

**COUNTY:** OXFORDSHIRE

**SITE NAME:** WATERPERRY WOOD

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

**Local Planning Authorities:** South Oxfordshire District Council

**National Grid Reference:** SP605090

**Ordnance Survey Sheet 1:50,000:** 164                      **1:10,000:** SP61 SW/SP50 NE/SP60 NW/  
SP51 SE

**Date Notified (Under 1949 Act):** 1955                      **Date of Last Revision:** 1977

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

**Area:** 140.2 ha 346.4 ac

**Other information:** The site is subject to a Forest Nature Reserve agreement with the Forestry Commission and is being managed to maintain its interest for Lepidoptera.

### **Description and Reasons for Notification**

Waterperry Wood is an ancient woodland site which between 1955 and 1970 was almost entirely replanted with a mixture of Norway spruce and pedunculate oak. There still remain small stands of birch-hazel coppice and poplar plantation. The wood has retained well developed hedges of blackthorn on the southern and west edges, as well as a series of glades. The site is of special interest for its insect fauna which contains many nationally uncommon and rare species.

The site lies on Oxford clay which produces wet, heavy soils of the Denchworth Series. The woodland is divided into management compartments with a block of experimental plantings in the south-eastern quarter of the wood. The woodland in the northern half of the site contained eight glades which were cleared for nature conservation purposes in 1956 and five of these still remain. The glades contain remnants of the original woodland and are considered to be of major importance to the invertebrate interest of the site. A series of forestry rides run through the wood with elements of deciduous woodland flora on the ride edges.

The shrub flora of the glades and ride edges includes birch, aspen, hazel, bramble *Rubus fruticosus* and goat willow *Salix caprea*. The growth of these is kept in check by deer browsing. The ground flora of the glades, and certain areas of rides contain species normally associated with ancient woodland in southern England, including wood spurge *Euphorbia amygdaloides*, wood anemone *Anemone nemorosa*, primrose *Primula vulgaris*, common figwort *Scrophularia nodosa*, hairy wood-rush *Luzula pilosa*, wood sedge *Carex sylvatica* and remote sedge *C. remota*. The ground flora over many of the rides consists of tufted hair-grass *Deschampsia cespitosa* and common bent-grass *Agrostis tenuis* in the drier rides, with wood small-reed *Calamagrostis epigejos* dominant on the wetter rides. A coppice compartment in the north of the wood is predominantly birch with hazel, and includes aspen, pedunculate oak, alder buckthorn *Frangula alnus* and the nationally uncommon wild service tree *Sorbus torminalis*.

The wood has a very diverse insect fauna, due partly to its proximity to adjacent, ancient woodland in the Bernwood Forest complex, and partly to the continuity of woodland on the site. This association with ancient woodland is reflected in the presence of nineteen species of nationally uncommon hoverflies, five of which are listed in the British Red Data Book of Insects. They include the aphid feeders *Epistrophella euchroma*, *Melangyna triangulifera* and *Pipiza bimaculata*, deadwood feeders *Criorhina asilica*, *Brachypalpoides lenta* and *Ferdinandea ruficornis*, the rare *Microdon eggeri* whose larvae live in ant's nests, and other species normally associated with ancient deciduous woodland. A further two species of uncommon hoverfly *Parasyrphus malinellus* and *P. vittiger* are normally associated with Caledonian pine forest. On this site they are considered to be recent colonists of the coniferous plantation. Other flies recorded from the wood include the endangered species *Odinia xanthocera* which is known only from Waterperry Wood and one locality in Surrey.

The beetle fauna of the wood includes many nationally uncommon species, most of which are associated with the remaining ancient woodland elements of the site. They include the longhorn beetle *Anaglyptus mysticus*, the click beetle *Ampedus elongatulus*, and the bark beetle *Xyleborus dispar*, all of which are associated with deadwood. Other species, such as the weevil *Polydrosus flavipes* and the leaf beetle *Aphthona melancholica*, are associated with woodland herbs, whilst the histerid beetle *Plegaderus dissectum* and the leiodid beetle *Catops coracinus* are predators or scavengers in woodland habitats.

The bee, ant and wasp fauna is rich for a woodland site and contains over ninety species, including ten species of bumble bee *Bombus* spp. Uncommon, or locally rare, species include the sphecid wasp *Oxybelus uniglumis*, the pompilid wasps *Priocnemis coriaceus* and *Deuteraenia hircana*, and the sawflies *Cephus nigrinus* and *Allantus truncatus*. Several species of chalcid wasp and ichneumon wasps new to Britain have been recorded from Waterperry Wood. Other insect groups are considered to be as diverse as those already recorded in recent years.

The butterfly fauna of Waterperry Wood includes over thirty breeding species, with many more recorded historically. The wood is of considerable regional importance for two nationally uncommon species, with many more recorded historically. The wood is of considerable regional importance for two nationally uncommon species: the black hairstreak *Strymonidia pruni* and the purple emperor *Apatura iris*. The black hairstreak lays its eggs, along with over thirty-six species of moth, on the wide blackthorn hedges which enclose the wood and on blackthorn thickets within the wood. The caterpillars of the purple emperor feed on goat willow *Salix caprea* and grey willow *S. cinerea* in the woodland canopy and along the ride edges and glades. The woodland rides and glades also provide a habitat for other regionally uncommon butterfly species including the pearl-bordered fritillary *Boloria euphrosyne*, wood white *Leptidea sinapis*, brown hairstreak *Thecla betulae* and silver-washed fritillary *Argynnis paphia*. The moth fauna is also rich with the more uncommon species including mere wainscot *Photedes flux*, poplar lutestring *Tethea or* and the inappropriately named common fanfoot *Herminia strigilata*.