

Site Name: Annesley Woodhouse Quarries SSSI **County:** Nottinghamshire

District: Ashfield

Status: Site of Special Scientific Interest (SSSI) notified under section 28C of the Wildlife and Countryside Act 1981 as inserted by Schedule 9 to the Countryside and Rights of Way Act 2000

Local Planning Authority: Ashfield District Council

National Grid reference: SK 486537 **Area:** 34.60 ha

Ordnance Survey Sheet: **1:50,000:** 120 **1:10,000:** SK 45 SE

Notification date: 22 June 2010

Reasons for notification:

Annesley Woodhouse Quarries SSSI is a nationally important site for its unimproved dry calcareous grassland and marshy grassland vegetation communities, and an outstanding assemblage of native breeding amphibians, which includes a nationally important breeding population of great crested newts *Triturus cristatus*.

General description:

Situated within the valley of the Cuttail Brook on the Carboniferous Coal Measures and the Permian Magnesian Limestone escarpment, the site contains an extensive and diverse range of habitats which support several features of special interest. The south-west-facing escarpment slopes in the south of the site contain notable areas of lowland calcareous grassland which have been partly subject to quarrying in the past. The turf here is generally dominated by heath false-brome *Brachypodium pinnatum* with red fescue *Festuca rubra*, upright brome *Bromopsis erecta*, sheep's-fescue *Festuca ovina*, quaking-grass *Briza media* and meadow oat-grass *Helictotrichon pratense*. Cowslip *Primula veris* and common bird's-foot-trefoil *Lotus corniculatus* are typically abundant, as are herbs such as common rock-rose *Helianthemum nummularium*, salad burnet *Sanguisorba minor*, burnet-saxifrage *Pimpinella saxifraga*, wild thyme *Thymus polytrichus*, rough hawkbit *Leontodon hispidus*, small scabious *Scabiosa columbaria* and fairy flax *Linum catharticum* particularly on the thinner soils of the steepest slopes. On deeper soils, the calcareous grassland community becomes more intermediate with the appearance of more mesotrophic species such as devil's-bit scabious *Succisa pratensis*, common knapweed *Centaurea nigra*, pepper-saxifrage *Silaum silaus*, adder's-tongue *Ophioglossum vulgatum* and betony *Stachys officinalis*. A number of orchid species are also present throughout.

In places, these tracts of dry grassland are flushed with calcium-rich water emanating from the underlying limestone via a number of bryophyte-dominated springs and seepage lines. Notable stands of species-rich marshy grassland characterise the flushed ground below. This community is generally distinguished by a dominance of glaucous sedge *Carex flacca*, red fescue and the pointed spear-moss *Calliergonella cuspidata*, together with a diverse range of herbs typical of damp grasslands including carnation sedge *Carex panicea*, brown sedge *C. disticha*, jointed rush *Juncus articulatus*, common fleabane *Pulicaria dysenterica*, hoary ragwort *Senecio erucifolius*, marsh horsetail *Equisetum palustre*, fen bedstraw *Galium uliginosum*, devil's-bit scabious, marsh valerian *Valeriana dioica*, ragged-robin *Lychnis flos-cuculi* and meadowsweet *Filipendula ulmaria*.

The north of the site is dominated by a low-lying bowl-shaped valley known locally as Bentinck Void, a former opencast coal quarry. It now consists of a permanently flooded lake and a number of smaller permanent water bodies flanked by a diverse mosaic of habitats

which have developed through the natural re-colonisation of vegetation, following the cessation of working and re-contouring of the land. The void lake and ponds have both been colonised by an abundance of aquatic and marginal vegetation and support an outstanding assemblage of breeding amphibians including common toad *Bufo bufo*, common frog *Rana temporaria*, smooth newt *Triturus (Lissotriton) vulgaris* and great crested newt *T. cristatus*, the last-named regularly occurring in numbers which make the colony one of the largest in the county. The breeding ponds are surrounded by a large contiguous expanse of structurally-diverse terrestrial habitat, ranging from early successional open vegetation, dry and marshy grassland, to scattered trees and scrub. These, along with a network of open drainage ditches and lengths of boundary hedgerow, provide amphibians with important areas for foraging, dispersal and sheltering during periods of inactivity, including hibernation. The exceptionally large population of great crested newts, the highly suitable breeding ponds and the extensive mosaic of high quality terrestrial habitat found throughout the site combine to make this site the best known breeding locality for this species in Nottinghamshire.

In addition to the reasons for notification described above, the site supports small resident populations of water voles *Arvicola amphibius*, grass snakes *Natrix natrix* and common lizards *Lacerta vivipara*, and several breeding birds that are listed as priority species in the UK Biodiversity Action Plan (BAP). The site also supports a number of nationally rare, scarce and notable invertebrate species and a population of the dingy skipper *Erynnis tages*, a UK BAP priority species of butterfly. Of note, botanically, are a number of bryophyte-dominated, tufa-forming calcareous springs present on the south-west-facing slopes of the SSSI. These occur around discrete points where calcium-rich water emerges at the ground surface and are marked out by a distinctive mire vegetation community, here characterised by the fern-leaved hook-moss *Cratoneuron filicinum*.