COUNTY: KENT SITE NAME: OTFORD TO SHOREHAM DOWNS

**DISTRICT: SEVENOAKS** 

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the

Wildlife and Countryside Act 1981

Local Planning Authorities: SEVENOAKS DISTRICT

National Grid Reference: TQ(51) 536596–532638 Area: 147.3 (ha.) 363.7 (ac.)

Ordnance Survey Sheet 1:50,000: 188 1:10,000: TQ 55 (NW) &

TQ 56 (SW)

Date Notified (Under 1949 Act): 1951 Date of Last Revision: 1968

and 1981

Date Notified (Under 1981 Act): 1991 Date of Last Revision: 1991

Other Information:

## Reasons for Notification:

This site includes areas of species-rich chalk grassland, and chalk scrub, and woodlands on a variety of soils. It supports a range of scarce and rare invertebrates.

The site lies in the valley where the River Darent has cut through the chalk escarpment. Both chalk and overlying deposits are close to the surface and these different rock types produce varied soils, which on the hill tops are clayey and poorly drained while others, mostly on the steep slopes, are thin, calcareous (chalky) and freely draining.

Much of the chalk downland was traditionally managed by grazing, mainly by sheep, which over centuries led to the development of very species-rich chalk grassland. A lack of grazing in recent decades has led to an overgrown form of this grassland over much of the site which is dominated by upright brome grass *Bromus erectus*. This is still very diverse, supporting over a hundred plant species. Other plants in the sward include sheep's fescue grass *Festuca ovina*, red fescue *Festuca rubra*, bird's-foot trefoil *Lotus corniculatus*, salad burnet *Sanguisorba minor*, rough hawkbit *Leontodon hispidus*, ribwort plantain *Plantago lanceolata*, fragrant orchid *Gymnadenia conopsea*, stemless thistle *Cirsium acaule*, quaking grass *Briza media* and devil's bit scabious *Succisa pratensis*. Two nationally scarce\* plants are found growing here: man orchid *Acerus anthropophorum* and chalk milkwort *Polygala calcarea*. The formerly widespread scrub species juniper *Juniperus communis* occurs here at one of its last Kent localities.

Much of the grassland areas grade into woodland through an intermediate scrub phase. Typically it is dominated by hawthorn *Crataegus monogyna*, ash

Fraxinus excelsior, roses Rosa species, with traveller's-joy Clematis vitalba, privet Ligustrum vulgare, black bryony Tamus communis and a variety of calcicolous (chalk-loving) species. The scrub communities vary greatly in age from a few years to a number of decades.

The woodlands vary according to the underlying geology and contain both ancient\*<sup>2</sup> and more recent sites. Areas on the deposits overlying the chalk are dominated by ash, pedunculate oak *Quercus robur* standards, downy birch *Betula pubescens*, field maple *Acer campestre*, hazel *Corylus avellana*, and sweet chestnut *Castanea sativa*. The ground flora is dominated by bramble *Rubus fruticosus* but includes a variety of other woodland species such as bluebell *Hyancinthoides non-scripta*, yellow archangel *Lamiastrum galeobdolon* and giant fescue grass *Festuca gigantea*.

The scarp slope woods are mainly beech *Fagus sylvatica* woodlands which grade into ash-field maple woodlands at the foot of the scarp. The stands contain a range of tree species including yew *Taxus baccata*, ash, field maple, whitebeam *Sorbus acuparia*, silver birch *Betula pendula*, hornbeam *Carpinus betulus*, wych elm and sycamore *Acer pseudoplatanus*. The open canopy produced by the storm of October 1987 has encouraged a ground flora dominated by bramble with traveller's-joy, ivy *Hedera helix*, wood false-brome grass *Brachypodium sylvaticum* and other woodland species.

The variety of habitats support outstanding communities of woodland and chalk grassland invertebrate species. Amongst the nationally scarce\*<sup>1</sup> species present are moths: plumed prominant *Ptilophora plumigera* which feeds on field maple and *Eudonia delunella* which feeds on lichens and mosses on the trunks of ash, apple *Malus* species and occasionally on elms *Ulmus* species. A scarce hoverfly *Cheilosia soror* is present, found on the chalk downs visiting umbels in glades of woods. It has been reported to breed in truffles.

 $<sup>^{*1}</sup>$ nationally scarce: species recorded from between 16 and 100 10  $\times$  10km squares in Britain.

<sup>\*2</sup> ancient woodland site: A wooded site believed to have been wooded since before AD 1600.