

SITE NOTIFIED TO THE SECRETARY OF STATE ON THE 13TH MARCH 1992

COUNTY: LANCASHIRE

SITE NAME: COLDWELL FARM PASTURE

DISTRICT: LANCASTER

Status: Site of Special Scientific Interest (SSSI) notified under Section 23 of the Wildlife and Countryside Act 1981.

Local Planning Authority: Lancaster City Council

National Grid Reference: SD 477781

Area: 0.75 (ha.) 1.85 (ac.)

Ordnance Survey Sheet 1:50,000: 97

1:10,000: SD 47 NE

Date Notified (Under 1949) Act): –

Date of Last Revision: –

Date Notified (Under 1981 Act): 1992

Date of Last Revision: –

Other Information:

1. The site is within the Arnside-Silverdale AONB.
2. This is a new site.

Description and Reasons for Notification:

Coldwell Farm Pasture is a small area of lowland grassland situated some 2km south-east of Arnside at an altitude of about 8m OD. It is an important enclosure supporting three types of unimproved herb-rich grassland typically associated with soils of the Carboniferous limestone of the Arnside-Silverdale area, which vary in depth, nutrient status and moisture content. The grassland includes over 100 plant species, four of which are nationally scarce. An area of mature semi-natural broadleaved woodland is also found within this site on exposed limestone pavement, a rare and threatened habitat in Great Britain.

The grassland plant communities present are all characteristic of grazed pasture which has been traditionally managed and left unimproved over many years. Such communities are now scarce nationally and have become almost completely destroyed in Lancashire due to agricultural improvement.

Shallow limestone soils covering rock outcrops support a calcareous grassland plant community dominated by blue moor-grass *Sesleria albicans*, a nationally scarce species, with meadow oat-grass *Avenula pratensis* and quaking-grass *Briza media*. Herbs are well represented within the sward including many characteristic species such as common rock-rose *Helianthemum nummularium*, wild thyme *Thymus praecox*, fairy flax *Linum catharticum*, small scabious *Scabiosa columbaria* and mouse-ear hawkweed *Hieracium pilosella* as well as three other national rarities namely limestone bedstraw *Galium sternerii*, spring sandwort *Minuartia verna* and spring cinquefoil *Potentilla tabernaemontani*. The calcareous grassland is representative of the *Sesleria albicans* -- *Galium sternerii* community as described in the National Vegetation Classification.

Away from rock outcrops the soil becomes deeper and the calcium content falls. In such areas the grassland plant community present shows a transition towards a more neutral type dominated by crested dog's-tail *Cynosurus cristatus*, fescue *Festuca rubra* and common bent *Agrostis capillaris*. Herbs, especially common bird's-foot-trefoil *Lotus corniculatus*, lady's bedstraw *Galium verum*, salad burnet *Sanguisorba minor*, yarrow *Achillea millefolium* and common knapweed *Centaurea nigra* are abundant. This association of plant species is considered to be representative of the *Galium verum* sub-community of the

Cynosurus cristatus -- *Centaurea nigra* neutral grassland community as described in the National Vegetation Classification.

A stream borders the northern and western sides of the enclosure and as the ground falls to meet its banks there is an increase in soil moisture content. Here a transition to a wetter type of neutral grassland plant community occurs, supporting abundant sweet vernal-grass *Anthoxanthum odoratum* and Yorkshire-fog *Holcus lanatus* with many herbs such as meadowsweet *Filipendula ulmaria* great burnet *Sanguisorba officinalis*, marsh hawk's-beard *Crepis paludosa*, smooth lady's mantle *Alchemilla glabra*, wild angelica *Angelica sylvestris*, marsh marigold *Caltha palustris* and the locally uncommon globe flower *Trollius europaeus*. These species are characteristic of the *Cynosurus cristatus* -- *Caltha palustris* flood pasture community as described in the National Vegetation Classification.

An area of exposed and undamaged limestone pavement within the site supports mature semi-natural broadleaved woodland showing evidence of past coppicing. The canopy is dominated by ash *Fraxinus excelsior* and sessile oak *Quercus petraea* over hazel *Corylus avellana* and other shrubs including hawthorn *Crataegus monogyna* blackthorn *Prunus spinosa*, buckthorn *Rhamnus catharticus* and spindle *Euonymus europaeus*, the latter two being present at the northern limit of their distribution range in Britain. The clefts and grikes of the underlying pavement provide a habitat for dog's mercury *Mercurialis perennis*, hart's-tongue *Phyllitis scolopendrium*, herb-Robert *Geranium robertianum* and bramble *Rubus fruticosus*.