

COUNTY: KENT SITE NAME: KNOLE PARK

DISTRICT: SEVENOAKS

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

Local Planning Authorities: Sevenoaks District Council

National Grid Reference: TQ(51)542538 Area: 376.20 (ha.) 929.21 (ac.)

Ordnance Survey Sheet 1:50,000: 188 1:10,000: TQ 55 SE & TQ 55 SW

Date Notified (Under 1949 Act): 1968 Date of Last Revision: 1981

Date Notified (Under 1981 Act): 1991

Other Information:

This site lies within the Kent Downs Area of Outstanding Natural Beauty.

Description:

Knole Park Site of Special Scientific Interest includes areas of acidic grassland, parkland, woodland and several ponds. It was a dead wood and ancient woodland invertebrate fauna which is regarded as the finest in Kent, and supports a rich fungus flora.

The first emparkments took place in the fifteenth century and probably included woodlands and have been managed as parklands to the present day. This continuity of habitat and management has led to the development of a parkland with ancient pollards believed to provide a direct link with the wildwood, together with more recent plantations. The site lies on the Folkestone, Sandgate and Hythe Beds on top of the Lower Greensand escarpment. The soils which derive from these strata are generally acidic and well-drained and support woodland stands dominated by sessile oak *Quercus petraea*, beech *Fagus sylvatica* and sweet chestnut *Castanea sativa* with some field maple *Acer campestre*, ash *Fraxinus excelsior*, downy birch *Betula pubescens*, sycamore *Acer pseudoplatanus* and hawthorn *Crataegus monogyna*. Grazing by fallow deer *Dama dama* and the Japanese species sika deer *Cervus nippon* and the acidic soils have formed species-poor ground floras and have severely limited the growth of a shrub layer and natural regeneration of tree species. Woodlands beyond the pale, or park boundary, have a more representative ground flora dominated by bramble *Rubus fruticosus*. Areas of dense bracken *Pteridium aquilinum* are also present on the woodland edge.

The central plateau supports species-poor acidic grasslands between the woodland areas. Common bent *Agrostis capillaris* dominates the turf, with sheep's fescue *Festuca ovina*, sweet vernal-grass *Anthoxanthum odoratum*, heath grass *Danthonia decumbens*, tormentil *Potentilla erecta*, sheep's-sorrel *Rumex acetosella* and heath bedstraw *Galium saxatile*. The sward contains numerous ant hills. More fertile grasslands occur on the golf course and in the valley bottoms. These are dominated by common bent and Yorkshire-fog *Holcus lanatus* together with crested dog's-tail *Cynosaurus cristatus*. The trees, turf and masonry of walls and buildings support a lichen flora of county importance. The first

British record for the lichen *Parmelia elegantula* was made from a sycamore at Knole.

The site supports a range of nationally rare*¹ and nationally scarce*² invertebrate species which depend upon the parkland and woodland habitats, particularly on their dead wood components. A nationally rare beetle *Platypus cylindrus* is found in the ancient broad-leaved forest and parkland, boring into thick oak bark. A number of nationally scarce invertebrates occupy various ecological niches in the woodlands and parkland of this site. *Cerylon fagi* lives under bark and in dead wood habitats. *Bolitochara mulsanti* is a small rove beetle found under fungus-infected bark and in decaying fungus. *Dienerella elongata* is a tiny beetle found in leaf litter, moss and fungi on this site. The park supports several nationally scarce and local dung beetles, including *Aphodius zenkeri* and *Aphodius borealis* which feed on the dung of the deer.

Many species of fungus have been recorded from the site. Among the many which have restricted distributions are some living under trees, such as an earth star *Geastrum fornicatum* and a tube-gilled toadstool *Boletus pruinatus*, and many associated with dead wood. The latter include: *Fomes fomentarius* on beech, a polypore bracket fungus rare in the south east, but more common in Scotland on birch *Betulus* species, and two gilled bracket fungi, *Panellus serotinus* growing on standing trees, and *Schizophyllum commune* on recently fallen timber. Many commoner species have been recorded, including many species of *Coprinus*, *Mycena*, and wax-caps *Hygrophorus*.

*¹ 'Nationally rare': recorded from 1--15 10km x 10km squares in Britain.

*² 'Nationally scarce': recorded from between 16 and 100 10km x 10km squares in Britain.