## SITE NOTIFIED TO THE SECRETARY OF STATE ON 21 MARCH 1990

COUNTY: DERBYSHIRE & SITE NAME: MOSS VALLEY

SOUTH YORKSHIRE

DISTRICT: NORTH EAST DERBYSHIRE, SITE REF: 15 WMN

**SHEFFIELD** 

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, North East

Derbyshire District Council, Sheffield City Council

National Grid Reference: SK 415802 Area: 25.9 (ha.) 63.9 (ac.)

Ordnance Survey Sheet 1:50,000: 120 1:10,000: SK 48 SW, SK 47 NW

Date Notified (Under 1949 Act): 1951 Date of Last Revision: 1980

Date Notified (Under 1981 Act): 1990 Date of Last Revision: –

## Other Information:

Site boundary alteration (extension & reduction). Site formerly known as Ford Valley.

## Description and Reasons for Notification:

The Moss Valley is situated on the eastern side of the Pennines to the south of the City of Sheffield, and is virtually surrounded by urbanisation and industrialisation which contrasts sharply with its rural character and semi-natural vegetation. It is a wide valley of about 10 square km formed by the Moss Brook and its tributaries which rise at its western end. The Moss Brook is a small, fast-flowing stream of high quality water. The valley lies on the shales and sandstones of the Lower Coal Measures of the Upper Carboniferous period, producing a wide range of soil types and fertility.

The site includes the Moss Brook from near Ford village in the west, to Eckington in the east. It contains wet habitats of the valley bottom associated with the brook and its flood plain, and the bogs and open water of several derelict mill ponds. There are areas of open marshy grassland, shady wet woodland, old hedgerows, ditches, and scrub. The meanders of the brook produce high, shaley banks and pools. The woodland and field boundaries contain old and rotting trees and much fallen dead wood. This diverse mosaic of topographic features and vegetation types supports rich assemblages of invertebrates, including nationally rare species. The site provides essential habitats for the life cycles of these invertebrates, many of which are at the edge of their range here.

The wet woodlands are dominated by alder *Alnus glutinosa*, with crack willow *Salix fragilis*, ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*. The understorey contains hawthorn *Crataegus monogyna*, hazel *Corylus avellana* and willows *Salix* spp. The ground flora is dominated by bramble *Rubus fruticosus*, wood club-rush *Scirpus sylvaticus* and great willowherb *Epilobium hirsutum*, with reed canary-grass *Phalaris arundinacea*, wild angelica *Angelica sylvestris* and common marsh-bedstraw *Galium palustre*. There are two types of drier woodland. Some areas are predominantly sessile oak *Quercus petraea* and silver birch *Betula pendula* with a ground flora of wavy hair-grass *Deschampsia flexuosa* and creeping soft-grass *Holcus mollis*. Elsewhere wych elm *Ulmus glabra* and sycamore are dominant, with birch, ash and alder locally abundant. The understorey contains oak

and hazel and the ground flora includes wood melick *Melica uniflora*, dog's mercury *Mercurialis perennis*, ivy *Hedera helix* and yellow archangel *Galeobdolon luteum*. The range of woodland types and their component of dead or dying timber makes them or special importance for invertebrate communities.

The neutral grasslands are dominated by creeping bent *Agrostis stolonifera* and Yorkshire-fog *Holcus lanatus* with devil's-bit scabious *Succisa pratensis* and betony *Stachys officinalis*. Areas of marshy grassland are dominated by tufted hairgrass *Deschampsia cespitosa* and rushes *Juncus spp.* with bulrush *Typha latifolia* in the wettest areas. There is a diversity of wet grassland plants here including common bistort *Polygonum bistorta*, common spike-rush *Eleocharis palustris*, greater bird's-foot-trefoil *Lotus uliginosus* and marsh ragwort *Senecio aquaticus*.

The site is of special interest for its range of invertebrate species. The beetle and hoverfly fauna associated with dead and dying timber is of particular importance. Beetles include the net-winged beetle *Pyropterus nigroruber*, the larvae of which live in dead wood, and *Hylecoetus dermestoides* which requires dying wood. Hoverflies include *Melangyna guttata*, the larvae of which feed on aphids in ancient woodland sites, and *Xylota florum* which requires dead wood in wet woodland.

At least two other nationally scarce species and seven species of regional significance associated with overmature timber are found here. About 30 species which are recognised as indicating a continuity of cover by mature woodland have so far been recorded.

Other uncommon species present include those associated with acidic wet grassland such as the cranefly *Prionocera pubescens* and others such as the digger wasp *Lindenius albilabris* which requires open sandy soil in which to nest. A total of 14 nationally scarce species has been recorded from the site.

The area is important for grass snakes *Natrix natrix* which inhabit the wet grassland areas of the Moss Brook. Great crested newts *Triturus cristatus* are recorded from the site and the native British freshwater crayfish *Austropotamobius pallipes* is found in the waters of the Moss Brook.

The valley is also important for breeding birds. Species recorded from the site include green woodpecker *Picus viridus*, great spotted woodpecker *Dendrocopos major*, tawny owl *Strix aluco*, kingfisher *Alcedo atthis* and grey wagtail *Motacilla cinerea*.