

COUNTY: SURREY SITE NAME: HACKHURST AND WHITE DOWNS

BOROUGH/DISTRICT: GUILDFORD/MOLE VALLEY

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981. Part of the site is a local Nature Reserve managed by Surrey County Council.

Local Planning Authority: GUILDFORD BOROUGH COUNCIL, Mole Valley District Council

National Grid Reference: TQ 097487, TQ 124495 Area: 185.0 (ha.) 457.1 (ac.)

Ordnance Survey Sheet 1:50,000: 187 1:10,000: TQ 04 NE, TQ 14 NW,  
TQ 15 SW, TQ 15 SE

Date Notified (Under 1949 Act): 1955 Date of Last Revision: 1975  
(as three separate sites)

Date Notified (Under 1981 Act): 1986 Date of Last Revision: –

Other Information:

This site is in 'A Nature Conservation Review',\* and is managed in part by the National Trust.

Description and Reasons for Notification:

The Hackhurst and White Downs site includes part of the North Downs escarpment west of Dorking. Most of the site is on the steeply sloping Upper and Middle chalk but some small areas overlying the Netley Heath Beds of the Clay-with-Flints plateau are included.

The chalk slopes are mostly south-facing and they are covered by a mosaic of grassland, scrub and secondary woodland habitats.

Variations in grazing pressure have created a graduation of grassland types from areas dominated by upright brome *Bromus erectus* and tor grass *Brachypodium pinnatum* to areas of close-cropped sheep's fescue *Festuca ovina*. Typical chalk grassland herbs, such as squinancywort *Asperula cynanchica*, yellow wort *Blackstonia perfoliata*, felwort *Gentianella amarella*, bee orchid *Ophrys apifera*, fragrant orchid *Gymnadenia conopsea* and pyramidal orchid *Anacamptis pyramidalis* are well represented. Rarer species include horse-shoe vetch *Hippocrepis comosa*, autumn lady's tresses *Spiranthes spiralis*, fly orchid *Ophrys insectifera*, and the nationally uncommon burnt *Orchis ustulata*, and many *Aceras anthroporum* orchids.

Stands of scrub are variable both in density and composition and most of the southern calcareous types are well represented. Common species include hawthorn *Crataegus monogyna*, dogwood *Cornus sanguinea*, silver birch *Betula pendula*, blackthorn *Prunus spinosa*, yew *Taxus baccata* and spindle *Euonymus europaeus*. Hackhurst Down supports the only sizeable population of juniper *Juniperus communis* remaining on the North Downs which supports thirteen invertebrates reliant on this species. There are also

some small areas on the Netley Heath Beds where gorse *Ulex europaeus* dominates the scrub.

The woodland stands on the chalk escarpment range from young ash *Fraxinus excelsior* to mature beech *Fagus sylvatica* woodland. Yew is common within these stands and whitebeam *Sorbus aria*, field maple *Acer campestre*, traveller's-joy *Clematis vitalba* and wild privet *Ligustrum vulgare* are also widespread. Where the canopy is fairly open a rich ground flora of dog's mercury *Mercurialis perennis*, ivy *Hedera helix*, false brome *Brachypodium sylvaticum*, lords and ladies *Arum maculatum* and violets *Viola* spp. can be found. Less common woodland species include white helleborine *Cephalanthera damasonium*, bird's nest orchid *Neottia nidus-avis*, yellow bird's-nest *Montropa hypopitys* and greater butterfly orchid *Platanthera chlorantha*. Woodland on the Netley Heath Beds is dominated by pedunculate oak *Quercus robur* and ash, over a shrub layer of hazel *Corylus avellana* coppice and a ground flora of bluebells *Hyacinthoides non-scripta*, brambles *Rubus fruticosus* and bracken *Pteridium aquilinum*.

The invertebrate fauna of the chalk escarpment is extremely rich; forty species of butterfly have been recorded and there are good colonies of locally uncommon species such as adonis blue *Lysandra bellargus*, chalkhill blue *L. coridon*, brown hairstreak *Thecla betulae*, Duke of Burgundy fritillary *Hamearis lucina*, marbled white *Melanargia galathea* and silver-spotted skipper *Hesperia comma*. Other notable invertebrates include the juniper-specific bug *Cyphostethus tristriatus*, the rare flies *Gymnosoma rotundatum* and *Microdon devius*, four rare beetles (Coleoptera) and *Centromerus albidus*, a spider known from only two other locations in Britain.

\* 'A Nature Conservation Review', D A Ratcliffe (1977), Cambridge.