

Notification Date: 2 February 1989

COUNTY: HEREFORD & WORCESTER                      SITE NAME: LEIGH BROOK VALLEY

DISTRICT: MALVERN HILLS                              SITE REF: 15 WRC

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

Local Planning Authority: HEREFORD & WORCESTER COUNTY COUNCIL, Malvern Hills District Council

National Grid Reference: SO 746516                      Area: 44.1 (ha.) 108.9 (ac.)

Ordnance Survey Sheet 1:50,000: 156                      1:10,000: SO 75 SW, SE

Date Notified (Under 1949 Act): 1971                      Date of Last Revision: 1975

Date Notified (Under 1981 Act): 1989                      Date of Last Revision: –

Other Information:

Site boundary alteration (extension and deletion). The site is within the Malvern Hills AONB. Part managed as a nature reserve by the Worcestershire Nature Conservation Trust.

Description and Reasons for Notification:

The site occupies a section of the steep-sided valley of the Leigh Brook near the village of Alfrick. It overlies limestone and shales of the Silurian Period. Within the site there is a range of habitats including broadleaved woodland, unimproved meadows, old orchards and a section of the Leigh Brook itself. It has been selected for its woodland, grassland and invertebrates. The site features four nationally scarce types of woodland and the meadows include a nationally restricted type of grassland. In addition the rich invertebrate fauna includes several uncommon moths and a nationally rare hoverfly. A wide variety of breeding birds also occurs.

Within the woods are a number of types with a very restricted national distribution. Whereas sessile oak *Quercus petraea* is the characteristic dominant of oakwoods on acid soils in the north and west of Britain, there are only a few areas, such as the Wye Valley and the Silurian outcrops of the West Midlands, where it occurs on calcareous rocks. In Leigh Brook Valley sessile oak occurs in association with a number of other species such as wych elm *Ulmus glabra*, small-leaved lime *Tilia cordata* and beech *Fagus sylvatica*. These associations constitute different types of woodland which are all nationally restricted and this makes Leigh Brook Valley a particularly important site.

The woodland is dominated by sessile oak with ash *Fraxinus excelsior* and field maple *Acer campestre*. The distribution of other tree species is related to the topography of the site. Along the valley bottoms where the soils are flushed, sessile oak is associated with wych elm. Further up the slopes the soils are drier and wych elm is replaced by small-leaved lime. Wild service-tree *Sorbus torminalis* is also present here with a few trees of the nationally restricted large-leaved lime *Tilia platyphyllos*. On the valley slopes in Sheephill Coppice beech *Fagus sylvatica* is also present as old coppice stools. At the top of the slopes where leaching has taken place, sessile oak is associated with silver birch *Betula pendula* and small-leaved lime is largely absent.

The understorey is similar throughout the woodland and is dominated by hazel *Corylus avellana* with spurge-laurel *Daphne laureola*, spindle *Euonymus europaeus* and wild privet *Ligustrum vulgare*. Many typical woodland ground flora species occur such as bluebell *Hyacinthoides non-scripta*, dog's mercury *Mercurialis perennis*, ramsons *Allium ursinum* and yellow archangel *Lamium galeobdolon* as well as a number of species that are more

local in Worcestershire. These include violet helleborine *Epipactis purpurata*, small teasel *Dipsacus pilosus*, stinking iris *Iris foetidissima* and the nationally restricted monk's-hood *Aconitum napellus*.

Within the site are several herb-rich meadows which are characterised by crested dog's-tail *Cynosurus cristatus* and common knapweed *Centaurea nigra*. Other grasses include sweet vernal-grass *Anthoxanthum odoratum* and red fescue *Festuca rubra* whilst herbs include green-winged orchid *Orchis morio*, cowslip *Primula veris*, yellow rattle *Rhinanthus minor* and adder's-tongue *Ophioglossum vulgatum*. The nationally restricted greater broomrape *Orobanche rapum-genistae*, which is parasitic on broom *Sarothamnus scoparius*, is found in the meadows adjacent to Papermill Coppice and wild daffodil *Narcissus pseudonarcissus* occurs in one of the meadows as well as in part of the woodland.

The site is important for invertebrates, Lepidoptera (moths and butterflies) being particularly well represented. These include a number of nationally scarce moths including alder kitten *Furcula bicuspis*, maple pug *Eupithecia inturbata* and the rare micromoth *Stigmella pyri* which is associated with pear trees in the old orchards. The larvae of a nationally rare hoverfly *Chalcosyrphus eunotus* live in decaying wood in the Leigh Brook where the club-tailed dragonfly *Gomphus vulgatissimus* also occurs.

Birds breeding in the woods include wood warbler *Phylloscopus sibilatrix*, hawfinch *Coccothraustes coccothraustes* and tawny owl *Strix aluco*. In recent years a nest box scheme on the site has attracted pied flycatcher *Ficedula hypoleuca*. The number of breeding birds is further amplified by species that nest along the brook such as dipper *Cinclus cinclus* and kingfisher *Alcedo atthis*.