

## Appendix B. Background on Internationally Designated Sites.

### B.1 North Downs Woodlands SAC

#### B.1.1 Introduction

This site is composed of two Sites of Special Scientific Interest (SSSI). Wouldham to Detling Escarpment is located within Maidstone Borough. This is the eastern parcel of the SAC. This 10 km stretch of the chalk escarpment to the north of Maidstone includes representative examples of woodland, scrub and unimproved grassland habitats on chalk, which support a number of rare and scarce species of plants and invertebrates. The Culand Pits are also of importance because of their rich and unique fossil fauna which includes a variety of fish and reptiles. The second parcel of land is located 6.5km west of Maidstone Borough, this is Halling to Trottiscliffe Escarpment SSSI. This site consists of an extensive area of the North Downs west of the 'Medway Gap'. The site is representative of Chalk grassland in west Kent and beech woodland on the chalk. Outstanding assemblages of plants and invertebrates are present.

#### B.1.2 Reason for Designation

- *Asperulo-Fagetum* beech forests
- Yew *Taxus baccata* woods of the British Isles
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\*important orchid sites)

#### B.1.3 Conservation Objectives

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of the qualifying natural habitats
- The structure and function (including typical species) of the qualifying natural habitats; and,
- The supporting processes on which the qualifying natural habitats rely

#### B.1.4 Environmental Sensitivities

- Low nutrient runoff from surrounding land - being steep and narrow, the Hanger woodlands are vulnerable to nutrient run-off leading to eutrophication;
- Maintenance of grazing;
- Minimal trampling of sensitive woodland ground flora;
- Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification;
- Absence of direct fertilisation; and
- Well-drained soils

## **B.2 Queendown Warren SAC**

### **B.2.1 Introduction**

The grassland and woodland of this site are on the south-facing slope of a dry chalk valley. Two nationally rare plant species occur along with outstanding plant assemblages.

### **B.2.2 Reason for Designation**

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid sites. Dry grasslands and scrublands on chalk or limestone, including important orchid sites)).

### **B.2.3 Conservation Objectives**

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely

### **B.2.4 Environmental Sensitivities**

- Maintenance of grazing
- Minimal recreational trampling
- Minimal air pollution – nitrogen deposition may cause reduction in diversity, sulphur deposition can cause acidification
- Absence of direct fertilisation
- Well-drained soils

## **B.3 Peter's Pit SAC**

### **B.3.1 Introduction**

The SAC was an active chalk quarry until about 20 years ago with additional land consisting of old agricultural land that has been stripped. The site contains undulating terrain in which rain fed ponds, have developed. Terrestrial habitats present include chalk grassland, ruderal vegetation as well as scrub and developing woodland. The site supports a large population of great crested newts.

### **B.3.2 Reason for Designation**

- Great crested newt

### **B.3.3 Conservation Objectives**

With regard to the natural habitats and/or species for which the site has been designated (the 'Qualifying Features listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of the habitats of qualifying species
- The structure and function of the habitats of qualifying species
- The supporting processes on which the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site

### **B.3.4 Environmental Pressures**

- Habitat loss via scrub encroachment of the grassland and waterbodies
- Recreational disturbances

## B.4 Medway Estuary and Marshes SPA and Ramsar site

### B.4.1 Introduction

The Medway Estuary SPA and Ramsar site is located along the North Kent Coast within the Thames Estuary, approximately 14.3km east of the Dartford Borough boundary.

The Ramsar information Sheet describes the site as a ‘*complex of rain-fed, brackish, floodplain grazing marsh with ditches, and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. Rare wetland birds breed in important numbers. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.*

### B.4.2 Reason for Designation

#### **Medway Estuary & Marshes SPA**

The site is designated as an SPA for supporting bird populations of European importance for the breeding species of:

- Avocet *Recurvirostra avosetta*
- Little tern *Sterna albifrons*
- Common tern *Sterna hirundo*

The site is designated as an SPA for supporting bird populations of European importance for the over-wintering species of:

- Tundra swan *Cygnus columbianus bewickii*
- Avocet *Recurvirostra avosetta*
- Pintail *Anas acuta*
- Northern shoveler *Anas clypeata*
- Teal *Anas crecca*
- Wigeon *Anas penelope*
- Ruddy turnstone *Arenaria interpres*
- Dark-bellied brent goose *Branta bernicla bernicla*
- Dunlin *Calidris alpina alpina*
- Knot *Calidris canutus*
- Ringed plover *Charadrius hiaticula*
- Oystercatcher *Haematopus ostralegus*
- Black-tailed godwit *Limosa limosa*
- Curlew *Numenius arquata*
- Grey plover *Pluvialis squatarola*
- Great crested grebe *Podiceps cristatus*
- Redshank *Tringa tetanus*
- Shelduck *Tadorna tadorna*
- Greenshank *Tringa nebularia*

#### **Medway Estuary & Marshes Ramsar site**

The Ramsar information sheet states that Medway Estuary and Marshes site comprises, “A complex of brackish and freshwater, floodplain grazing marsh with ditches, and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. Rare wetland birds breed in important numbers. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates”.

Ramsar criterion 2: The site supports nationally scarce plants and at least seven British Red data book invertebrates.

Ramsar criterion 5: Assemblages of international importance: Species with peak counts in winter: 47637 waterfowl (5 year peak mean 1998/99-2002/2003).

Ramsar criterion 6: – Species/ populations occurring at levels of international importance. The site has bird species occurring in internationally important numbers: Redshank, grey plover (spring/autumn), dark-bellied brent goose, shelduck, pintail, red knot, ringed plover, dunlin (winter)

#### **B.4.3 Conservation Objectives**

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

#### **B.4.4 Environmental Pressures**

- Erosion of intertidal habitat within the site due to natural processes and the effects of sea defences and clay extraction.
- The intertidal area is also vulnerable to disturbance from water borne recreation
- The terrestrial part of the site depends on appropriate grazing and management of water.
- The site is sensitive to change in grazing levels.
- Water levels: abstraction, and drainage for arable
- Recreational disturbances

## B.5 The Swale SPA and Ramsar site

### B.5.1 Introduction

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.

### B.5.2 Reason for Designation

#### ***The Swale SPA***

The site is designated as an SPA for supporting bird populations of European importance:

During the breeding season:

- Avocet *Recurvirostra avosetta*
- Marsh Harrier *Circus aeruginosus*
- Mediterranean Gull *Larus melanocephalus*

Over winter:

- Avocet *Recurvirostra avosetta*
- Bar-tailed Godwit *Limosa lapponica*
- Golden Plover *Pluvialis apricaria*
- Hen Harrier *Circus cyaneus*
- Black-tailed Godwit *Limosa limosa islandica*
- Grey Plover *Pluvialis squatarola*
- Knot *Calidris canutus*
- Pintail *Anas acuta*
- Redshank *Tringa totanus*
- Shoveler *Anas clypeata*
- Dark-bellied Brent goose *Branta bernicla bernicla*
- Dunlin *Calidris alpina alpina*

On passage:

- Ringed Plover *Charadrius hiaticula*

The SPA also qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl (Over winter, the area regularly supports 65,390 individual waterfowl (5 year peak mean 1991/2 - 1995/6))

#### ***The Swale Ramsar site***

Ramsar Criterion 2: The site supports nationally scarce plants and at least seven red data book invertebrates. The site supports the GB Red Book vulnerable plants *Bupleurum tenuissimum*, *Carex divisa* and *Hordeum marinum*, as well as the endangered *Spartina maritima*. The Mediterranean gull *Larus melanocephalus* is also included in CITES Appendix I.

Ramsar Criterion 5: Assemblages of international importance: Species with peak counts in winter: 77,501 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar Criterion 6: Species/populations occurring at levels of international importance.

Species with peak counts in spring/autumn:

Ringed plover, *Charadrius hiaticula*, Europe/Northwest Africa. 917 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe. 1504 individuals, representing an average of 4.2% of the population (5 year peak mean 1998/9-2002/3)

Eurasian wigeon, *Anas penelope*, NW Europe. 15296 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

Northern pintail, *Anas acuta*, NW Europe. 763 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)

Northern shoveler, *Anas clypeata*, NW & C Europe. 483 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3)

### **B.5.3 Conservation Objectives**

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

### **B.5.4 Environmental Pressures**

- Erosion of intertidal habitat within the site due to natural processes and the effects of sea defences and clay extraction.
- The intertidal area is also vulnerable to disturbance from water borne recreation
- The terrestrial part of the site depends on appropriate grazing and management of water.
- The site is sensitive to change in grazing levels.
- Water levels: abstraction, and drainage for arable
- Recreational disturbances

## B.6 Thames Estuary and Marshes SPA and Ramsar site

### B.6.1 Introduction

The Thames Estuary and Marshes SPA and Ramsar site is located along the North Kent Coast within the Thames Estuary. It is located mainly within Kent, with approximately 10% within Essex, north of the River Thames.

The Ramsar information Sheet describes the site as a '*complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates*'.

### B.6.2 Reason for designation

#### **Thames Estuary & Marshes Ramsar site**

Ramsar Criterion 2: 'The site supports more than 20 British Red Data Book invertebrates and populations of the GB Red Book endangered least lettuce *Lactuca saligna*, as well as the vulnerable slender hare's-ear *Bupleurum tenuissimum*, divided sedge *Carex divisa*, sea barley *Hordeum marinum*, Borrer's saltmarsh-grass *Puccinellia fasciculata*, and dwarf eelgrass *Zostera noltei*'

Ramsar Criterion 5: The site supports assemblages of international importance with species with peak counts in winter: 45,118 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar Criterion 6: Species/populations occurring at levels of international importance with peak counts in spring/autumn:

- Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe - 1,640 individuals, representing an average of 4.5% of the population (5 year peak mean 1998/9-2002/3).

Species/populations occurring at levels of international importance with peak counts in winter:

- Dunlin, *Calidris alpina alpina*, W Siberia/W Europe - 15,171 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3); and,
- Red knot, *Calidris canutus islandica*, W & Southern Africa (wintering) - 7,279 individuals, representing an average of 1.6% of the population (5 year peak mean 1998/9-2002/3).

#### **Thames Estuary & Marshes SPA**

The site is designated as an SPA for supporting bird populations of European importance for the over-wintering species of:

- Dunlin *Calidris alpina alpina*
- Red knot *Calidris canutus*
- Hen harrier *Circus cyaneus*
- Black-tailed godwit *Limosa limosa islandica*
- Grey plover *Pluvialis squatarola*
- Avocet *Recurvirostra avosetta*
- Redshank *Tringa totanus*

Over winter the area regularly supports: 75019 waterfowl (5 year peak mean 21/03/2000) including: Avocet *Recurvirostra avosetta*, grey plover *Pluvialis squatarola*, red knot *Calidris canutus*, Dunlin *Calidris alpina alpina*, clack-tailed godwit *Limosa limosa islandica*, and redshank *Tringa totanus*.

The site is designated as an SPA for supporting bird populations of European importance for the staging species of:

- Common ringed plover *Charadrius hiaticula*

### B.6.3 Conservation Objectives

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features

- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

#### **B.6.4 Environmental Pressures**

- Coastal squeeze and erosion of intertidal habitat within the site.
- The intertidal area is vulnerable to disturbance from water borne recreation. This is being addressed by information dissemination as part of an estuary management plan.
- Changing grazing regimes
- Water supply to grazing marsh has decreased. Direct land take from the site and indirect disturbance
- Hydrological effects of development
- Eutrophication

## **B.7 Wye and Crundale Downs SAC**

### **B.7.1 Introduction**

This site contains a mosaic of different habitats including species-rich chalk grassland, neutral grassland, calcareous fen-meadow communities, scrub and woodland on chalk, and wet alder woodland. The grassland and woodland contain outstanding assemblages of plants including 2 rare species which are specially protected. It also supports an outstanding assemblage of invertebrates including many local and rare species. The species-rich grassland provides a particularly good habitat for moths and butterflies including a specially protected moth. The woodland and scrub also support a diverse breeding bird community. Part of the site, the Devil's Kneading Trough, is of importance for its fossil remains and geomorphological interest which extends on to the Gault clay plain to the south west.

### **B.7.2 Reason for Designation**

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) Dry grasslands and scrublands on chalk or limestone (important orchid sites)

### **B.7.3 Conservation Objectives**

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely

### **B.7.4 Environmental Pressures**

- Appropriate grazing regime.
- Recreational pressure
- Air quality
- Well-drained soils

## B.8 Blean Complex SAC

### B.8.1 Introduction

This is a complex of woodlands located within the Swale District and Canterbury City Council boundaries. The woodland complex comprises two SSSI units, Church Woods SSSI and Ellenden Wood SSSI. The SAC is one of the best remaining examples of primary deciduous woodland in the wider Blean Woods complex north of Canterbury. Church Woods SSSI is one of the most extensive areas of broadleaved woodland remaining in the Forest of Blean and is representative of these woodlands which are situated on London Clay. It contains a diverse assemblage of deciduous tree species with sweet chestnut *Castanea sativa* coppice a substantial component. Other native coppiced species include hornbeam *Carpinus betulus*, hazel *Corylus avellana*, beech *Fagus sylvatica*, pedunculate oak *Quercus robur*, sessile oak *Quercus petraea* and birch *Betula pendula*. One nationally rare species of butterfly the heath fritillary *Melitaea athalia* is present and in addition an outstanding assemblage of invertebrate species has been recorded. Ellenden Wood SSSI comprises sessile oak-beech woodland on acid soils and hornbeam with pedunculate and sessile oak on clay, plus a small amount of sweet chestnut coppice. Rare species of insect have been recorded. The wood has a diverse flora with over 250 higher plants and 300 fungi present. Large numbers of insects including three nationally rare species have been recorded. The area also supports a diverse breeding bird community.

### B.8.2 Reason for Designation

The site is designated as a Special Area of Conservation for its:

**B.8.3** Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*; Oak-hornbeam forests

### B.8.4 Conservation Objectives

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely

### B.8.5 Environmental Pressures

The key environmental conditions that support the features of European interest are:

- Low levels of trampling
- Maintenance of coppice management
- Minimal air pollution
- Absence of direct fertilisation and
- Well-drained soil