Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands.* Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form: FOR OFFICE USE ONLY. DD MM YY Joint Nature Conservation Committee Monkstone House City Road Site Reference Number Designation date Peterborough Cambridgeshire PE1 1JY UK Telephone/Fax: +44 (0)1733 - 562 626 / +44 (0)1733 - 555 948 Email: RIS@JNCC.gov.uk 2. Date this sheet was completed/updated: Designated: 28 July 1994 **Country:** 3. **UK (England)** 4. Name of the Ramsar site:

Thanet Coast and Sandwich Bay

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update: a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

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7. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i) hard copy (required for inclusion of site in the Ramsar List): yes ✓ -or- no □;

ii) an electronic format (e.g. a JPEG or ArcView image) Yes

iii) a GIS file providing geo-referenced site boundary vectors and attribute tables yes \checkmark -orno \Box ;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

8. Geographical coordinate	es (latitude/longitude):
51 18 18 N	01 22 47 E

9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town. Nearest town/city: Margate and Ramsgate

The site lies on the east Kent coast, between Deal to the south-east and Whitestable to the north-west.

Administrative region: Kent

10.	Elevation	(average and/or max. & min.) (metres):	11.	Area (hectares): 2169.23
	Min.	-1		
	Max.	6		
	Mean	0		

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

A coastal site, consisting of a long stretch of rocky shore, adjoining areas of estuary, sand dune, maritime grassland, saltmarsh and grazing marsh. The wetland habitats support 15 British Red Data Book invertebrates, as well as a large number of nationally scarce species. The site attracts internationally important numbers of turnstone *Arenaria interpres*, and nationally important numbers of nationally important wintering populations of four wader species: ringed plover, golden plover, grey plover and sanderling, as well as Lapland bunting. The site is used by large numbers of migratory birds.

13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

2,6

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 2

Supports 15 British Red Data Book wetland invertebrates.

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation): Species with peak counts in winter:

Ruddy turnstone, *Arenaria interpres interpres*, NE Canada, Greenland/W Europe & NW Africa

1007 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation): Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	basic, neutral, shingle, sand, mud, clay, alluvium, peat, nutrient-rich, nutrient-poor, sedimentary, limestone/chalk	
Geomorphology and landscape	lowland, coastal, valley, floodplain, barrier beach, intertidal sediments (including sandflat/mudflat), open coast (including bay), estuary, cave/tunnel, lagoon, cliffs, pools	
Nutrient status	eutrophic, highly eutrophic	
pH	alkaline	
Salinity	brackish / mixosaline, fresh, saline / euhaline	
Soil	mainly mineral, mainly organic	
Water permanence	usually permanent	
Summary of main climatic features	Annual averages (Greenwich, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites /greenwich.html) Max. daily temperature: 14.8° C Min. daily temperature: 7.2° C	
	Days of air frost: 29.1 Rainfall: 583.6 mm Hrs. of sunshine: 1461.0	

General description of the Physical Features:

Thanet Coast and Sandwich Bay consists of a long stretch of rocky shore, adjoining areas of estuary, sand dune, maritime grassland, saltmarsh and grazing marsh.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Thanet Coast and Sandwich Bay consists of a long stretch of rocky shore, adjoining areas of estuary, sand dune, maritime grassland, saltmarsh and grazing marsh.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Shoreline stabilisation and dissipation of erosive forces

19. Wetland types:

Inland wetland, Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	56
D	Rocky shores	15.5
4	Seasonally flooded agricultural land	15
М	Rivers / streams / creeks: permanent	10
Xf	Freshwater, tree-dominated wetlands	1
Е	Sand / shingle shores (including dune systems)	0.9
F	Estuarine waters	0.8
Тр	Freshwater marshes / pools: permanent	0.6
Н	Salt marshes	0.2

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Chalk cliffs and rocky shore: Much of the Thanet coastline consists of chalk cliffs, approx. 75% of which has been subjected to the building of sea defences. Where the cliffs are undefended they contain a large number of sea caves which are are rich in marine algae. The chalk shore platform is the most extensive such area in the UK and supports a range of characteristic biotopes.

Sand/mud flats: There are extensive areas of intertidal mud and sand flat that are attractive to waders.

Saltmarsh: The relatively small areas of saltmarsh integrate in some areas with the sand dune communities. Common species include *Puccinellia maritima*, *Atriplex portulacoides*, and *Limonium vulgare*. Scarce plants include *Inulia crithmoides*.

Shingle beach: The coastline around Sandwich and Reculver is fringed by shingle beach, mostly unvegetated. There are small areas of vegetated shingle with species such as *Glaucium flavum*, and *Crambe maritima*.

Sand dune: Part of the site includes a part of a larger area of dune grassland. Here there are small areas of young *Ammophila arenaria* dune, with large areas of fixed dune, dominated by *Festuca rubra*, *Galium verum* communities. The scarce rush *Juncus acutus* occurs here. Lizard orchid *Himantoglossum hircinum* and bedstraw broomrape *Orobanche caryophyllacea* both occur on the dune grassland.

There are extensive areas of grazing marsh located in some areas on alluvial deposits, and in other areas on thick beds of peat. The peat-dominated areas have the greatest interest, supporting the nationally scarce *Potamogeton coloratus* and *Sparganium minimum* at its only locality in south-east England; the ditches support a wide diversity of aquatic plants typical of south-eastern grazing marsh, other scarce species include *Myriophyllum verticillatum* and *Althaea officinalis*. Much of the grazing marsh has been subject to agricultural improvement. A few fields remain, however, with an unimproved turf and a relatively diverse flora.

Arable: Some areas of grazing marsh have been ploughed and drained. The ditches retain some water, but with an impoverished flora, dominated by emergents such as *Typha latifolia*, *T. angustifolia* and *Phragmites australis*.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site.

Higher Plants.

Juncus acutus, Potamogeton coloratus, Ceratophyllum submersum, Myriophyllum verticillatum, Carex divisia, Althaea officinalis, Frankenia laevis, Inula crithmoides

Non-wetland higher plants of importance:

Plants of sand dunes: *Himantoglossum hircinum* (90% UK population on dunes at Sandwich Bay); *Orobanche caryophyllacea*.

Plants of chalk cliffs: Brassica oleracea var. oleracea; Matthiola incana; Matthiola sinuata; Limonium binervosum.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present* – *these may be supplied as supplementary information to the RIS*.

Birds

Species currently occurring at levels of national importance:					
Species with peak counts in spring/autumn:					
Ringed plover, Charadrius hiaticula,	649 individuals, representing an average of 2% of				
Europe/Northwest Africa	the GB population (5 year peak mean 1998/9-2002/3)				
Common greenshank, <i>Tringa nebularia</i> , Europe/W Africa	35 individuals, representing an average of 5.8% of the GB population (5 year peak mean 1998/9-2002/3)				
Species with peak counts in winter:					
Red-throated diver, Gavia stellata, NW Europe	57 individuals, representing an average of 1.1% of the GB population (5 year peak mean 1998/9-2002/3)				
Great crested grebe, <i>Podiceps cristatus cristatus</i> , NW Europe	218 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)				

European golden plover, *Pluvialis apricaria apricaria*, P. a. altifrons Iceland & Faroes/E Atlantic

Sanderling, Calidris alba, Eastern Atlantic

4190 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3)

598 individuals, representing an average of 2.9% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Sand lizards *Lacerta agilis* are being reintroduced to the site on the Sandwich & Pegwell Bay NNR, September 2004, as part of a national programme of reintroduction to seven sites across England.

Invertebrates.

Lixus vilis, Stigmella repentiella, Bagous nodulosus, Deltote bankiana, Poecilobothrus ducalis, Emblethis verbasci, Pionosomus varius, Nabis brevis, Euheptauclacus sus, Melanotus punctolineatus, Eluma purpurescens, Ectemnius ruficornis, Alysson lunicornis, Orthotylus rubidus

Non-wetland invertebrates of importance recorded during 2004 survey:

- Bees & wasps: Cerceris quadricincta (RDB 1; largest UK colony discovered on site in Pegwell area); Philanthus triangulum (RDB2, pRDB4); Hedychrum niemelai (RDB3); Smicromyrme rufipes (Notable b species); Andrena minutuloides (Notable a species); Andrena pilipes (Notable b species); Melitta leporine (Notable b species); Nomada fucata (Notable a species).
 Moths found on sand dunes at Sandwich: Idaea ochrata (BAP priority species); Aplasta
- ononaria (RDB3); Phibalapteryx virgata (Nationally Scarce),

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic Archaeological/historical site Environmental education/ interpretation Livestock grazing Non-consumptive recreation Scientific research Sport fishing Sport hunting

Tourism Transportation/navigation

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation	+	
(NGO)		
Local authority, municipality etc.	+	
Private	+	
Public/communal	+	

25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Tourism	+	
Recreation	+	
Current scientific research	+	
Collection of non-timber natural	+	
products: (unspecified)		
Fishing: (unspecified)	+	
Fishing: commercial	+	
Fishing: recreational/sport	+	
Marine/saltwater aquaculture		+
Gathering of shellfish	+	
Bait collection	+	
Arable agriculture (unspecified)	+	
Permanent arable agriculture		+
Grazing (unspecified)	+	
Permanent pastoral agriculture	+	
Hunting: recreational/sport	+	
Industrial water supply	+	
Industry	+	
Sewage treatment/disposal		+
Harbour/port		+
Flood control	+	
Mineral exploration (excl.	+	
hydrocarbons)		
Transport route		+
Domestic water supply	+	
Urban development	+	

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

- 1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
- 2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Vegetation succession	2	Survey 2003 revealed problem of lack of ditch management in some areas.	+		+
Water diversion for irrigation/domestic/indu strial use	1		+	+	+
Eutrophication	1	Subsidence in former colliery areas has created sump effect and contributed to eutrophication.	+	+	+
Pollution – pesticides/agricultural runoff	2	Runoff from agricultural fields.	+	+	+
Recreational/tourism disturbance (unspecified)	1	Disturbance of turnstones <i>Arenaria interpres</i> , especially by dog walking and kite surfing/boarding, which can result in loss of condition to birds if unmanaged.	+		+
Unspecified development: urban use	1	Activities connected with ongoing management and new development on the coast cause significant disturbance to wintering birds if unmanaged.	+		+

NA = Not Applicable because no factors have been reported.

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors? Vegetation succession - Management agreements in place. It is intended that the number of these will increase when Environmental Stewardship Scheme is introduced.

Negotiation is underway with owners to reinstate ditch management in neglected areas.

Pollution – pesticides/agricultural runoff - Environment Agency currently investigating nature and extent of problem with view to implementing appropriate controls.

Is the site subject to adverse ecological change? YES

27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest	+	
(SSSI/ASSI)		
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation	+	
for nature conservation		
Management agreement	+	
Site management statement/plan implemented	+	
Special Area of Conservation (SAC)	+	

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.

A littoral and sublittoral marine life survey of the chalk cliffs, caves and reefs was undertaken by the Natural History Museum in 1997 (Tittley *et al.* 1998); the littoral element was repeated in 2001 (Tittley *et al.* 2004).

A sublittoral diving survey of the chalk reefs took place in Summer 2004.

A survey of the numbers and distribution of the golden plover population was undertaken in 2002-03. Turnstone research was undertaken from 2001-03.

A sand dune NVC survey was undertaken in 2002 and a ditch flora survey in 2003. Reintroduction of sand lizards *Lacerta agilis* to Sandwich & Pegwell Bay NNR, September 2004.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The Thanet Coast Project was set up in 2001 and operates over most of the site. The Project implements aspects of the North East Kent European marine sites Management Scheme and works with local people, providing a wide range of coastal educational activities for adults and children as well as leaflets and other information.

Sandwich and Pegwell Bay NNR and LNR is managed by Kent Wildlife Trust. Guided walks and events are held on site throughout the year and information leaflets and interpretive boards are provided.

Sandwich Bay Bird Observatory is situated close to the site and provides information and leaflets on birds, as well as guided walks and events. It has conference and laboratory facilities as well as accommodation for visiting groups.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

There are a number of beach resorts around this Ramsar site, and the whole coastline is heavily used for recreation. Although there is more use in summer, there are a number of recreational activities that take place year-round on the coast, such as dog walking, and it is these that have most effect on wintering birds.

The inland parts of this Ramsar Site are the only areas that are not heavily used for recreation.

Water-based recreation includes jet-skiing, power-boat use, sailing, water-skiing and kite-surfing at a number of locations around the site. These activities happen mostly in spring, summer and autumn, but there is some year-round use.

Kite-boarding has been noted at two locations and has caused bird disturbance problems. This activity happens intermittently but more often in summer.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Head, Natura 2000 and Ramsar Team, Department for Environment, Food and Rural Affairs,

European Wildlife Division, Zone 1/07, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Site Designations Manager, English Nature, Sites and Surveillance Team, Northminster House, Northminster Road, Peterborough, PE1 1UA, UK

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see **15** above), list full reference citation for the scheme.

Site-relevant references

- Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP, Davidson, NC & Buck, AL (eds.) (1998) Coasts and seas of the United Kingdom. Region 7 South-east England: Lowestoft to Dungeness. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)
- Bratton, JH (ed.) (1991) British Red Data Books: 3. Invertebrates other than insects. Joint Nature Conservation Committee, Peterborough
- Buck, AL (ed.) (1997) An inventory of UK estuaries. Volume 6. Southern England. Joint Nature Conservation Committee, Peterborough

Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes.* Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)

- Covey, R (1998) Chapter 6. Eastern England (Bridlington to Folkestone) (MNCR Sector 6). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 179-198. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts.* British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Doarks, C, Hedley, SM, Radley, GP & Woolven, SC (1990) Sand dune survey of Great Britain. Site report No. 76. Sandwich Bay, Kent, 1990. *Nature Conservancy Council, CSD Report*, No. **1126**
- Doody, JP, Johnston, C & Smith, B (1993) *Directory of the North Sea coastal margin*. Joint Nature Conservation Committee, Peterborough
- Fowler, SL & Tittley, I (1993) The marine nature conservation importance of British coastal chalk cliff habitats. *English* Nature Research Reports, No. **32**
- Griffiths, M (2004) Numbers and distribution of the wintering golden plover population in and around the Thanet Coast & Sandwich Bay SPA 2002/2003. English Nature Research Reports, No. 569. www.englishnature.org.uk/pubs/publication/PDF/569R.pdf

Griffiths, ME (1992) Thanet coast wintering wader survey 1991/92. Unpublished, Sandwich Bay Bird Observatory

- Henderson, ACB (1982) *Biological survey of the pastures and dykes of the Sandwich Deal area, 1982.* Unpublished, Nature Conservancy Council
- Henderson, ACB (1986) *Historical review of land use changes on Sandwich Bay dunes, Kent.* Unpublished, Nature Conservancy Council
- McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ & Way, SF (eds.) (2004) The Habitats Directive: selection of Special Areas of Conservation in the UK. 2nd edn. Joint Nature Conservation Committee, Peterborough. www.jncc.gov.uk/SACselection
- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) *Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992–93 to 1998–99.* WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts.* British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge. www.wwt.org.uk/publications/default.asp?PubID=14
- Radley, GP (1994) Sand dune vegetation survey of Great Britain: a national inventory. Part 1: England. Joint Nature Conservation Committee, Peterborough
- Ratcliffe, DA (ed.) (1977) A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)
- Shirt, DB (ed.) (1987) British Red Data Books: 2. Insects. Nature Conservancy Council, Peterborough
- Stewart, A, Pearman, DA & Preston, CD (eds.) (1994) *Scarce plants in Britain*. Joint Nature Conservation Committee, Peterborough
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content*. Joint Nature Conservation Committee, Peterborough (3 vols.) www.jncc.gov.uk/UKSPA/default.htm
- Tittley, I & Peckham, S (eds.) (2004) Proceedings of the North East Kent Coastal Research Workshop, 22 October 2002, Sandwich Bay Bird Observatory. *English Nature Research Reports*, No. **570**
- Tittley, I, Spurrier, CJH & Chimonides, PJ (2004) Thanet intertidal survey: Assessment of favourable condition of reef and sea-cave features in the Thanet Coast cSAC. *English Nature Research Reports*, No. **568** www.english-nature.org.uk/pubs/publication/PDF/568.pdf
- Tittley, I, Spurrier, CJH, Chimonides, PJ, George, JD, Moore, JA, Evans, NJ & Muir, AI (1998) Survey of chalk cave, cliff, intertidal and subtidal reef biotopes in the Thanet Coast cSAC. *English Nature Research Reports*, No. **325**
- Wiggington, M (1999) British Red Data Books. 1. Vascular plants. 3rd edn. Joint Nature Conservation Committee, Peterborough

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