

COUNTY: BUCKINGHAMSHIRE

SITE NAME: DANCERSEND WATERWORKS

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

Local Planning Authorities: Aylesbury Vale District Council, Buckinghamshire County Council

National Grid Reference: SP906090

Ordnance Survey Sheet 1:50,000: 165 **1:10,000:** SP90 NW

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

Area: 4.0 ha 9.9 ac

Other information: The site is presently owned by Thames Water Authority, but was formerly a private waterworks supplying the Rothschild properties around Tring and Aylesbury. It is within the Chilterns AONB.

Description and Reasons for Notification

Situated on the deep calcareous soils of a gently sloping valley bottom, this small area of artificial banks, basins and plateaux with elements of the original topography, supports an unusually rich assemblage of herbs, grasses and shrubs. Locally the periodic flushing of chalk silt from the waterworks into specially constructed basins has created a remarkable habitat for certain chalk-loving species.

The herb-rich sward contains many species characteristic of calcareous grassland in the Chilterns with several uncommon and locally rare plants, including nine species of orchid. There is scattered scrub throughout, in places forming substantial thickets, with several pockets of woodland. The grassland supports a number of butterfly species while the scrub and woodland provide habitats for a range of breeding birds. There is a large active badger sett.

The grassland, which is maintained by mowing, is dominated by many species strongly associated with chalk soils such as tor-grass *Brachypodium pinnatum*, hairy oat-grass *Avenula pubescens*, yellow oat-grass *Trisetum flavescens*, quaking grass *Briza media*, glaucous sedge *Carex flacca*, fairy flax *Linum catharticum*, large thyme *Thymus pulegioides*, basil-thyme *Acinos arvensis*, small scabious *Scabiosa columbaria*, yellow-wort *Blackstonia perfoliata*, horse-shoe vetch *Hippocrepis comosa* and stemless thistle *Cirsium acaule*. Other noteworthy species include adder's-tongue fern *Ophioglossum vulgatum* and the clover parasite lesser broomrape *Orobanche minor*. The chalk silt floor of one of the larger basins bears a very large population of the nationally rare Chiltern gentian *Gentianella germanica*, together with abundant clustered bellflower *Campanula glomerata*. On an area of poorly drained, heavier soil the uncommon pale sedge *Carex pallescens*, hairy sedge *C. hirta* and bush grass *Calamagrostis epigejos* dominate.

The grasslands are rich in orchid species, particularly on the well-drained sloping banks. Here bee and pyramidal orchids *Ophrys apifera* and *Anacamptis pyramidalis* occur in large numbers with common twayblade *Listera ovata* and common spotted orchid *Dactylorhiza fuchsii*, the latter particularly evident on areas of disturbed ground. Species less abundant on the site are fly, greater butterfly and fragrant orchid *Ophrys insectifera*, *Platanthera chlorantha* and *Gymnadenia conopsea* which have a restricted distribution in Buckinghamshire.

In areas with taller grasses and herbs, butterflies are common. Kidney vetch, a local herb usually restricted to chalk soils, is the larval food plant of the small blue butterfly. Its close relative, the common blue, is also found here and depends on the more common bird's-foot trefoil *Lotus corniculatus* and common restharrow *Ononis repens*.

The mixed scrub and young woodland is confined mainly to the south of the site and is dominated by silver birch, goat willow, hazel and wild cherry. Other species typically associated with chalk and found here include dogwood, wayfaring tree, whitebeam, wych elm and the dwarf evergreen spurge-laurel *Daphne laureola*. The associated woodland ground flora includes wood barley *Hordelymus europaeus* which is nationally rare, bird's-nest orchid *Neottia nidus-avis* and moschatel *Adoxa moschatellina* which are uncommon in Buckinghamshire. Other characteristic woodland species are white helleborine *Cephalanthera damasonium*, sweet woodruff *Galium odoratum*, sanicle *Sanicula europaea* and wood spurge *Euphorbia amygdaloides*.

The range of natural habitats present at Dancersend Waterworks provides nest sites and feeding areas for several species

of common birds including willow warbler, blackcap, long-tailed tit and yellowhammer. In the past the site has supported breeding circl buntings and red-backed shrike, two species much declined recently in Britain.