Cumbria	3	Not SSSI	
Upper Lune Valley, Cumbria	3	Not SSSI	
Seaton-Axminster, Devon	3	Not SSSI	

Table continued...

Site	Pairs	Interest feature	Season
Escomb/Witton Park, Durham	3	Not SSSI	
Mcneil Bottoms, Durham	3	Not SSSI	
Hasfield Ham & Ashleworth Meadows, Gloucestershire	3	Not SSSI	
Gooseham & Aysham, Hereford & Worcs	3	Not SSSI	
Green Hill Laithe Farm, Lancashire	3	Not SSSI	
River Lune, Tunstall, Lancashire	3	Not SSSI	
Ranskill, Nottinghamshire	3	Not SSSI	
River Idle Washlands, Nottinghamshire	2	No	
Northmoor, Somerset	2	No	
Morecambe Bay, Cumbria	2	SPA	Wintering
Heslington Tillmire, North Yorkshire	2	No	
Cavenham-Icklingham, Suffolk	2	No	
Bassenthwaite Lake, Cumbria	2	No	
Cobney Meadows-Vine Tree Farm, Glos	2	Not SSSI	
River Chelt, Inchmore Bridge-Fletcher's Leap, Gloucestershire	2	Not SSSI	
Avon (Woodgreen), Hampshire	2	Not SSSI	
Avon, Bredons Hardwick, Hereford & Worcs	2	Not SSSI	
Eckington Marshes, Hereford & Worcestershire	2	Not SSSI	
Longdon Brook, Hereford & Worcestershire	2	Not SSSI	
Upton Hams, Hereford & Worcestershire	2	Not SSSI	
Hyde Farm, Oxfordshire	2	Not SSSI	
Eyton-On-Severn Racecourse, Shropshire	2	Not SSSI	
Melverley, Shropshire	2	Not SSSI	
Alrewas - Orgreave, Staffordshire	2	Not SSSI	

Source: Breeding waders of wet meadows survey 2002 except * unpublished NNR data

Table 171b Curlew - non-breeding

SSSI	5YPM	% sites	WeBS Site	Interest feature
Lune Estuary				SSSI
Morecambe Bay	12,683	24.7	Morecambe Bay	SSSI
South Walney & Piel Channel Flats				SSSI
Wyre Estuary				SPA
Upper Solway Flats & Marshes	7,230	14.1	Solway Estuary	SSSI
The Wash	4,449	8.7	The Wash	SSSI
Gibraltar Point				20000
Dee Estuary				SSSI
Inner Marsh Farm	4,102	8.0	Dee Estuary	No
North Wirral Foreshore				No
Humber Estuary				SSSI
North Killingholme Haven Pits	3,865	7.5	Humber Estuary	No
Saltfleetby - Theddlethorpe Dunes				No
Benfleet & Southend Marshes				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes				SSSI
West Thurrock Lagoon & Marshes	3,763	7.3	Thames Estuary	No
Foulness				SSSI
Holehaven Creek				No
Inner Thames Marshes				No
Bridgwater Bay				SSSI
Severn Estuary	3,072	6.0	Severn Estuary	SSSI
Upper Severn Estuary				SPA
Berrow Dunes				No
Duddon Estuary	2,434	4.7	Duddon Estuary	SSSI
North Norfolk Coast	1,764	3.4	North Norfolk Coast	20000
Stiffkey Valley				No

Table continued...

SSSI	5YPM	% sites	WeBS Site	Interest feature
Ribble Estuary				SPA
Sefton Coast	1,758	3.4	Ribble Estuary	SPA
Newton Marsh				No
Mersey Estuary	1,624	3.2	Mersey Estuary	SSSI
Lindisfarne	1,599	3.1	Lindisfarne	SSSI
Poole Harbour	1,561	3.1	Poole Harbour	SSSI
Chichester Harbour	1,524	3.0	Chichester Harbour	SPA

Source: WeBS (1999-2004)

Table 172a Spotted Redshank - wintering

SSSI	5YPM	% sites	WeBS Site	Interest feature
Lynher Estuary				No
St John's Lake	20	30.3	Tamar Complex	No
Tamar – Tavy Estuary				No
Benfleet & Southend Marshes				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes				20000
West Thurrock Lagoon & Marshes	11	16.6	Thames Estuary	No
Foulness				20000
Holehaven Creek				No
Inner Thames Marshes				No
Bridgwater Bay				20000
Severn Estuary				20000
Upper Severn Estuary	10	15.2	Severn Estuary	20000
Berrow Dunes				No
North Solent	7	10.6	Beaulieu Estuary	20000
Amble Marshes				No
Pentire Peninsula	7	10.6	Camel Estuary	No
North Norfolk Coast				20000
Stiffkey Valley	7	10.6	North Norfolk Coast	No
Abberton Reservoir	4	6	Abberton Reservoir	No

Source: WeBS (1999-2004)

Table 172b Spotted Redshank - passage

SSSI	5YPM	Month	WeBS Site	Interest feature
Minsmere-Walberswick	58	Jul	Minsmere	No
The Wash	36	Jul	The Wash	20000
Gibraltar Point				20000
North Norfolk Coast	35	Oct	North Norfolk Coast	20000
Stiffkey Valley				No
Humber Estuary	27	Aug	Humber Estuary	20000
North Killingholme Haven Pits				No
Saltfleetby – Theddlethorpe Dunes				No
Breydon Water	17	Apr	Breydon Water/Berney Marshes	No
Halvergate Marshes				No
Dee Estuary	13	Apr	Dee Estuary	20000
Inner Marsh Farm				No
North Wirral Foreshore				No
Rutland Water	10	Sep	Rutland Water	No

Source: WeBS (1999-2004)

Table 173a Redshank - breeding on lowland wet grassland

Site	Pairs	Interest feature	Season
Nene Washes, Cambridgeshire	160	SSSI	Breeding
South Thames Estuary & Marshes, Kent	132	SSSI	Winter
North Norfolk Coast, Norfolk	124	SSSI	Winter
Ouse Washes, Norfolk	114	SSSI	Breeding
The Swale, Kent	112	SPA	Winter
Halvergate Marshes, Norfolk	62	No	
Derwent Ings, North & East Yorkshire	54	SPA	Winter
Rockliffe Marshes, Cumbria	44	SSSI	Winter
Northward Hill RSPB Reserve, Kent	34	Not SSSI	
Chedgrave Marshes, Norfolk	27	Not SSSI	
Orwell Estuary, Suffolk	23	SSSI	Winter
Avon Valley (Bickton-Christchurch), Hants	22	SSSI	Breeding

Table continued...

Site	Pairs	Interest feature	Season
Alde-Ore Estuary, Suffolk	19	SSSI	Winter
Wath Ings/Broomhill Flash, South Yorks	19	Not SSSI	
Foulness, Essex	18	SSSI	Winter
Inner Thames Marshes, Essex	18	No	
Melling, Lancashire	18	Not SSSI	
Newton Marsh, Lancashire	17	No	
Martin Mere, Lancashire	16	No	
Otmoor (Southwest), Oxfordshire	14	Not SSSI	
Sandwich Bay To Hacklinge Marsh, Kent	13	No	
Dungeness, Romney Marsh & Rye Bay, Sussex	12	No	
Hurst Castle & Lymington River Estuary, Hampshire	12	SPA	Winter
West Sedgemoor, Somerset	12	SPA	Winter
Crouch & Roach Estuaries, Essex	11	SSSI	Winter
Stanny Farm Marshes, Suffolk	11	Not SSSI	
Minsmere-Walberswick Heath & Marshes, Suffolk	10	No	
Humber Estuary, Lincolnshire & East Yorkshire	9	SSSI	Winter
Kings Sedgemoor, Somerset	9	SPA	Winter
Burton/Christchurch Water, Dorset	9	Not SSSI	
Cam Washes, Buckinghamshire	8	No	
Leiston-Aldburgh, Suffolk	8	No	
Avon (North End Farm-Wattons Ford), Hampshire	8	Not SSSI	
Boyton Marshes, Suffolk	8	Not SSSI	
Tealham, Tadham & Aller Moors, Somerset	7	Not SSSI	
Amberley Wild Brooks, West Sussex	7	SSSI	Breeding
Ribble Estuary, Lancashire	6	SSSI	Winter
Upper Severn Estuary, Gloucestershire	6	SPA	Winter
Saul Warth, Gloucestershire	6	Not SSSI	
River Lune, Tunstall, Lancashire	6	Not SSSI	
Meare, Shapwick, Ashcott, Walton & Street Heaths, Somerset	6	Part SSSI	
Belvide Reservoir Fields, Staffordshire	6	Not SSSI	

Table continued...

Site	Pairs	Interest feature	Season
Exe Estuary, Devon	5	SPA	Winter
Aylburton Warth, Gloucestershire	4	Not SSSI	
Beddington Sewage Farm, Surrey	4	Not SSSI	
Otmoor, Oxfordshire	3	No	
Upham Meadow & Summer Leasow, Gloucestershire	3	SSSI	Breeding
Seaton-Axminster, Devon	3	Not SSSI	
Carrant, Kemerton, Hereford & Worcs	3	Not SSSI	
Woodfield Farm, Hereford & Worcs	3	Not SSSI	
Windrush, Burford, Oxfordshire	3	Not SSSI	
Alrewas-Elford, Staffordshire	3	Not SSSI	
Broomhill Fields, Staffordshire	3	Not SSSI	
St.Thomas/Tixall Bridge, Staffordshire	3	Not SSSI	

Source: Breeding waders of wet meadows survey 2002

Table 173b Redshank - non-breeding

SSSI	5YPM	% sites	WeBS Site	Int. feature	Season
Lune Estuary				SSSI	Wintering
Morecambe Bay				SSSI	Wintering
South Walney & Piel Channel Flats	7,101	9.9	Morecambe Bay	SSSI	Wintering
Wyre Estuary				SPA	Wintering
Dee Estuary				SSSI	Breeding Passage Wintering
Inner Marsh Farm	6,169	8.6	Dee Estuary	No	
North Wirral Foreshore				No	
Humber Estuary				SSSI	Wintering Passage
North Killingholme Haven Pits	5,578	7.7	Humber Estuary	No	
Saltfleetby - Theddlethorpe Dunes				No	
Mersey Estuary	5,081	7.0	Mersey Estuary	SSSI	Wintering Passage

Table continued...

SSSI	5YPM	% sites	WeBS Site	Int. feature	Season
Benfleet & Southend Marshes				SSSI	Wintering
Mucking Flats & Marshes				SSSI	Wintering
South Thames Estuary & Marshes				SSSI	Wintering
West Thurrock Lagoon & Marshes	4,479	6.2	Thames Estuary	SSSI	Wintering
Foulness				SSSI	Wintering Passage
Holehaven Creek				No	
Inner Thames Marshes				No	
The Wash	3,508	4.8	The Wash	SSSI	Breeding Wintering
Gibraltar Point				20000	
Blackwater Estuary	3,282	4.5	Blackwater Estuary	SSSI	Wintering
Dengie				20000	Wintering
Ribble Estuary				SSSI	Wintering
Sefton Coast	2,794	3.9	Ribble Estuary	SPA	Wintering
Newton Marsh				No	
Upper Solway Flats & Marshes	2,702	3.7	Solway Estuary	SSSI	Wintering
Bridgwater Bay				SSSI	Wintering
Severn Estuary	2,528	3.5	Severn Estuary	SSSI	Wintering
Upper Severn Estuary				SPA	Wintering
Berrow Dunes				No	
Duddon Estuary	2,227	3.1	Duddon Estuary	SSSI	Wintering
Deben Estuary	2,152	3.0	Deben Estuary	SSSI	Wintering
Stour Estuary	2,118	2.9	Stour Estuary	SSSI	Wintering
Cattawade Marshes				No	
Chichester Harbour	2,101	2.9	Chichester Harbour	SSSI	Wintering
Alde-Ore Estuary	2,096	2.9	Alde Complex	SSSI	Wintering
Hamford Water	2,014	2.8	Hamford Water	SSSI	Wintering
Orwell Estuary	1,975	2.7	Orwell Estuary	SSSI	Wintering

Table continued...

SSSI	5YPM	% sites	WeBS Site	Int. feature	Season
North Norfolk Coast	1,900	2.6	North Norfolk Coast	SSSI	Breeding Wintering
Stiffkey Valley				No	
Medway Estuary & Marshes	1,829	2.5	Medway Estuary	SSSI	Wintering
Lindisfarne	1,700*	2.3	Lindisfarne	SSSI	Wintering
Northumberland Shore				SSSI	Wintering
Colne Estuary	1,679	2.3	Colne Estuary	SSSI	Wintering
The Swale	1,592	2.2	Swale Est.	SPA	Wintering
Seal Sands	1,476	2.0	Tees Estuary	SSSI	Wintering Passage
Cowpen Marsh				Yes	Wintering Passage
Seaton Dunes & Common				SPA	Wintering Passage
South Gare & Coatham Sands				SPA	Wintering Passage
Tees & Hartlepool Foreshore & Wetlands				SPA	Wintering Passage
Breydon Water				1,453	2.0
Halvergate Marshes				20000	Wintering
Minsmere-Walberswick	1,373	1.9	Blyth Estuary	No	
Sefton Coast	1,213	1.6	Alt Estuary	SPA	Wintering

Source: WeBS (1999-2004) except * unpublished NNR data

Table 174a Greenshank - wintering

SSSI	5YPM	% Site	WeBS Site	Interest feature
Chichester Harbour	41	13.7	Chichester Harbour	SSSI
Lynher Estuary				No
St John's Lake	29	9.7	Tamar Complex	No
Tamar - Tavy Estuary				No
Salcombe to Kingsbridge Estuary	29	9.7	Kingsbridge Estuary	No
Malpas Estuary	28	9.4	Fal Complex	No
Upper Fal Estuary & Woods				No
Taw-Torridge Estuary	17	5.7	Taw-Torridge Estuary	No

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature			
Blackwater Estuary	15	5.0	Blackwater Estuary	20000			
Dengie				20000			
Dawlish Warren	15	5.0	Exe Estuary	20000			
Exe Estuary				20000			
Amble Marshes	14	4.7	Camel Estuary	No			
Pentire Peninsula				No			
Eling & Bury Marshes	12	4.0	Southampton Water	20000			
Hythe To Calshot Marshes				20000			
Lee-On-The Solent To Itchen Estuary				20000			
Lincegrove & Hackett's Marshes				20000			
Lower Test Valley				20000			
Titchfield Haven				20000			
Upper Hamble Estuary & Woods				20000			
Dibden Bay				No			
Hurst Castle & Lymington River				10	3.3	North West Solent	20000
Upper Solway Flats & Marshes				10	3.3	Solway Estuary	20000
Glasson Moss	20000						
Lune Estuary	9	3.0	Morecambe Bay	20000			
Morecambe Bay				20000			
South Walney & Piel Channel Flats				20000			
Wyre Estuary				20000			
Yealm Estuary				No			
South Thames Estuary	8	2.7	Thames Estuary	SSSI			
Benfleet & Southend Marshes				20000			
Foulness				20000			
Mucking Flats & Marshes				20000			
Holehaven Creek				No			
Inner Thames Marshes				No			
West Thurrock Lagoon & Marshes				No			

Table continued...

SSSI	5YPM	% Site	WeBS Site	Interest feature
Poole Harbour				20000
Studland & Godlingston Hths	8	2.7	Poole Harbour	20000
The Moors				20000
Wareham Meadows				20000
Lower Fal & Helford Intertidal	7	2.3	Helford Estuary	No
Medway Estuary & Marshes	6	2.0	Medway Estuary	SPA
Stiffkey Valley	6	2.0	North Norfolk Coast	No
North Norfolk Coast				20000
Gibraltar Point	6	2.0	The Wash	20000
The Wash				20000
Inner Marsh Farm				No
North Wirral Foreshore	6	2.0	Dee Estuary	No
Dee Estuary				20000
Brading Marshes to St Helen's Level	6	2.0	Brading Harbour	No

Source: WeBS (1999-2004)

Table 174b Greenshank - passage

SSSI	2003	Month	WeBS Site	Interest feature
Chichester Harbour	179	Sept	Chichester Harbour	SSSI
Lynher Estuary				No
St John's Lake	57	Sept	Tamar Complex	No
Tamar – Tavy Estuary				No
The Swale	56	Oct	Swale Estuary	SPA
Stour Estuary	68	Aug	Stour Estuary	SSSI
Cattawade Marshes				No
Blackwater Estuary	169	Sept	Blackwater Estuary	20000
Dengie				20000
Dawlish Warren	72	Sept	Exe Estuary	20000
Exe Estuary				20000

Table continued...

SSSI	2003	Month	WeBS Site	Interest feature
South Thames Estuary & Marsh				SSSI
Benfleet & Southend Marshes				20000
Foulness				20000
Mucking Flats & Marshes	78	Sept	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Stiffkey Valley	131	Aug	North Norfolk Coast	No
North Norfolk Coast				20000
Gibraltar Point	336	July	The Wash	20000
The Wash				20000
Inner Marsh Farm				No
North Wirral Foreshore	76	Sept	Dee Estuary	No
Dee Estuary				20000

Source: WeBS (1999-2004)

Table 175 Common Sandpiper - non-breeding

SSSI	5YPM	Month	WeBS Site	Interest feature
Abberton Reservoir	55	Aug	Abberton Reservoir	No
Dungeness, Romney Marsh & Rye Bay	55	July	Rye Harbour & Pett Level	SSSI
Lune Estuary				20000
Morecambe Bay	52	Jul	Morecambe Bay	20000
South Walney & Piel Channel Flats				20000
Wyre Estuary				20000
North Norfolk Coast	59	Aug	North Norfolk Coast	20000

Source: WeBS (1999-2004)

Table 176a Turnstone - wintering

SSSI	5YPM	% Eng	WeBS Site	Interest feature
Thanet Coast	914	11.2	Thanet Coast	SSSI
Lune Estuary				SPA
Morecambe Bay	907	11.1	Morecambe Bay	SPA
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
Benfleet & Southend Marshes				20000
Foulness				20000
Mucking Flats & Marshes				20000
South Thames Estuary & Marshes	756	9.3	Thames Estuary	20000
Holehaven Creek				No
Inner Thames Marshes				No
West Thurrock Lagoon & Marshes				No
Stour Estuary	644	7.9	Stour Estuary	SPA
Humber Estuary	639	7.8	Humber Estuary	SPA
North Wirral Foreshore	596	7.3	Dee Estuary	SSSI
Dee Estuary				20000
North Norfolk Coast	585	7.2	North Norfolk Coast	20000
The Wash	522	6.4	The Wash	SPA
Gibraltar Point				20000

Source: WeBS (1999-2004)

Table 176b Turnstone - passage

SSSI	5YPM	Month	WeBS Site	Interest feature
Thanet Coast	600	Oct	Thanet Coast	SSSI
Lune Estuary				SPA
Morecambe Bay	1150	Apr	Morecambe Bay	SPA
South Walney & Piel Channel Flats				SPA
Wyre Estuary				SPA
North Norfolk Coast	727	Aug	North Norfolk Coast	20000
The Wash	1044	Aug	The Wash	SPA
Gibraltar Point				20000

Source: WeBS (1999-2004)

Table 177a Mediterranean Gull - breeding

Site	Interest feature	2000	2001	2002	2003	2004
Blackwater Estuary, Essex	No	3	3	1	1	-
Langstone Harbour, Hampshire	No	38	47	19	33	57
Colne Estuary, Essex	No	2	2	1	1	-
Dungeness, Romney Marsh & Rye Bay, Kent	SSSI	4	8	12	22	27
Hamford Water, Essex	No	3	2	4	4	3
Minsmere-Walberswick Heaths & Marshes, Suffolk	No	2	2	-	9	9
North Norfolk Coast	No	3	2	2	-	-
Poole Harbour, Dorset	No	5	-	-	5	6
Hurst Castle & Lymington River Estuary, Hampshire	SPA	2	1	4	3	1
Newtown Harbour, Isle of Wight	SPA	6	5	-	-	-
The Swale, Kent	No	13	8	8	7	26
Medway Estuary, Kent	No	10	16	12	30	48
North Solent, Hampshire	SPA	-	4	-	-	1
Stocks Reservoir, Lancs	Not SSSI	1	2	2	2	3
The Wash, Norfolk	No	-	-	-	3	4

Source: RBBP. Figures in italics are for possible breeding only

Table 177b Mediterranean Gull - non-breeding

Site	Count	Interest feature
Folkestone-Copt Point, Kent	157	Not SSSI
Breydon Water, Norfolk	26	No
Blythburgh Estuary, Suffolk	10	No
Weymouth Bay, Dorset	6	Not SSSI
Dungeness, Romney Marsh & Rye Bay, Kent	5	No
Poole Harbour	3	No

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Table 178a Black-headed Gull - breeding

Site	Pairs	Interest feature
Medway Estuary, Kent	13,100	SSSI
Hamford Water, Essex	11,000	No
Ribble Estuary, Lancashire	9,886	SSSI
North Solent, Hampshire	6,125	SSSI
Hesketh Marsh, Lancashire	5,000	Not SSSI
West Nidderdale, Barden & Blubberhouses Moor, North Yorkshire	4,000	No
North Norfolk Coast, Norfolk	3,954	No
The Swale, Kent	3,805	No
Killington Reservoir, Cumbria	3,100	Not SSSI
Langstone Harbour, Hampshire	3,078	No
Minsmere-Walberswick Heaths & Marshes	2,558	No
Colne Estuary, Essex	2,300	No
Coquet Island, Northumberland	2,210	SSSI
Morecambe Bay, Lancashire	1,620	SSSI
Stocks Reservoir, Lancashire	1,580	Not SSSI
Poole Harbour, Dorset	1,501	No
Dungeness, Romney Marsh & Rye Bay, Kent	1,354	SSSI
Newtown Harbour, Isle of Wight	786	SSSI
The Wash, Lincolnshire & Norfolk	630	SSSI
Alde-Ore Estuary	209	SSSI
South Walney & Piel Channel Flats	40	SSSI
Sefton Coast, Lancashire	2	SSSI

Source: Seabird 2000

Table 178b Black-headed Gull - non-breeding

Site	Count	Interest feature
Bewl Bridge, Sussex	69,000	Not SSSI
Thames Estuary, Essex, Gt. London, Kent	44,548	No
Humber Estuary, Lincolnshire & East Yorks	34,118	No
Derwent Reservoir, Durham & Northumberland	30,000	Not SSSI

Table continued...

Site	Count	Interest feature
Chew Valley Lake, Avon	29,800	No
The Wash, Lincolnshire & Norfolk	25,657	No
Chingford Reservoirs, Greater London & Essex	25,600	No
Severn Estuary, Gloucestershire, Avon & Somerset	25,000	No
Ribble Estuary, Lancashire & Merseyside	24,460	SSSI
Lackford, Suffolk	22,000	No
Queen Elizabeth II, Reservoir, Surrey	21,820	Not SSSI
Rutland Water, Leicestershire	21,000	No
Hurleston Reservoir, Cheshire	20,000	Not SSSI
Southfield Reservoir, Yorkshire	20,000	No

Source: Banks et al. 2007, Burton et al. 2007

Table 179 Common Gull - non-breeding

Site	Count	Interest feature
Derwent Reservoir, Durham & Northumberland	80,000	Not SSSI
Bewl Bridge, Sussex	75,000	Not SSSI
Humber Estuary, Lincolnshire & East Yorkshire	31,134	No
Haweswater Reservoir, Cumbria	27,986	Not SSSI
Hallington Reservoir, Northumberland	25,000	Not SSSI
Chew Valley Lake, Avon	18,200	No
Tophill Low Reservoir, East Yorkshire	17,094	No
Eye Brook Reservoir, Leicestershire	16,100	No
Upper Solway Flats & Marshes	12,486	No
Rutland Water, Leicestershire	12,250	No
Blythburgh, Suffolk	12,000	No
Ullswater, Cumbria	11,470	No
Ribble Estuary, Lancashire	9,817	No
Dungeness, Romney Marsh & Rye Bay, Kent	8,600	No
Stanford Reservoir, Leicestershire	8,110	Not SSSI
Wroxham Broad, Norfolk	8,000	Not SSSI
The Wash, Lincolnshire & Norfolk	7,794	No
Lower Derwent Ings, North & East Yorkshire	7,230	No
Eccup Reservoir, South Yorkshire	7,000	No
William Girling Reservoir, Greater London	7,000	No

Source: Banks et al. 2007, Burton et al. 2007

Table 180a Lesser Black-backed Gull - breeding

SSSI	Pairs	Interest feature	Season
South Walney & Piel Channel Flats, Cumbria	19,487	SSSI	Breeding & Wintering
Bowland Fells, Lancashire	18,518	SSSI	Breeding
Alde-Ore Estuary, Suffolk	5,790	SSSI	Breeding
Ribble Estuary, Lancashire	4,108	SPA	Breeding & Wintering
Upper Solway, Flats & Marshes, Cumbria	2,400	No	
The Wash, Lincolnshire & Norfolk	2,179*	No	
Samson (with Green, White, Puffin & Stony Islands), Isles of Scilly	1,197	SSSI	Breeding
Gugh, Isles of Scilly	1,123	SPA	Breeding
St. Helen's, Isles of Scilly	543	SPA	Breeding
Annet, Isles of Scilly	517	SSSI	Breeding
Chapel Down (St Martin's), Isles of Scilly	58	SPA	Breeding
Shipman Head & Down, Isles of Scilly	50	SPA	Breeding
Castle Down (Tresco), Isles of Scilly	29	SPA	Breeding
White Island (off St Martin's), Isles of Scilly	28	SPA	Breeding
Tean, Isles of Scilly	24	SPA	Breeding
Eastern Isles, Isles of Scilly	19	SPA	Breeding
Norrard Rocks, Isles of Scilly	13	SPA	Breeding
Western Rocks, Isles of Scilly	4	SPA	Breeding
Big Pool & Browarth Point, Isles of Scilly	2	SPA	Breeding

Source: Seabird 2000 except * unpublished NNR data 2003

Table 180b Lesser Black-backed Gull - non-breeding

Site	Count	Interest feature
Morecambe Bay, Lancashire & Cumbria	30,899	No
Burghfield & Theale GP, Berkshire	10,576	Not SSSI
Severn Estuary, Gloucestershire, Avon, Somerset, Gwent, East Glamorgan	7,250	No
Chew Valley Lake, Avon	7,015	No
Carsington Water, Derbyshire	7,000	Not SSSI
Queen Mary Reservoir, Surrey	6,656	Not SSSI

Table continued...

Site	Count	Interest feature
Cotswold Water Park (South Cerney), Glos & Wiltshire	5,800	No
Throckmorton, Hereford & Worcester	4,500	Not SSSI
River Avon – Fordingbridge to Ringwood, Hants & Wiltshire	4,187	No
Westwood Great Pool, Herefordshire	4,000	No
Priorslee Lake, Shropshire	3,605	Not SSSI
Chelmarsh Reservoir, Shropshire	3,500	No
Mersey Narrows, Merseyside	3,500	No
Ribble Estuary, Lancashire	3,011	SPA
Belvide Reservoir, Staffordshire	3,000	SSSI
Blithfield Reservoir, Staffordshire	2,620	No
Torr Works (Merehead), Somerset	2,600	Not SSSI
Longnewton Reservoir, Teeside	2,356	Not SSSI
Rutland Water, Leicestershire	2,180	No
Swithland Reservoir	2,050	Not SSSI
Alde-Ore, Suffolk	2,042	No
Calvert, Buckinghamshire	2,000	Not SSSI
South Thames Estuary & Marshes, Essex, Gt London, Kent	1,983	No
Ogston Reservoir, Derbyshire	1,900	SSSI
Alt Estuary, Lancashire	1,783	No
Queen Elizabeth II Reservoir, Surrey	1,612	Not SSSI
Colliford Reservoir, Cornwall	1,520	Not SSSI
Lakenheath Fen, Suffolk	1,500	Not SSSI
Frampton Pools, Gloucestershire	1,500	No
Lower Windrush Valley GP, Oxfordshire	1,387	Not SSSI
Roadford Reservoir, Devon	1,267	Not SSSI
Chasewater, Staffordshire	1,250	Not SSSI
Bartley Reservoir, West Midlands	1,200	Not SSSI

Source: Banks et al. 2007, Burton et al. 2007

Table 181a Herring Gull - breeding birds

SSSI	Pairs	Interest feature	Season
South Walney & Piel Channel Flats	10,129	SSSI	Wintering Breeding
Upper Solway Flats & Marshes	7,200	No	
The Wash	1,544*	No	
Alde-Ore Estuary	825	SSSI	Breeding
Flamborough Head	722	No	
Samson (with Green, White, Puffin & Stony Islands)	238	SSSI	Breeding

Source: Seabird 2000 except * unpublished NNR data 2000

Table 181b Herring Gull - non-breeding

Site	Count	Interest feature
Ribble Estuary, Lancashire	22,975	SPA
Torbay, Devon	18,000	Not SSSI
The Wash, Lincolnshire & Norfolk	13,189	No
Dungeness, Romney Marsh & Rye Bay, Kent	12,000	No
Morecambe Bay, Lancashire & Cumbria	10,579	No
Queen Mary Reservoir, Surrey	8,279	Not SSSI
Mersey Narrows, Merseyside	8,000	No

Source: Banks et al. 2007, Burton et al. 2007

Table 182a Greater Black-backed Gull - breeding

Isles of Scilly SSSIs	Pairs	Interest feature
Eastern Isles	286	SPA
Annet	137	SSSI
Western Rocks	124	SPA
Norrard Rocks	100	SPA
Samson (with Green, White, Puffin & Stony Islands)	46	SPA
St Helen's (with Northwethel & Men-a-vaur)	27	SPA
Tean	16	SPA
Shipman Head & Shipman Down (Bryher)	13	SPA
Gugh	3	SPA
Chapel Down (St Martin's)	3	SPA
White Island (Off St Martin's)	2	SPA
Pentle Bay, Merrick & Round Islands	1	SPA

Source: Seabird 2000

Table 182b Great Black-backed Gull - non-breeding

Site	Count	Interest feature
The Wash, Norfolk & Lincolnshire	3,219	No
Humber Estuary, Lincolnshire & East Yorks	2,387	No
Hoveringham Pastures	1,600	No
Tees Estuary, Teeside	1,294	No
Brogborough No. 1 & Stewartby Clay Pit, Bedfordshire	1,242	Not SSSI
Sutton & Lound GP, Nottinghamshire	1,176	SSSI
South Shields, Tyne & Wear	1,130	Not SSSI
Sunderland, Tyne & Wear	1,120	Not SSSI
Lynemouth Ash Lagoon, Northumberland	1,074	Not SSSI
Grafham Water, Cambridgeshire	1,050	No
Dungeness, Romney Marsh & Rye Bay, Kent	1,000	No
Portland Harbour, Dorset	1,000	Not SSSI
Seghill Tip, Northumberland	1,000	Not SSSI
Coquet Island, Northumberland	980	No

Table continued...

Site	Count	Interest feature
Ogston Reservoir, Derbyshire	900	SSSI
Pegwell Bay, Kent	882	No
Tophill Low Reservoir, East Yorkshire	858	No
South Thames Estuary & Marshes, Essex, Gt. London & Kent	857	No
Wheldrake Ings, North & East Yorkshire	815	No
Camel Estuary, Cornwall	802	Not SSSI
Durham Coast, Durham	776	No

Source: Banks et al. 2007, Burton et al. 2007

Table 183 Kittiwake - breeding

Site	Pairs	Interest feature
Flamborough Head, East Yorkshire	42,750	SSSI
Farne Islands, Northumberland	5,096	SPA
Cayton Bay to Filey, North Yorkshire	5,000	Not SSSI
Hunt Cliff, Cleveland	3,950	Not SSSI
St Bees Head, Cumbria	1,269	SSSI
Dover to Kingsdown Cliffs, Kent	1,229	SSSI
Lundy, Devon	237	SSSI
Gerrans Bay to Camels Cove, Cornwall	192*	SSSI
Brighton to Newhaven Cliffs, Sussex	180	SSSI
Gugh, Isles of Scilly	155	SPA
Tresco, Isles of Scilly	54	SPA
Samson, Isles of Scilly	38	SPA
Chapel Down (St Martin's), Isles of Scilly	27	SSSI
Godrevy Head to St Agnes, Cornwall	11	SSSI
St Helen's, Isles of Scilly	7	SPA

All data from Seabird 2000 except * from Seabird Colony Register 1985

Table 184a Sandwich Tern - breeding

SSSI	Pairs	Interest feature
North Norfolk Coast	4,275	SSSI
Farne Islands, Northumberland	1,950	SSSI
Coquet Island, Northumberland	1,726	SSSI
Duddon Estuary, Cumbria	340	SPA
Medway Estuary, Kent	333	No
North Solent, Hampshire	268	SSSI
Langstone Harbour	88	SPA
Dungeness, Romney Marsh & Rye Bay, Kent	300**	SSSI
South Walney & Piel Channel Flats, Cumbria	45*	SPA
Alde-Ore Estuary	7	SPA
Newtown Harbour, Isle of Wight	2*	SSSI
Foulness, Essex	0	SSSI

All data from Seabird 2000 except * from Seabird Colony Register (1986-87) and ** unpublished data 2004

Table 184b Sandwich Tern - non-breeding

SSSI	Mean Peak	Interest feature	Season
North Norfolk Coast	4,595	SSSI	Breeding
Humber Estuary, Lincolnshire & East Yorks	1,329	No	
Teesmouth & Cleveland Coast, Cleveland	1,149	SPA	Passage
Dee Estuary, Cheshire	992	No	
Duddon Estuary, Cumbria	964	No	
Upper Solway Estuary, Cumbria	548	No	
Sandwich Bay to Hacklinge Marshes, Kent	540	No	

Source: WeBS 1999-2004

Table 185 Roseate Tern - breeding

Site	Interest feature	2000	2001	2002	2003	2004
Coquet Island, Northumberland	SSSI	34	42	57	70	73
Farne Islands, Northumberland	SSSI	1	1	1?	0	-
Hurst Castle & Lymington River Estuary, Hampshire	No	-	-	-	2	2
North Solent, Hampshire	SPA	1	-	1?	-	-

Source: RBBP

Table 186 Common Tern - breeding

Site	Pairs	Interest feature
Coquet Island, Northumberland	1033	SSSI
North Norfolk Coast	408	SSSI
Redcar Ore Terminal, Cleveland	300	Not SSSI
Dungeness, Romney Marsh & Rye Bay, Kent	294**	SSSI
Medway Estuary, Kent	228	SSSI
Poole Harbour, Dorset	191	SPA
Mersey Narrows, Merseyside	157	SSSI
Farne Islands, Northumberland	147	SSSI
Foulness, Essex	134	SSSI
Langstone Harbour, Hampshire	126	SPA
North Solent, Hampshire	123	SSSI
Ribble Estuary, Lancashire	111	SSSI
Blackwater Estuary, Essex	96	SSSI
Rye Harbour, East Sussex	70*	SSSI
South Walney & Piel Channel Flats, Cumbria	70*	SSSI
The Wash, Norfolk & Lincolnshire	68	SSSI
Breydon Water, Norfolk	63*	SSSI
Hurst Castle & Lymington River Estuary, Hampshire	59	SSSI
Alde-Ore Estuary, Suffolk	56	SSSI
Rye Meads, Hertfordshire	42	SSSI
Duddon Estuary, Cumbria	40	SSSI
Upper Solway Flats & Marshes, Cumbria	31	SPA
Pentle Bay, Merrick & Round Islands, Isles of Scilly	13	SSSI
Samson, Isles of Scilly	11	SSSI
Amwell Quarry, Hertfordshire	11	SSSI
Newtown Harbour, Isle of Wight	9	SSSI
Lune Estuary, Lancashire	4	SSSI
Chichester Harbour, Hampshire	2	SSSI
Pagham Harbour, West Sussex	1	SPA

Source: Seabird 2000 except * from Seabird Colony Register 1987 & **unpublished data 2004

Table 187 Arctic Tern - breeding

SSSI	Pairs	Interest feature
Farne Islands, Northumberland	1,526	SSSI
Newton Links, Northumberland	1,200	SSSI
Coquet Island, Northumberland	833	SSSI
South Walney & Piel Channel Flats, Cumbria	33	SSSI
Upper Solway Flats & Marshes, Cumbria	0	SPA

Source: Seabird 2000

Table 188 Little Tern - breeding

SSSI	Pairs	Interest feature
North Norfolk Coast	291	SSSI
Langstone Harbour, Hampshire	129	SPA
Great Yarmouth North Denes, Norfolk	220	SSSI
Hamford Water, Essex	113	SSSI
Blackwater Estuary, Essex	99	SPA
Winterton Dunes, Norfolk	99	SPA
Alde-Ore Estuary, Suffolk	88	SSSI
Chesil & The Fleet, Dorset	81	SSSI
Rye Harbour, East Sussex	60*	SSSI
The Lagoons, East Yorkshire	49	SSSI
Newton Links, Northumberland	43	SSSI
Gibraltar Point	32	SPA
Duddon Estuary, Cumbria	26	SSSI
Colne Estuary, Essex	20	SSSI
Hurst Castle & Lymington River Estuary, Hampshire	20	SSSI
The Swale, Kent	20	SSSI
Minsmere-Walberswick Heaths & Marshes, Suffolk	19	SPA
South Gare & Coatham Sands, Cleveland	19	SSSI
Dungeness, Romney Marsh & Rye Bay, Kent	18**	SSSI
Foulness, Essex	15	SSSI
Pagham Harbour, West Sussex	15*	SSSI

Table continued...

SSSI	Pairs	Interest feature
Medway Estuary, Kent	14	SPA
Humber Estuary, Lincolnshire & East Yorkshire	14	SPA
Lindisfarne, Northumberland	7	SSSI
Thanet Coast, Kent	4	SSSI
The Wash, Norfolk & Lincolnshire	4*	SSSI
North Solent, Hampshire	2	SSSI
Chichester Harbour, Hampshire	1	SSSI
Pakefield to Easton Bavents, Suffolk	1	SSSI
Newtown Harbour, Isle of Wight	1*	SSSI
Durham Coast	-	SSSI

Source: Seabird 2000 except * from Seabird Colony Register 1987 and **unpublished data 2004

Table 189 Guillemot - breeding

SSSI	Pairs	Interest feature
Flamborough Head, East Yorkshire	46,685	SSSI
Farne Islands, Northumberland	31,497	SSSI
St Bees Head, Cumbria	6,450	SSSI
Lundy, Devon	2,348	SSSI
West Exmoor Coast & Woods, Devon	862	SSSI
Berry Head to Sharkham Point, Devon	673*	SSSI
Gerrans Bay to Camels Cove, Cornwall	148	SSSI
St Helen's, Isles of Scilly	117	SSSI
Norrard Rocks, Isles of Scilly	40	SPA
Western Rocks, Isles of Scilly	39	SPA
Pentire Peninsula, Cornwall	18	SSSI

Source: Seabird 2000 except * from Seabird Colony Register 1986

Table 190 Razorbill - breeding

SSSI	Pairs	Interest feature
Flamborough Head, East Yorkshire	5,744	SSSI
Lundy, Devon	950	SSSI
St Bees Head, Cumbria	312	SSSI
West Exmoor Coast & Woods, Devon	187	SSSI
Norrard Rocks, Isles of Scilly	103	SPA
St Helen's, Isles of Scilly	101	SSSI
Western Rocks, Isles of Scilly	52	SPA
Pentire Peninsula, Cornwall	12	SSSI
Annet, Isles of Scilly	5	SPA

Source: Seabird 2000

Table 191 Puffin - breeding

SSSI	Pairs	Interest feature
Farne Islands, Northumberland	55,674	SSSI
Coquet Island, Northumberland	17,208	No
Flamborough Head, East Yorkshire	2,615	SSSI
Norrard Rocks, Isles of Scilly	77	SPA
Annet, Isles of Scilly	58	SSSI
St Helen's, Isles of Scilly	36	SPA
Pentire Peninsula, Cornwall	25	SSSI
Tean, Isles of Scilly	14	SPA
St Bees Head, Cumbria	13	SSSI
Lundy, Devon	13	SSSI
Western Rocks, Isles of Scilly	11	SPA

Source: Seabird 2000

Table 192 Nightjar - breeding

Site	Males	SPA	Interest feature
Arne	29		SPA
Black Hill Heath	4		SPA
Blue Pool & Norden Heaths	3		SPA
Brenscombe Heath	1		SPA
Canford Heath	19		SPA
Corfe & Barrow Hills	6		SPA
Cranborne Common	18		SPA
Ferndown Common	6		SPA
Ham Common	1		SPA
Hartland Moor	15		SPA
Holton & Sandford Heaths	20		SPA
Horton Common	5		SPA
Hurn Common	9		SPA
Lions Hill	3		SPA
Morden Bog & Hyde Heath	28	Dorset Heathlands	SSSI
Oakers Bog	16		SPA
Parley Common	9		SPA
Povington & Grange Heaths	54		SPA
Rempstone Heaths	10		SPA
St Leonards & St Ives Heaths	52		SSSI
Stoborough & Creech Heaths	12		SPA
Stokeford Heaths	16		SPA
Studland & Godlingston Heaths	52		SPA
Town Common	20		SPA
Turners Puddle Heath	29		SPA
Upton Heath	8		SPA
Warmwell Heath	2		SPA
Winfrith Heath	21		SSSI
Worgret Heath	1		SPA

Table continued...

Site	Males	SPA	Interest feature
Ashdown Forest	84	Ashdown Forest	SPA
Breckland Forest	347		SSSI
Thetford Golf Course & Marsh	1	Breckland	SPA
Stanford Training Area	1		SPA
Cavenham-Icklingham Heaths	1		SPA
East Devon Pebblebed Heaths	61	East Devon Heaths	SPA
Minsmere-Walberswick Heaths & Marshes	38	Minsmere-Walberswick	SPA
The New Forest	631	New Forest	SPA
Blackheath	5		SPA
Blaxhall Heath	4		SPA
Leiston-Aldeburgh	11		SPA
Sandlings Forest	45	Sandlings	SSSI
Snape Warren	2		SPA
Sutton & Hollesley Heaths	9		SPA
Tunstall Common	3		SPA
Ash to Brookwood Heaths	66		SPA
Bourley & Long Valley	22		SSSI
Bramshill	27		SSSI
Broadmoor to Bagshot Woods & Heaths	46		SSSI
Castle Bottom to Yateley & Hawley Commons	25		SPA
Chobham Common	52		SSSI
Colony Bog & Bagshot Heath	36	Thames Basin Heaths	SPA
Eelmoor Marsh	1		SPA
Hazeley Heath	2		SPA
Horsell Common	13		SPA
Ockham & Wisley Commons	1		SPA
Sandhurst to Owlsmoor Bogs & Heaths	1		SPA
Whitmoor Common	4		SPA
Hatfield Moors	16	Thorne & Hatfield Moors	SSSI
Thorne, Crowle & Goole Moors	24		SPA

Table continued...

Site	Males	SPA	Interest feature
Thursley, Hankley & Frensham Commons	68		SPA
Bramshott & Ludshott Commons	12		SPA
Broxhead & Kingsley Commons	6	Wealden Heaths	SPA
Devil's Punch Bowl	7		SPA
Woolmer Forest	44		SSSI
North York Moors plantations	190		Not SSSI
Wareham-Goreham Heath, Dorset	81		Not SSSI
East Dartmoor	65		Not SSSI
Clumber Park & Sherwood Forest, Nottinghamshire	50	Not SPA	Not SSSI
Ringwood Forest, Dorset	49		Not SSSI
The Quantocks, Somerset	47		No
Cannock Chase, Staffordshire	?		SSSI

Source: National Nightjar survey 2004-05

Table 193 Woodlark - breeding

Site	Pairs	SPA	Interest feature
Ashdown Forest	39	Ashdown Forest	No
Breckland Forest	271		SSSI
Breckland Farmland	32		SPA
Bridgham & Brettenham Heaths	7		SPA
Cranwich Camp	1		SPA
Deadman's Grave	1		SPA
Foxhole Heath	3		SPA
Grime's Graves	1	Breckland	SPA
Old Bodney Camp	2		SPA
Lakenheath Warren	21		SPA
Thetford Heath	4		SPA
Stanford Training Area	2		SPA
Weeting Heath	3		SPA
Cavenham-Icklingham Heaths	8		SPA
Minsmere-Walberswick Heaths & Marshes	29	Minsmere-Walberswick	No

Table continued...

Site	Pairs	SPA	Interest feature
The New Forest	144	New Forest	SSSI
Arne	4		SPA
Black Hill Heath	1		SPA
Cranborne Common	4		SPA
Ferndown Common	2		SPA
Holt & West Moors Heaths	5		SSSI
Holton & Sandford Heaths	8		SPA
Lions Hill	1		SPA
Morden Bog & Hyde Heath	9	Dorset Heathlands	SSSI
Parley Common	1		SPA
Povington & Grange Heaths	16		SPA
Rempstone Heaths	2		SPA
St Leonards & St Ives Heaths	17		SPA
Studland & Godlingston Heaths	1		SPA
Turners Puddle Heath	3		SPA
Upton Heath	1		SPA
Winfrith Heath	1		SPA
Blaxhall Heath	2		SPA
Leiston-Aldeburgh	10		SSSI
Sandlings Forest	15	Sandlings	SSSI
Snape Warren	9		SPA
Sutton & Hollesley Heaths	34		SSSI
Tunstall Common	3		SPA
Thursley, Hankley & Frensham Commons	50		SPA
Bramshott & Ludshott Commons	5		SPA
Broxhead & Kingsley Commons	6	Wealden Heaths	SPA
Devil's Punch Bowl	7		SPA
Woolmer Forest	36		SSSI

Table continued...

Site	Pairs	SPA	Interest feature
Ash to Brookwood Heaths	39		SPA
Bourley & Long Valley	29		SSSI
Bramshill	19		SSSI
Broadmoor to Bagshot Woods & Heaths	48		SSSI
Castle Bottom to Yateley & Hawley Commons	19		SPA
Chobham Common	11	Thames Basin Heaths	SSSI
Colony Bog & Bagshot Heath	22		SPA
Eelmoor Marsh	1		SPA
Hazeley Heath	3		SPA
Ockham & Wisley Commons	2		SPA
Sandhurst to Owlsmoor Bogs & Heaths	2		SPA
Whitmoor Common	1		SPA

Source: National Woodlark survey 2006

Table 194 Savi's Warbler - breeding

SSSI	Interest feature	2000	2001	2002	2003	2004
Dungeness, Romney Marsh & Rye Bay, Kent	Assemblage	1	1	0	1	0
Stodmarsh, Kent	SPA			1	1	2
Leighton Moss, Lancashire	No	1			1	

Source: RBBP & county bird reports. Confirmed breeding shown in bold

Table 195 Aquatic Warbler - passage

Site	SSSI	Interest feature	2000	2001	2002	2003	2004
Marazion, Cornwall	Marazion Marsh	SPA	5	4	-	-	1
Slapton Ley, Devon	Slapton Ley	No	-	-	-	2	-
Icklesham, Kent	Dungeness, Romney Marsh & Rye Bay	SSSI	1	1	3	5	1
Combe Haven, Sussex	Combe Haven	No	1	-	-	1	-
Thorney Island, Sussex	Chichester Harbour	No	-	1	-	-	1
Cuckmere Haven, Sussex	Seaford to Beachy Head	No	-	1	-	-	-
Farlington Marsh, Hampshire	Langstone Harbour	No	-	1	-	-	1
Titchfield Haven, Hampshire	Titchfield Haven	No	-	1	2	3	1
Sandwich Bay, Kent	Sandwich Bay to Hacklinge Marshes	No	1	-	-	-	-
Waterham, Kent	The Swale	No	-	-	-	-	1
Spurn, East Yorks	Humber Estuary & Marshes	No	-	-	1	-	-
Portland, Dorset	Isle of Portland	No	-	-	1	-	-
Keyworth, Dorset	Poole Harbour	No	-	-	1	-	-
Lodmoor, Dorset	Lodmoor	No	-	-	-	1	-
Ridge Moors, Dorset	The Moors	No	-	-	-	1	-
Abbotsbury, Dorset	Chesil Beach & the Fleet	No	-	-	-	-	1
Soar, Devon	Bolt Head - Bolt Tail	No	-	-	1	-	-
Tresco, Scilly		Not SSSI	-	-	1	-	-
Orfordness, Suffolk	Alde-Ore Estuary	No	-	-	-	2	-

Source: British Birds & county bird reports

Table 196 Dartford Warbler - breeding

SSSI	Pairs	SPA	Interest feature
Arne	37		SSSI
Black Hill Heath	3		SPA
Bourne Valley	3		SSSI
Canford Heath	77		SSSI
Corfe & Barrow Hills	14		SPA
Christchurch	4		SPA
Cranborne Common	6		SPA
Ferndown Common	10		SSSI
Ham Common	4		SPA
Hartland Moor	23		SSSI
Holt & West Moors Heaths	105		SSSI
Holton & Sandford Heaths	14		SPA
Lions Hill	1		SPA
Morden Bog & Hyde Heath	29		SSSI
Parley Common	15	Dorset Heathlands	SPA
Poole Harbour	3		SPA
Povington & Grange Heaths	29		SSSI
Rempstone Heaths	1		SPA
Slop Bog & Uddens Heath	1		SPA
St Leonards & St Ives Heaths	31		SPA
Stoborough & Creech Heaths	49		SSSI
Stokeford Heaths	5		SSSI
Studland & Godlingston Heaths	45		SSSI
Town Common	28		SSSI
Turbary & Kinson Commons	4		SPA
Turners Puddle Heath	10		SPA
Upton Heath	26		SSSI
Verwood Heath	1		SPA
Warmwell Heath	1		SPA

Table continued...

SSSI	Pairs	SPA	Interest feature
Winfrith Heath	17	Dorset Heathlands (cont.)	SSSI
Ashdown Forest	34	Ashdown Forest	SPA
East Devon Pebblebed Heaths	64	East Devon Heaths	SPA
Minsmere-Walberswick	95	Minsmere-Walberswick	No
The New Forest	379	New Forest	SSSI
Ash to Brookwood Heaths	129		SPA
Bourley & Long Valley	21		SSSI
Bramshill	9		SSSI
Broadmoor to Bagshot Woods	22		SSSI
Castle Bottom to Yateley & Hawley Commons	21		SSSI
Chobham Common	94		SSSI
Colony Bog & Bagshot Heath	38	Thames Basin Heaths	SPA
Eelmoor Marsh	3		SPA
Hazeley Heath	1		SPA
Horsell Common	3		SPA
Ockham & Wisley Commons	1		SPA
Sandhurst to Owlsmoor Bogs & Heaths	3		SPA
Whitmoor Common	4		SPA
Thursley, Hankley & Frensham Commons	129		SPA
Bramshott & Ludshott Commons	33		SPA
Broxhead & Kingsley Commons	13	Wealden Heaths	SPA
Devil's Punch Bowl	9		SPA
Woolmer Forest	80		SSSI
North Exmoor	41	Not SPA	No
The Quantocks	37	Not SPA	No

Source: national Dartford Warbler survey 2006

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Appendix 1: Ornithological selection guidelines for SSSIs

Table A Summary of the guidelines used to select ornithological interest features for SSSIs since 1983

Guideline	1989	1983
<p>Breeding aggregations and localities of very rare species: Regularly supporting 1% or more of total British breeding population of a native bird species (& seabird colonies > 10,000 breeding pairs): typically for colonial, semi-colonial or rare breeding (<300 pairs) species</p>	3.1	Cvii(a)
<p>Smaller isolated colonies of seabirds and other breeding sites: The largest colony of a seabird (excl. Herring and Lesser-blackbacked gull), Grey Heron or Sand Martin within the Area of Search (AOS) where no sites within the AOS qualify under guideline 3.1/Cvii(a). Colonies must hold >10 pairs to qualify.</p>	3.2	Cvii(b)
<p>Localities regularly used by non-breeding birds: Regularly supporting 1% or more of the total British non-breeding population of any species at any season (typically passage, overwintering, pre/post-breeding, moulting flocks of waterbirds)</p>	3.3	Cvii(c)
<p>Localities used by birds in particular conditions: Regularly supporting 1% or more of total British wintering population in definable conditions (e.g. cold and windy), even if not during most years</p>	3.4	N/A
<p>Assemblages of breeding bird species: Assemblages of birds showing especially good range of species characteristic of a number of distinct habitats (or a mixture of two, e.g. scrub and woodland), as defined by a "BTO index". Note listed habitats and threshold levels vary between 1989 and 1983.</p>	3.5	Cvii(e)
<p>Variety of species: Sites with either 70 (1989) or 65 (1983) breeding species, 90 wintering species (1989 & 1983) or 150 passage species (1989 only) recorded in recent years.</p>	3.7	Cvii(d)
<p>Rare species and features (1989) or Miscellaneous scientific value (1983): Sites that regularly have unique/unusual ornithological features (e.g. isolated colonies, breeding waders on wet meadows, very high breeding densities).</p>	3.8	Cvii(f)

Note: the 3.6 Upland bird guidelines in 1989 have not been used in England

Appendix 2: Numbers of SSSIs notified for birds

Table B Number of SSSIs notified under each guideline category of the SSSI guidelines for birds

Guideline category	No. of SSSIs	No. of interest features
Breeding aggregations and localities of very rare species	147	308
Smaller isolated colonies of seabirds and other breeding sites	23	46
Localities regularly used by non-breeding birds	187	797
Localities used by birds in particular conditions	0	0
Assemblages of breeding bird species	370	399
Variety of species	41	49
Rare species and features	24	31
Total	561	1631

Appendix 3: SSSIs including breeding bird assemblages

Table C Lowland damp grassland assemblage sites

SSSI Name	County	Assemblage feature
Gordano Valley	Avon	Lowland damp grasslands
Ouse Washes	Cambridgeshire	Lowland damp grasslands
Cam Washes	Cambridgeshire	Lowland damp grasslands
Nene Washes	Cambridgeshire	Lowland damp grasslands
Chippenham Fen & Snailwell Poor's Fen	Cambridgeshire	Mixed (fen, open water, scrub, wet grassland, woodland)
Ogston Reservoir	Derbyshire	Lowland damp grasslands
Hollow Moor & Odham Moor	Devon	Mixed (scrub, wet grassland, woodland)
Radipole Lake	Dorset	Mixed (open water, wet grassland)
Pett Level	East Sussex	Lowland damp grasslands
Cattawade Marshes	Essex	Lowland damp grasslands
Inner Thames Marshes	Greater London	Lowland damp grasslands
Mid Colne Valley	Greater London	Mixed (scrub, wet grassland, woodland)
Abram Flashes	Gt Manchester	Lowland damp grasslands
Martin & Tidpit Downs	Hampshire	Mixed (scrub, wet grassland, woodland)
Eastnor Park	Hereford & Worcester	Mixed (wet grassland, woodland)
Brading Marshes To St. Helen's Ledges	Isle Of Wight	Lowland damp grasslands
Medway Estuary & Marshes	Kent	Lowland damp grasslands
South Thames Estuary & Marshes	Kent	Lowland damp grasslands
Walland Marsh	Kent	Lowland damp grasslands
Martin Mere, Burscough	Lancashire	Lowland damp grasslands
Lune Estuary	Lancashire	Lowland damp grasslands

Table continued...

SSSI Name	County	Assemblage feature
Charnwood Lodge	Leicestershire	Mixed (moorland, wet grassland, woodland)
Croxtan Park	Leicestershire	Mixed (open water, wet grassland, woodland)
Moor Farm	Lincolnshire	Lowland damp grasslands
Shallam Dyke Marshes, Thurne	Norfolk	Lowland damp grasslands
Ludham - Potter Heigham Marshes	Norfolk	Lowland damp grasslands
Halvergate Marshes	Norfolk	Lowland damp grasslands
Stiffkey Valley	Norfolk	Lowland damp grasslands
Heslington Tillmire	North Yorkshire	Lowland damp grasslands
Derwent Ings	North & East Yorkshire	Lowland damp grasslands
Brighton Meadows	North Yorkshire	Lowland damp grasslands
Curry & Hay Moors	Somerset	Lowland damp grasslands
Wet Moor	Somerset	Lowland damp grasslands
King's Sedgemoor	Somerset	Lowland damp grasslands
Moorlinch	Somerset	Lowland damp grasslands
North Moor	Somerset	Lowland damp grasslands
Tealham & Tadham Moors	Somerset	Mixed (wet grassland, moorland)
Shapwick Heath	Somerset	Mixed (heath, scrub, wet grassland, woodland)
Denaby Ings	South Yorks	Mixed (wet grassland, woodland)
Minsmere-Walberswick Heaths & Marshes	Suffolk	Lowland damp grasslands
Barnby Broad & Marshes	Suffolk	Lowland damp grasslands
Alde-Ore Estuary	Suffolk	Lowland damp grasslands
Sizewell Marshes	Suffolk	Lowland damp grasslands
Leiston - Aldeburgh	Suffolk	Lowland damp grasslands
Bookham Commons	Surrey	Mixed (open water, scrub, wet grassland, woodland)
Epsom & Ashted Commons	Surrey	Mixed (scrub, wet grassland, woodland)
Pagham Harbour	West Sussex	Lowland damp grasslands
Pulborough Brooks	West Sussex	Lowland damp grasslands

Table continued...

SSSI Name	County	Assemblage feature
Waltham Brooks	West Sussex	Lowland damp grasslands
Amberley Wild Brooks	West Sussex	Mixed (wet grassland, woodland)
Chanctonbury Hill	West Sussex	Mixed (wet grassland, woodland)
Porton Down	Wiltshire	Mixed (scrub, wet grassland, woodland)

Table D Lowland Fen Assemblage sites

SSSI Name	County	Assemblage feature
Chippenham Fen & Snailwell Poor's Fen	Cambridgeshire	Mixed (fen, open water, scrub, wet grassland, woodland)
Fowlmere Watercress Beds	Cambridgeshire	Mixed (fen, scrub)
Marazion Marsh	Cornwall	Lowland fen without open water
Wedholme Flow	Cumbria	Lowland fen without open water
South Milton Ley	Devon	Lowland fen without open water
Otter Estuary	Devon	Mixed (fen, woodland)
Christchurch Harbour	Dorset	Mixed (fen, heath, scrub)
Combe Haven	East Sussex	Lowland fen without open water
Weir Wood Reservoir	East Sussex	Lowland fen without open water
Rye Harbour	East Sussex	Mixed (fen, open water, scrub, wet grassland)
Eridge Park	East Sussex	Mixed (fen, woodland)
Hatfield Forest	Essex	Mixed (fen, woodland)
Brampton Bryan Park	Hereford & Worcester	Mixed (fen, woodland)
The Swale	Kent	Lowland fen without open water
Holborough To Burham Marshes	Kent	Mixed (fen, scrub)
Hawes Water	Lancashire	Mixed (fen, woodland)
Misterton Marshes	Leicestershire	Lowland fen without open water
Saltfleetby - Theddlethorpe Dunes	Lincolnshire	Lowland fen without open water
Gibraltar Point	Lincolnshire	Lowland fen without open water
Kirkby Moor	Lincolnshire	Mixed (fen, heath, scrub)
Dibbinsdale	Merseyside	Mixed (fen, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Cantley Marshes	Norfolk	Lowland fen without open water
Bure Broads & Marshes	Norfolk	Lowland fen without open water
North Norfolk Coast	Norfolk	Mixed (fen, woodland)
River Ribble (Long Preston Deeps)	North Yorkshire	Lowland fen without open water
Pitsford Reservoir	Northamptonshire	Lowland fen without open water
West Sedgemoor	Somerset	Lowland fen without open water
Westhay Heath	Somerset	Lowland fen without open water
Catcott Edington & Chilton Moors	Somerset	Lowland fen without open water
Papercourt	Surrey	Lowland fen without open water
Bracklesham Bay	West Sussex	Lowland fen without open water
Forest Mere	West Sussex	Mixed (fen, woodland)
Grimley Brick Pits	Worcestershire	Lowland fen without open water
Wylde Moor, Feckenham	Worcestershire	Mixed (fen, scrub)

Table E Lowland heath assemblage sites

SSSI Name	County	Assemblage feature
Porthgwarra To Pordenack Point	Cornwall	Mixed (heath, scrub)
Goss & Tregoss Moors	Cornwall	Mixed (heath, scrub)
Drumburgh Moss	Cumbria	Lowland heath
Glasson Moss	Cumbria	Lowland heath
Appleby Fells	Cumbria	Lowland heath
Great Haldon Heaths	Devon	Lowland heath
East Devon Pebblebed Heaths	Devon	Mixed (heath, woodland)
Chudleigh Knighton Heath	Devon	Mixed (heath, woodland)
West Exmoor Coast & Woods	Devon	Mixed (heath, woodland)
Holt & West Moors Heaths	Dorset	Lowland heath
Studland & Godlingston Heaths	Dorset	Lowland heath
Hartland Moor	Dorset	Lowland heath
Town Common	Dorset	Lowland heath

Table continued...

SSSI Name	County	Assemblage feature
Turners Puddle Heath	Dorset	Lowland heath
Stoborough & Creech Heaths	Dorset	Lowland heath
St Leonards & St Ives Heaths	Dorset	Lowland heath
Hurn Common	Dorset	Lowland heath
Canford Heath	Dorset	Lowland heath
Holton & Sandford Heaths	Dorset	Lowland heath
Povington & Grange Heaths	Dorset	Lowland heath
Christchurch Harbour	Dorset	Mixed (fen, heath, scrub)
Seaford To Beachy Head	East Sussex	Mixed (heath, scrub)
Ashdown Forest	East Sussex	Mixed (heath, woodland)
Woolmer Forest	Hampshire	Lowland heath
Bramshott & Ludshott Commons	Hampshire	Lowland heath
Pamber Forest & Silchester Common	Hampshire	Lowland heath
Kirkby Moor	Lincolnshire	Mixed (fen, heath, scrub)
The Stiperstones & The Hollies	Shropshire	Lowland heath
North Exmoor	Somerset	Lowland heath
South Exmoor	Somerset	Mixed (heath, scrub)
Shapwick Heath	Somerset	Mixed (heath, scrub, wet grassland, woodland)
The Quantocks	Somerset	Mixed (heath, woodland)
Hatfield Moors	South Yorks	Lowland heath
Thorne Crowle & Goole Moors	South Yorks	Lowland heath
Sutton & Hollesley Heaths	Suffolk	Lowland heath
Lakenheath Warren	Suffolk	Lowland heath
Devil's Punch Bowl	Surrey	Lowland heath
Chobham Common	Surrey	Lowland heath
Horsell Common	Surrey	Lowland heath
Ash To Brookwood Heaths	Surrey	Lowland heath
Thursley, Hankley & Frensham Commons	Surrey	Mixed (heath, scrub, woodland, open water)

Table continued...

SSSI Name	County	Assemblage feature
Blackheath	Surrey	Mixed (heath, woodland)
Puttenham & Crooksbury Commons	Surrey	Mixed (heath, woodland)
Ambersham Common	West Sussex	Lowland heath
Chapel Common	West Sussex	Lowland heath
Iping Common	West Sussex	Lowland heath
The New Forest	Wiltshire	Lowland heath
Salisbury Plain	Wiltshire	Lowland heath
Devil's Spittleful	Worcester	Lowland heath

Table F Lowland open water and their margins assemblage sites

SSSI Name	County	Assemblage feature
Chew Valley Lake	Avon	Lowland open waters and their margins
Blagdon Lake	Avon	Lowland open waters and their margins
Wraysbury & Hythe End Gravel Pits	Berkshire	Lowland open waters and their margins
Thatcham Reed Beds	Berkshire	Lowland open waters and their margins
Aldermaston Gravel Pits	Berkshire	Lowland open waters and their margins
Weston Turville Reservoir	Buckinghamshire	Lowland open waters and their margins
Grafham Water	Cambridgeshire	Lowland open waters and their margins
Chippenham Fen & Snailwell Poor's Fen	Cambridgeshire	Mixed (fen, open water, scrub, wet grassland, woodland)
Tees & Hartlepool Foreshore & Wetlands	Cleveland	Lowland open waters and their margins
Siddick Pond	Cumbria	Lowland open waters and their margins
Esthwaite Water	Cumbria	Lowland open waters and their margins
Kirkby Moor	Cumbria	Mixed (open water, woodland)
Hilton Gravel Pits	Derbyshire	Lowland open waters and their margins
Ogston Reservoir	Derbyshire	Lowland open waters and their margins
Slapton Ley	Devon	Lowland open waters and their margins

Table continued...

SSSI Name	County	Assemblage feature
Poole Harbour	Dorset	Lowland open waters and their margins
Chesil & The Fleet	Dorset	Lowland open waters and their margins
Radipole Lake	Dorset	Mixed (open water, wet grassland)
Witton-Le-Wear	Durham	Lowland open waters and their margins
Rye Harbour	East Sussex	Mixed (fen, open water, scrub, wet grassland)
Walthamstow Reservoirs	Greater London	Lowland open waters and their margins
Barn Elms Wetland Centre	Greater London	Lowland open waters and their margins
Ruxley Gravel Pits	Greater London	Lowland open waters and their margins
Ingrebourne Marshes	Greater London	Lowland open waters and their margins
Brent Reservoir	Greater London	Lowland open waters and their margins
Woolston Eyes	Greater Manchester	Lowland open waters and their margins
Bryn Marsh & Ince Moss	Greater Manchester	Lowland open waters and their margins
Marton Mere, Blackpool	Greater Manchester	Lowland open waters and their margins
Risley Moss	Greater Manchester	Lowland open waters and their margins
Avon Valley (Bickton To Christchurch)	Hampshire	Lowland open waters and their margins
Titchfield Haven	Hampshire	Lowland open waters and their margins
River Itchen	Hampshire	Lowland open waters and their margins
River Test	Hampshire	Lowland open waters and their margins
Flintsham & Titley Pools	Hereford & Worcester	Lowland open waters and their margins
Berrington Pool	Hereford & Worcester	Lowland open waters and their margins
Tring Reservoirs	Hertfordshire	Lowland open waters and their margins
Amwell Quarry	Hertfordshire	Lowland open waters and their margins
Turnford & Cheshunt Pits	Hertfordshire	Lowland open waters and their margins
Brading Marshes To St. Helen's Ledges	Isle Of Wight	Lowland open waters and their margins
Stodmarsh	Kent	Lowland open waters and their margins
Sandwich Bay To Hacklinge Marshes	Kent	Lowland open waters and their margins
South Thames Estuary & Marshes	Kent	Lowland open waters and their margins

Table continued...

SSSI Name	County	Assemblage feature
Sevenoaks Gravel Pits	Kent	Lowland open waters and their margins
Cheyne Court	Kent	Lowland open waters and their margins
Dungeness	Kent	Lowland open waters and their margins
Eye Brook Reservoir	Leicestershire	Lowland open waters and their margins
Bradgate Park & Cropston Reservoir	Leicestershire	Lowland open waters and their margins
Rutland Water	Leicestershire	Lowland open waters and their margins
Croxtan Park	Leicestershire	Mixed (open water, wet grassland, woodland)
Buddon Wood & Swithland Reservoir	Leicestershire	Mixed (open water, woodland)
Humber Estuary	Lincolnshire	Lowland open waters and their margins
Deeping Gravel Pits	Lincolnshire	Lowland open waters and their margins
Hardley Flood	Norfolk	Lowland open waters and their margins
Stiffkey Valley	Norfolk	Lowland open waters and their margins
Didlington Park Lakes	Norfolk	Lowland open waters and their margins
Alderfen Broad	Norfolk	Lowland open waters and their margins
Ant Broads & Marshes	Norfolk	Lowland open waters and their margins
Yare Broads & Marshes	Norfolk	Lowland open waters and their margins
Trinity Broads	Norfolk	Lowland open waters and their margins
Thompson Water, Carr & Common	Norfolk	Mixed (open water, woodland)
Dillington Carr, Gressenhall	Norfolk	Mixed (open water, woodland)
Ripon Parks	North Yorkshire	Lowland open waters and their margins
Pocklington Canal	North Yorkshire	Lowland open waters and their margins
Gouthwaite Reservoir	North Yorkshire	Lowland open waters and their margins
Swale Lakes	North Yorkshire	Lowland open waters and their margins
River Derwent	North Yorkshire	Lowland open waters and their margins
Sutton & Lound Gravel Pits	Nottinghamshire	Lowland open waters and their margins
Thoresby Lake	Nottinghamshire	Lowland open waters and their margins
Clumber Park	Nottinghamshire	Lowland open waters and their margins
Attenborough Gravel Pits	Nottinghamshire	Lowland open waters and their margins
Welbeck Lake	Nottinghamshire	Mixed (open water, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Otmoor	Oxfordshire	Mixed (open water, scrub, wet grassland)
Allscott Settling Ponds	Shropshire	Lowland open waters and their margins
Messingham Sand Quarry	North Lincolnshire	Lowland open waters and their margins
Aqualate Mere	Staffordshire	Lowland open waters and their margins
Betley Mere	Staffordshire	Lowland open waters and their margins
Barnby Broad & Marshes	Suffolk	Lowland open waters and their margins
Orwell Estuary	Suffolk	Lowland open waters and their margins
Sprat's Water & Marshes, Carlton Colville	Suffolk	Lowland open waters and their margins
Leiston - Aldeburgh	Suffolk	Lowland open waters and their margins
Lackford Lakes	Suffolk	Lowland open waters and their margins
Godstone Ponds	Surrey	Lowland open waters and their margins
Hedgecourt	Surrey	Lowland open waters and their margins
Vann Lake & Ockley Woods	Surrey	Lowland open waters and their margins
Thursley, Hankley & Frensham Commons	Surrey	Mixed (heath, scrub, woodland, open water)
Puttenham & Crooksbury Commons	Surrey	Mixed (heath, woodland, open water)
Bookham Commons	Surrey	Mixed (open water, scrub, wet grassland, woodland)
Alvecote Pools	Warwickshire	Lowland open waters and their margins
Whitacre Heath	Warwickshire	Lowland open waters and their margins
Brandon Marsh	Warwickshire	Lowland open waters and their margins
Combe Pool	Warwickshire	Mixed (open water, woodland)
Middleton Pool	Warwickshire	Mixed (open water, woodland)
Burton Park	West Sussex	Lowland open waters and their margins
Coate Water	Wiltshire	Mixed (open water, woodland)
Hewell Park Lake	Worcestershire	Lowland open waters and their margins
Oakley Pool	Worcestershire	Lowland open waters and their margins
Bittell Reservoirs	Worcestershire	Lowland open waters and their margins
Upton Warren Pools	Worcestershire	Lowland open waters and their margins
Hurcott & Podmore Pools	Worcestershire	Mixed (open water, woodland)

Table G Montane grassland and heaths assemblage sites

SSSI Name	County	Assemblage feature
Skiddaw Group	Cumbria	Montane grasslands and heaths
Buttermere Fells	Cumbria	Montane grasslands and heaths
Moorhouse and Cross Fell	Cumbria	Montane grasslands and heaths

Table H Sand-dunes & saltmarshes assemblage sites

SSSI Name	County	Assemblage feature
Duddon Estuary	Cumbria	Sand-dunes and saltmarshes
Drigg Coast	Cumbria	Sand-dunes and saltmarshes
Upper Solway Flats & Marshes	Cumbria	Sand-dunes and saltmarshes
Poole Harbour	Dorset	Sand-dunes and saltmarshes
South Thames Estuary and Marshes	Kent	Sand-dunes and saltmarshes
Dungeness	Kent	Sand-dunes and saltmarshes
Morecambe Bay	Lancashire	Sand-dunes and saltmarshes
Winterton - Horsey Dunes	Norfolk	Mixed (heath, sand-dunes, scrub)
Pagham Harbour	West Sussex	Mixed (saltmarshes, sand-dunes)

Table I Upland moorland and grassland assemblage sites

SSSI Name	County	Assemblage feature
Goyt Valley	Cheshire	Upland moorland & grassland
Upper Fowey Valley	Cornwall	Upland moorland & grassland
Appleby Fells	Cumbria	Upland moorland & grassland
Sunbiggin Tarn & Moors & Little Asby Scar	Cumbria	Upland moorland & grassland
Skiddaw Group	Cumbria	Upland moorland & grassland
Shap Fells	Cumbria	Upland moorland & grassland
Armboth Fells	Cumbria	Upland moorland & grassland
Moorhouse & Cross Fell	Cumbria	Upland moorland & grassland
Geltsdale & Glendue Fells	Cumbria	Mixed (moorland, woodland)
Brothers Water	Cumbria	Mixed (upland moorland & grassland, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Eastern Peak District Moors	Derbyshire	Upland moorland & grassland
Dark Peak	Derbyshire	Upland moorland & grassland
North Dartmoor	Devon	Upland moorland & grassland
Bowes Moor	Durham	Upland moorland & grassland
Bollihope, Pikestone, Eggleston & Woodland Fells	Durham	Upland moorland & grassland
Lune Forest	Durham	Upland moorland & grassland
Cotherstone Moor	Durham	Upland moorland & grassland
Upper Teesdale	Durham	Upland moorland & grassland
Teesdale Allotments	Durham	Upland moorland & grassland
Black Mountains	Hereford & Worcester	Upland moorland & grassland
Bowland Fells	Lancashire	Upland moorland & grassland
Charnwood Lodge	Leicestershire	Mixed (moorland, wet grassland, woodland)
East Nidderdale Moors (Flamstone Pin - High Ruckles)	North Yorkshire	Upland moorland & grassland
Lovely Seat - Stainton Moor	North Yorkshire	Upland moorland & grassland
West Nidderdale, Barden & Blubberhouses Moors	North Yorkshire	Upland moorland & grassland
Arkengarthdale, Gunnerside & Reeth Moors	North Yorkshire	Upland moorland & grassland
Mallerstang-Swaledale Head	North Yorkshire	Upland moorland & grassland
North York Moors	North Yorkshire	Upland moorland & grassland
Muggleswick, Stanhope & Edmundbyers Commons & Blanchland Moor	Northumberland	Upland moorland & grassland
Whitfield Moor, Plenmeller & Asholme Commons	Northumberland	Upland moorland & grassland
Harbottle Moors	Northumberland	Upland moorland & grassland
Allendale Moors	Northumberland	Upland moorland & grassland
Hexhamshire Moors	Northumberland	Upland moorland & grassland
The Cheviot	Northumberland	Upland moorland & grassland
Kielderhead & Emblehope Moors	Northumberland	Upland moorland & grassland
Long Mynd	Shropshire	Upland moorland & grassland

Table continued...

SSSI Name	County	Assemblage feature
Westhay Moor	Somerset	Mixed (moorland, scrub, wet grassland)
Tealham & Tadham Moors	Somerset	Mixed (wet grassland, moorland)
Leek Moors	Staffordshire	Upland moorland & grassland
South Pennine Moors	West Yorkshire	Upland moorland & grassland

Table J Woodland and scrub assemblage sites

SSSI Name	County	Assemblage feature
Chippenham Fen & Snailwell Poor's Fen	Cambridgeshire	Mixed (fen, open water, scrub, wet grassland, woodland)
Fowlmere Watercress Beds	Cambridgeshire	Mixed (fen, scrub)
Monk's Wood & The Odd Quarter	Cambridgeshire	Mixed (scrub, woodland)
Peckforton Woods	Cheshire	Mixed (scrub, woodland)
Porthgwarra To Pordenack Point	Cornwall	Mixed (heath, scrub)
Goss & Tregoss Moors	Cornwall	Mixed (heath, scrub)
Steeple Point To Marsland Mouth	Cornwall	Mixed (scrub, woodland)
Geltsdale & Glendue Fells	Cumbria	Mixed (moorland, woodland)
Kirkby Moor	Cumbria	Mixed (open water, woodland)
Glencoyne Wood	Cumbria	Mixed (scrub, woodland)
Duddon Valley Woodlands	Cumbria	Mixed (scrub, woodland)
Smardale Gill	Cumbria	Mixed (scrub, woodland)
Lyne Woods	Cumbria	Mixed (scrub, woodland)
Hallinrag Wood	Cumbria	Mixed (scrub, woodland)
Naddle Forest	Cumbria	Mixed (scrub, woodland)
Brothers Water	Cumbria	Mixed (upland moorland and grassland with water bodies, woodland)
Yarncliff Wood, Padley	Derbyshire	Woodland
Ogston Reservoir	Derbyshire	Woodland
Ogston Reservoir	Derbyshire	Scrub
Shining Cliff Woods	Derbyshire	Mixed (scrub, woodland)
Lathkill Dale	Derbyshire	Mixed (scrub, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Dove Valley & Biggin Dale	Derbyshire	Mixed (scrub, woodland)
Abney & Bretton Cloughs	Derbyshire	Mixed (scrub, woodland)
Yarner Wood & Trendlebere Down	Devon	Woodland
Prawle Point & Start Point	Devon	Scrub
Otter Estuary	Devon	Mixed (fen, woodland)
East Devon Pebblebed Heaths	Devon	Mixed (heath, woodland)
Chudleigh Knighton Heath	Devon	Mixed (heath, woodland)
West Exmoor Coast & Woods	Devon	Mixed (heath, woodland)
Hollow Moor & Odham Moor	Devon	Mixed (scrub, wet grassland, woodland)
Teign Valley Woods	Devon	Mixed (scrub, woodland)
Hobby To Peppercombe	Devon	Mixed (scrub, woodland)
Dunsdon Farm	Devon	Mixed (scrub, woodland)
River Lemon Valley Woods	Devon	Mixed (scrub, woodland)
Dendles Wood	Devon	Mixed (scrub, woodland)
Stoke Woods	Devon	Mixed (scrub, woodland)
Holne Woodlands	Devon	Mixed (scrub, woodland)
Chudleigh Caves & Woods	Devon	Mixed (scrub, woodland)
Coombe Meadow	Devon	Mixed (scrub, woodland)
Halstock Wood	Devon	Mixed (scrub, woodland)
Bovey Valley Woodlands	Devon	Mixed (scrub, woodland)
Sampfords Spiney	Devon	Mixed (scrub, woodland)
Bradiford Valley	Devon	Mixed (scrub, woodland)
Halsdon	Devon	Mixed (scrub, woodland)
Town Common	Dorset	Woodland
Christchurch Harbour	Dorset	Mixed (fen, heath, scrub)
Oakers Wood	Dorset	Mixed (scrub, woodland)
Backstone Bank & Baal Hill Woods	Durham	Mixed (scrub, woodland)
Eridge Park	East Sussex	Mixed (fen, woodland)
Seaford To Beachy Head	East Sussex	Mixed (heath, scrub)

Table continued...

SSSI Name	County	Assemblage feature
Ashdown Forest	East Sussex	Mixed (heath, woodland)
Clayton To Offham Escarpment	East Sussex	Mixed (scrub, woodland)
Darwell Wood	East Sussex	Mixed (scrub, woodland)
Ashburnham Park	East Sussex	Mixed (scrub, woodland)
Plashett Park Wood	East Sussex	Mixed (scrub, woodland)
Hatfield Forest	Essex	Mixed (fen, woodland)
Epping Forest	Essex	Mixed (scrub, woodland)
Woodchester Park	Gloucestershire	Mixed (scrub, woodland)
Upper Wye Gorge	Gloucestershire	Mixed (scrub, woodland)
Cotswold Commons & Beechwoods	Gloucestershire	Mixed (scrub, woodland)
Mid Colne Valley	Greater London	Mixed (scrub, wet grassland, woodland)
Downe Bank & High Elms	Greater London	Mixed (scrub, woodland)
Ruislip Woods	Greater London	Mixed (scrub, woodland)
Hainault Forest	Greater London	Mixed (scrub, woodland)
Risley Moss	Greater Manchester	Mixed (scrub, woodland)
Martin & Tidpit Downs	Hampshire	Mixed (scrub, wet grassland, woodland)
Brampton Bryan Park	Hereford And Worcester	Mixed (fen, woodland)
Haugh Wood	Hereford And Worcester	Mixed (scrub, woodland)
Eastnor Park	Hereford And Worcester	Mixed (wet grassland, woodland)
Ashridge Commons & Woods	Hertfordshire	Mixed (scrub, woodland)
Church Woods, Blean	Kent	Woodland
Holborough To Burham Marshes	Kent	Mixed (fen, scrub)
Orlestone Forest	Kent	Mixed (scrub, woodland)
Hothfield Common	Kent	Mixed (scrub, woodland)
West Blean & Thornden Woods	Kent	Mixed (scrub, woodland)
Ham Street Woods	Kent	Mixed (scrub, woodland)
Dover To Kingsdown Cliffs	Kent	Mixed (scrub, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Cobham Woods	Kent	Mixed (scrub, woodland)
Chequer's Wood & Old Park	Kent	Mixed (scrub, woodland)
Westerham Wood	Kent	Mixed (scrub, woodland)
Wye & Crundale Downs	Kent	Mixed (scrub, woodland)
Ellenden Wood	Kent	Mixed (scrub, woodland)
Northward Hill	Kent	Mixed (scrub, woodland)
Hoad's Wood	Kent	Mixed (scrub, woodland)
Ileden & Oxenden Woods	Kent	Mixed (scrub, woodland)
Hawes Water	Lancashire	Mixed (fen, woodland)
Burley & Rushpit Woods	Leicestershire	Woodland
Charnwood Lodge	Leicestershire	Mixed (moorland, wet grassland, woodland)
Croxtan Park	Leicestershire	Mixed (open water, wet grassland, woodland)
Buddon Wood & Swithland Reservoir	Leicestershire	Mixed (open water, woodland)
Bradgate Park & Cropston Reservoir	Leicestershire	Mixed (scrub, woodland)
Clipsham Old Quarry & Pickworth Great Wood	Leicestershire	Mixed (scrub, woodland)
Swithland Wood & The Brand	Leicestershire	Mixed (scrub, woodland)
Beacon Hill, Hangingstone & Out Woods	Leicestershire	Mixed (scrub, woodland)
Kirkby Moor	Lincolnshire	Mixed (fen, heath, scrub)
Tortoiseshell Wood	Lincolnshire	Mixed (scrub, woodland)
Mavis Enderby Valley	Lincolnshire	Mixed (scrub, woodland)
Dibbinsdale	Merseyside	Mixed (fen, woodland)
North Norfolk Coast	Norfolk	Mixed (fen, woodland)
Thompson Water, Carr & Common	Norfolk	Mixed (open water, woodland)
Dillington Carr, Gressenhall	Norfolk	Mixed (open water, woodland)
Alderford Common	Norfolk	Mixed (scrub, woodland)
Yardley Chase	Northamptonshire	Mixed (scrub, woodland)
Clumber Park	Nottinghamshire	Woodland

Table continued...

SSSI Name	County	Assemblage feature
Misson Training Area	Nottinghamshire	Scrub
Welbeck Lake	Nottinghamshire	Mixed (open water, woodland)
Otmoor	Oxfordshire	Mixed (open water, scrub, wet grassland)
Wytham Woods	Oxfordshire	Mixed (scrub, woodland)
Bix Bottom	Oxfordshire	Mixed (scrub, woodland)
Aston Rowant	Oxfordshire	Mixed (scrub, woodland)
North Exmoor	Somerset	Woodland
South Exmoor	Somerset	Mixed (heath, scrub)
Shapwick Heath	Somerset	Mixed (heath, scrub, wet grassland, woodland)
The Quantocks	Somerset	Mixed (heath, woodland)
Barle Valley	Somerset	Mixed (scrub, woodland)
Denaby Ings	South Yorkshire	Mixed (wet grassland, woodland)
Churnet Valley	Staffordshire	Woodland
Combes Valley	Staffordshire	Mixed (scrub, woodland)
Barnby Broad & Marshes	Suffolk	Woodland
Hintlesham Woods	Suffolk	Mixed (scrub, woodland)
Thursley, Hankley & Frensham Commons	Surrey	Mixed (heath, scrub, woodland, open water)
Blackheath	Surrey	Mixed (heath, woodland)
Puttenham & Crooksbury Commons	Surrey	Mixed (heath, woodland, open water)
Bookham Commons	Surrey	Mixed (open water, scrub, wet grassland, woodland)
Epsom & Ashted Commons	Surrey	Mixed (scrub, wet grassland, woodland)
Langham Pond	Surrey	Mixed (scrub, woodland)
Leith Hill	Surrey	Mixed (scrub, woodland)
Mole Gap To Reigate Escarpment	Surrey	Mixed (scrub, woodland)
Papercourt	Surrey	Mixed (scrub, woodland)
Ranmore Common	Surrey	Mixed (scrub, woodland)
Chipstead Downs	Surrey	Mixed (scrub, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Banstead Downs	Surrey	Mixed (scrub, woodland)
Vann Lake & Ockley Woods	Surrey	Mixed (scrub, woodland)
Hedgecourt	Surrey	Mixed (scrub, woodland)
Devil's Punch Bowl	Surrey	Mixed (scrub, woodland)
Thornley Wood	Tyne And Wear	Mixed (scrub, woodland)
Wolford Wood & Old Covert	Warwickshire	Woodland
Combe Pool	Warwickshire	Mixed (open water, woodland)
Middleton Pool	Warwickshire	Mixed (open water, woodland)
Clowes Wood & New Fallings Coppice	Warwickshire	Mixed (scrub, woodland)
Oxhouse Farm	Warwickshire	Mixed (scrub, woodland)
Kingsbury Wood	Warwickshire	Mixed (scrub, woodland)
Forest Mere	West Sussex	Mixed (fen, woodland)
Wakehurst & Chiddingly Woods	West Sussex	Mixed (scrub, woodland)
Sullington Warren	West Sussex	Mixed (scrub, woodland)
Chiddingfold Forest	West Sussex	Mixed (scrub, woodland)
Kingley Vale	West Sussex	Mixed (scrub, woodland)
Cissbury Ring	West Sussex	Mixed (scrub, woodland)
Ebernoe Common	West Sussex	Mixed (scrub, woodland)
Arundel Park	West Sussex	Mixed (scrub, woodland)
Ambersham Common	West Sussex	Mixed (scrub, woodland)
Cow Wood & Harry's Wood	West Sussex	Mixed (scrub, woodland)
Harting Downs	West Sussex	Mixed (scrub, woodland)
The Mens	West Sussex	Mixed (scrub, woodland)
St. Leonard's Forest	West Sussex	Mixed (scrub, woodland)
Chanctonbury Hill	West Sussex	Mixed (wet grassland, woodland)
Amberley Wild Brooks	West Sussex	Mixed (wet grassland, woodland)
Coate Water	Wiltshire	Mixed (open water, woodland)
Porton Down	Wiltshire	Mixed (scrub, wet grassland, woodland)
Picket & Clanger Wood	Wiltshire	Mixed (scrub, woodland)

Table continued...

SSSI Name	County	Assemblage feature
Langley Wood & Homan's Copse	Wiltshire	Mixed (scrub, woodland)
Jones's Mill	Wiltshire	Mixed (scrub, woodland)
Midford Valley Woods	Wiltshire	Mixed (scrub, woodland)
Savernake Forest	Wiltshire	Mixed (scrub, woodland)
Spye Park	Wiltshire	Mixed (scrub, woodland)
Wyre Forest	Worcestershire	Woodland
Hewell Park Lake	Worcestershire	Woodland
Wylde Moor, Feckenham	Worcestershire	Mixed (fen, scrub)
Hurcott & Podmore Pools	Worcestershire	Mixed (open water, woodland)
Tiddesley Wood	Worcestershire	Mixed (scrub, woodland)
The Malvern Hills	Worcestershire	Mixed (scrub, woodland)
Shrawley Wood	Worcestershire	Mixed (scrub, woodland)
Dumbleton Dingle	Worcestershire	Mixed (scrub, woodland)
Trench Wood	Worcestershire	Mixed (scrub, woodland)
Leigh Brook Valley	Worcestershire	Mixed (scrub, woodland)

Table K Mixed assemblage sites

SSSI Name	County	Assemblage feature
Snelsmore Common	Berkshire	Mixed assemblage
Tintagel Cliffs	Cornwall	Mixed assemblage
Pentire Peninsula	Cornwall	Mixed assemblage
Combs Reservoir	Derbyshire	Mixed assemblage

Table L Variety of breeding species assemblage sites

SSSI	County
Aqualate Mere	Staffordshire
Ashridge Commons & Woods	Hertfordshire
Barnby Broad & Marshes	Suffolk
Bassenthwaite Lake	Cumbria
Belvide Reservoir	Staffordshire
Christchurch Harbour	Dorset
East Devon Pebblebed Heaths	Devon
Fairburn & Newton Ings	South Yorkshire
Gordano Valley	Avon
Lackford Lakes	Suffolk
Leighton Moss	Lancashire
Leiston – Aldeburgh	Suffolk
Marsland To Clovelly Coast	Cornwall
Melbourne & Thornton Ings	North Yorkshire
Mid Colne Valley	Greater London
Minsmere-Walberswick Heaths & Marshes	Suffolk
North Norfolk Coast	Norfolk
Ogston Reservoir	Derbyshire
Ouse Washes	Cambridgeshire & Norfolk
Papercourt	Surrey
Potteric Carr	South Yorkshire
River Derwent	North Yorkshire
Roman River	Essex
Sandbach Flashes	Cheshire
Skipwith Common	North Yorkshire
Stanford Training Area	Norfolk
Upper Thurne Broads & Marshes	Norfolk

Table M Variety of wintering species assemblage sites

SSSI	County
Amberley Wild Brooks	West Sussex
Bittell Reservoirs	Worcestershire
Blithfield Reservoir	Staffordshire
Christchurch Harbour	Dorset
Grafham Water	Cambridge
Hayle Estuary & Carrack Gladden	Cornwall
Martin Mere, Burscough	Lancashire
Melbourne & Thornton Ings	North Yorkshire
Minsmere-Walberswick Heaths & Marshes	Suffolk
Ouse Washes	Cambridgeshire & Norfolk
Pagham Harbour	West Sussex
Papercourt	Surrey
Siddick Pond	Cumbria
Stanford Training Area	Norfolk

Table N Variety of passage species assemblage sites

SSSI	County
Arlington Reservoir	East Sussex
Christchurch Harbour	Dorset
Isle of Portland	Dorset
Lodmoor	Dorset
Minsmere-Walberswick Heaths & Marshes	Suffolk
Rutland Water	Leicestershire
Seaford to Beachy Head	East Sussex
Sutton and Lound Gravel Pits	Nottinghamshire

Appendix 4: Thresholds for regionally important sites for breeding waders on wet meadows

Table O Thresholds for regionally important sites for breeding waders on wet meadows

Water Company Region	Lapwing (pairs)	Snipe (drummers)	Curlew (pairs)	Redshank (pairs)
South West	30	2	20	2
Wessex	30	6	20	6
Southern	30	4	6	8
Thames	30	4	6	3
Anglian	30	6	6	8
Severn Trent	30	4	6	3
North West	30	7	20	6
Northumbria	30	7	20	6
Yorkshire	30	7	20	6

From Smith (1983)



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