

Notification date: 21 March 1996

COUNTY: DERBYSHIRE

SITE NAME: KEDLESTON PARK

DISTRICT: AMBER VALLEY

SITE REF: 15 P3V/1006932

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

Local Planning Authority: DERBYSHIRE COUNTY COUNCIL, Amber Valley Borough Council

National Grid Reference: SK 315412

Area: 93.27 (ha.) 230.38 (ac.)

Ordnance Survey Sheet 1:50,000: 128

1:10,000: SK 33 NW, SK 34 SW

Date Notified (Under 1949 Act): –

Date of Last Revision: –

Date Notified (Under 1981 Act): 1996

Date of Last Revision: –

Other Information:

New site.

Description and Reasons for Notification:

Kedleston Park is situated 2 km north-west of the edge of the city of Derby in the valley of Cutler Brook, a small tributary of the River Derwent. The site includes three areas of the Park in which ancient firs are concentrated and is coincident in part with a former Mediaeval deer park although the land within the site is now managed in a variety of ways including wood-pasture, high-forest woodland and as a golf course.

The main interest of Kedleston Park is the rich and diverse deadwood invertebrate fauna which is primarily dependent upon the large number of mature and overmature beech *Fagus sylvatica* and pedunculate oak *Quercus robur* trees which have survived here providing a link through time with the formerly extensive areas of open structured wood-pasture of this part of lowland England. To be capable of supporting highly specialised deadwood invertebrates such as those found at Kedleston trees need to be several hundred years old and furnished with a wide range of small-scale habitats including living and dying wood together with dead wood in every type and stage of decay. Together with the wood-rotting fungi this community of organisms represents a complex system of nutrient recycling rarely found in woodlands today.

The predominant tree species at Kedleston are oak and beech and the majority of the rare and scarce deadwood (saproxylic) invertebrates have been found in close association with these species. There are also specimens of lime *Tilia* spp., ash *Fraxinus excelsior*, sweet-chestnut *Castanea sativa*, horse-chestnut *Aesculus hippocastaneum* and elm *Ulmus* spp. Many of these trees are known to be well over 200 years old with a number dating back to the mid 17th century. Pollen is also a key element in the diet of many of the deadwood beetles found at Kedleston and this is provided principally by hawthorn *Crataegus monogyna* bushes within the Park.

Over 130 wood-eating (lignicolous) beetle species have been recorded from Kedleston including one national rarity, *Atomaria morio* and 24 others which are nationally scarce. This diverse group includes species such as *Plegaderus dissectus* and the rove beetle *Quedius microps* which require wet or moist rotting wood; species of drier conditions such as *Thymalus limbatus* and species which live under

bark such as *Megatoma undata* and the reddish rove beetle *Quedius scitus*. There is also a large number of species associated with fungi including the small yellow rove beetle *Sepedophilus testaceus*; *Sphindus dubius* which is associated with slime moulds and powdery fungi on dead wood and *Lathridius consimilis*, a plaster beetle found in bracket fungi. Especially significant, however, is the large proportion of species known to be faithful to the, ancient woodland habitat. Their ability to colonise new sites is known to be poor and their presence at Kedleston indicates a continuity of ancient woodland on or adjacent to the site.

The abundance of dead wood in a wide variety of situations also provides ideal conditions for a rich assemblage of fly species indicative of ancient woodland habitats. Of particular note are the hoverflies, 50 species of which have been recorded to date at Kedleston. Three such species; *Orthonevra brevicornis*, *Xylota florum* and *X. tarda* are nationally scarce. Amongst other groups of specialist deadwood flies the soldierfly, *Neopachygaster meromelaena*, whose larvae live under the bark of deciduous trees and the crane fly, *Ctenophora pectinicornis* which relies on the presence of large decaying fallen tree trunks for its breeding sites, are nationally scarce. The strong southern bias in the distribution of *C. pectinicornis* is typical of many of the scarce invertebrate species found at Kedleston Park. This highlights the site's position towards the north-western limits of the range of an invertebrate community which has its stronghold in the south of England.

The ground flora of the site is very varied contributing significantly to the invertebrate assemblage by providing pollen and other factors required by many of the deadwood species and by adding to the overall species diversity. Unimproved acidic grasslands with abundant heath bedstraw *Galium saxatile* and tormentil *Potentilla erecta* and rush *Juncus effusus* and *J. inflexus* dominated flushes characterise the area near to North Lodge. Vicar Wood along the southern boundary of the site is carpeted in the spring with bluebells *Hyacinthoides non-scripta* and dog's mercury *Mercurialis perennis* and primroses *Primula vulgaris* and foxgloves *Digitalis purpurea* are encountered frequently throughout the Park. Hay Wood in the north of the site contains trees dating from around 1676 and the ground flora here includes bluebells, primroses and ramsons *Allium ursinum*.

The lower lake (which shares a boundary with the wet woodland of Bottom Covert) is an important additional feature at Kedleston. It has a particularly rich dragonfly and damselfly fauna including the emperor dragonfly *Anax imperator* and the broad-bodied chaser *Libellula depressa*, both of which are rare in Derbyshire. A large population of the spectacular and locally rare banded agrion *Calopteryx splendens* also occurs around the lake's margins.

In addition to the important invertebrate assemblage, the mosaic of habitats within the Park supports a good bird community and a number of species otherwise rare on the outskirts of Derby breed within the site. Barn owls *Tyto alba* nest in Vicar Wood and a wide range of woodland species including nuthatch *Sitta europaea*, treecreeper *Certhia familiaris*, and green *Picus viridis*, great spotted *Dendrocopos major* and lesser spotted woodpeckers *D. minor* breed and forage in the ancient trees. Sparrowhawks *Accipiter nisus* and kestrels *Falco tinnunculus* nest within the site and a pair of Hobby *F. subbuteo* also regularly breeds here.