

COUNTY: KENT

SITE NAME: THE SWALE

DISTRICT: CANTERBURY/SWALE

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended. Part of the site has been designated a National Nature Reserve under Section 16 of the National Parks and Access to the Countryside Act 1949 and part is a Local Nature Reserve under Section 21 of the National Park and Access to the Countryside Act 1949.

Local Planning Authorities: Canterbury City Council, Swale Borough Council

National Grid Reference: TR 000670

Area: 6568.45 (ha.) 16,230.58 (ac.)

Ordnance Survey Sheet 1:50,000: 178, 179

1:10,000: TQ 96, TQ 97 SE & SW,
TR 06, TR 07 SE, SW,
TR 16 NW

Date Notified (Under 1949 Act): 1968

Date of Last Revision: 1981

Date Notified (Under 1981 Act): 1984

Date of Last Revision: 1990

Other Information:

Parts of the site are listed in 'A Nature Conservation Review' D A Ratcliffe (ed) CUP 1979. The Royal Society for the Protection of Birds manage part of the site as a nature reserve. The site has been extended to include Coldharbour and Ridham Marshes, and an additional part of the Oaze. Most of the site is also designated under the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) and as a Special Protection Area under European Community Directive 79/409 on the Conservation of Wild Birds.

Reasons for Notification:

The Swale includes the largest remaining areas of freshwater grazing marsh in Kent and is representative of the estuarine habitats found on the north Kent coast. The habitats comprise chiefly mudflats, saltmarsh, and freshwater grazing marsh, the latter being intersected by extensive dykes and fleets. The area is particularly notable for the internationally important numbers of wintering and passage wildfowl and waders, and there are also important breeding populations of a number of bird species. Associated with the various constituent habitats of the site are outstanding assemblages of plants and invertebrates.

The mudflats of the Swale are extremely rich in invertebrates, over 350 species having been recorded. Some of these, such as the polychaete worm *Clymenella torquata* are known from nowhere else in Britain, while other more widespread species are present at high densities and provide food for the huge numbers of birds, especially waders, which use the Swale.

The saltmarshes are among the richest for plant life in Britain with for example particularly good representation of the saltmarsh-grasses *Puccinellia* and the glassworts *Salicornia*. Other abundant species include sea aster *Aster tripolium*, sea lavender *Limonium vulgare*, sea purslane *Halimione portulacoides* and common cord-grass *Spartina anglica* while less-common plants include small cord-grass *Spartina maritima** and golden samphire *Inula crithmoides**. As well as providing feeding and roosting places for many birds, the saltmarshes are of entomological interest; for example, this is the habitat of the scarce ground lackey moth *Malacostoma castrensis**.

Also on the seaward side of the sea walls are smaller areas of other habitats. The harder substrates of shingle below high water mark in places support large mussel beds, which in turn attract different birds from those of the mudflats, such as turnstone *Arenaria interpres*. There are several areas of shell, or shell sand beach, notably at Shellness on Sheppey and at Castle Coote west of Seasalter.

These have an interesting calcareous flora with plants characteristic of both sand and shingle beaches: sea kale *Crambe maritima**, yellow horned-poppy *Glaucium flavum*, marram grass *Ammophila arenaria* and sea rocket *Cakile maritima* occur for example. Where undisturbed these beaches attract breeding ringed plover *Charadrius hiaticula* and little tern *Sterna albifrons*.

The grazing marsh complexes, including seawalls, counterwalls, fleets, dykes, temporary runnels, etc. provide suitable conditions for a wide range of plants and animals. The grassland habitats range from the damp muddy areas near the dykes, where characteristic plants include divided sedge *Carex divisa** and small goosefoot *Chenopodium botryodes** to the dry seawalls and counterwalls which support several less-common in addition to many widespread plants. These less-common plants include the specially-protected hogs fennel *Peucedanum officinale*** and least lettuce *Lactuca saligna***, slender hare's-ear *Bupleurum tenuissimum**, sea clover *Trifolium squamosum** and sea barley *Hordeum marinum**, all of which are more abundant in the Thames estuary than elsewhere in Britain. The more level grassland is dominated by a variety of grasses including foxtails *Alopecurus*, bents *Agrostis*, rye-grass *Lolium* and fescues *Festuca* with various herbs such as clovers *Trifolium*, and buttercups *Ranunculus* also present.

The flora of the dykes and fleets varies according to the salinity. Those nearest the sea tend to be most brackish, and generally have sea club-rush *Scirpus maritimus*, common reed *Phragmites australis* and fennel pondweed *Potamogeton pectinatus* as the most abundant species. In the fresher water further inland there is a greater variety of species and plants such as branched bur-reed *Sparganium erectum* and reed-mace *Typha latifolia* may become dominant. Plants associated with the dykes include beaked tasselweed *Ruppia maritima* and soft hornwort *Ceratophyllum submersum**. There is also a good invertebrate community with beetles, dragon and damselflies, and flies especially well represented.

Other less extensive habitats in the Swale include water-filled disused clay-pits, and small patches of scrub and woodland. These provide additional variety and interest to the site, and in some cases also support uncommon plants or animals.

The bird interest of the Swale is centred on the large numbers of waders and wildfowl which use the area in winter, and on autumn and spring migrations. Several species: wigeon *Anas penelope*, teal *Anas crecca* and grey plover *Pluvialis squatarola* regularly overwinter in numbers of international importance+. Others, including shoveler *Anas clypeata*, knot *Caladris canutus*, dunlin *Caladris alpina* and spotted redshank *Tringa erythropus* are regularly present in winter in nationally significant numbers+.

Many of the birds use more than one habitat, some for example feed on the mudflats at low tide and then move up to roost on the saltmarsh or on fields inland of the sea wall.

The commoner breeding dry-land birds include skylark *Alauda arvensis*, meadow pipit *Anthus pratensis* and yellow wagtail *Motacilla flava*, and among the wetland birds mallard *Anas platyrhynchos*, shelduck *Tadorna tadorna*, coot *Fulica atra*, moorhen *Gallinula chloropus*, lapwing *Vanellus vanellus* and redshank *Tringa totanus*. Scarcer breeding birds include teal *Anas crecca*, gadwall *Anas strepera*, *Anas clypeata* and pochard *Aythya ferina*. Garganey *Anas querquedula*, pintail *Anas acuta*, ruff *Philomachus pugnax* and black-tailed godwit *Limosa limosa* have bred, or attempted to do so in recent years.

+ *Wildfowl and Wader Counts* 1987--88, D G Salmon et al, Wildfowl Trust 1988.

* Species regarded as 'scarce' in Britain (recorded from 16--100 of the 10 x 10km squares in Britain).

** Species recorded as 'rare' in Britain (recorded from 1--15 10 x 10km squares) and listed in *British Red Data Books: 1. vascular Plants*, 2nd Ed F H Perring & L Farrell, RSNC 1983.