

Site Notified to the Secretary of State on 21 March 1994.

COUNTY: CORNWALL

SITE NAME: OTTERY VALLEY

DISTRICT: NORTH CORNWALL

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

Local Planning Authority: CORNWALL COUNTY COUNCIL, North Cornwall District Council

National Grid Reference: SX 161895, SX 172908

Area: 32.48 (ha.)

Ordnance Survey Sheet 1:50,000: 190

1:10,000: SX 18 NE, SX 19 SE

Date Notified (Under 1949 Act): –

Date of Last Revision: –

Date Notified (Under 1981 Act): 1994

Date of Last Revision: –

Other Information:

A new site.

Description and Reasons for Notification:

Ottery Valley comprises fragments of a formerly extensive moorland and mire system on the Carboniferous Culm Measures of north Cornwall.

The unimproved 'Culm Grasslands' that occur here support a vegetation complex comprising grassland, heath, mire and fen communities, several of which are nationally restricted in distribution. The extent of such sites in Cornwall has decreased by at least 64% during the past 6 years and the remaining 137 ha. of unimproved Culm grassland represents a highly fragmented and diminishing resource.

The Ottery Valley site is located approximately 7km. to the east of Boscastle, within the catchment of the River Ottery. The site is underlain by shales of the Upper Carboniferous Culm Measures which weather to form typical cambic gley soils. These have been overlain by alluvial deposits along the river valley.

The site supports a wide range of floristically diverse community types, predominantly mire, rush-pasture and tall herb vegetation communities which are typical of unimproved acidic grassland overlying the Culm Measures. These include vegetation types not found elsewhere on the Culm grassland of Cornwall. Many of the community types intergrade to form complex vegetation mosaics.

Of particular nature conservation importance here is the occurrence of the highly localized vegetation community Bog Asphodel – Sphagnum moss *Narthecium ossifragum* – *Sphagnum papillosum* valley mire, occurring here as a mosaic together with Purple Moor-grass–Tormentil *Molinia caerulea*–*Potentilla erecta* mire. This vegetation mosaic is only recorded from this and one other Cornwall Culm site. In some areas *Molinia* is dominant, forming a tussocky vegetation with Tormentil, Devil's-bit Scabious *Succisa pratensis* and Heath Wood-rush *Luzula multiflora*. This grades into a species rich, low turf supporting Carnation Sedge *Carex panicea*, Flea Sedge *C. pulicaris*, Common Sedge *C. nigra*, Bog Asphodel, Common Cottongrass *Eriophorum angustifolium*, Sphagnum species, Devil's-bit Scabious and Cross-leaved Heath *Erica tetralix*. Species associated with wetter conditions include Bog Pimpernel *Anagallis tenella*, Round-leaved Sundew *Drosera rotundifolia*, Bogbean *Menyanthes trifoliata* and more rarely Pale Butterwort *Pinguicula lusitanica*. The bryophyte flora is also diverse and includes *Campylium stellatum*, *Riccardia*

*multifida*, *Breutelia chrysocoma* and *Odontoschisma sphagni* and the local moss *Philonotis caespitosa*.

Closely associated with the above vegetation mosaic are several localized areas of Marsh St John's-wort – Bog Pondweed *Hypericum elodes* – *Potamogeton polygonifolius* soakway communities.

A community type not found elsewhere on the Cornwall Culm sites is Star Sedge – Sphagnum moss *Carex echinata* – *Sphagnum recurvum/auriculatum* mire, Sharp-flowered rush sub-community. Species typically associated with this community are Tormentil, Devil's-bit Scabious and the mosses *Sphagnum palustre* and *Polytrichum commune*, however Purple Moor-grass and Sharp-flowered Rush *Juncus acutiflorus* remain abundant.

Occurring widely throughout the site is Soft Rush/Sharp-flowered Rush-Common Marsh-bedstraw *Juncus effusus/acutiflorus-Galium palustre* rush pasture, sub-community Sharp-flowered Rush. Sharp-flowered Rush is distributed throughout these rush-dominated pastures, while the Soft rush forms dense tussocks. Taller rush-dominated vegetation is characterized by the presence of Marsh Thistle *Cirsium palustre*, Marsh Bedstraw *Galium palustre*, Greater Bird's-foot-trefoil *Lotus pedunculatus*, Marsh Willowherb *Epilobium palustre* and Water-purslane *Lythrum portula*. Low growing sedge-rich areas are scattered sparsely throughout the taller rush-dominated vegetation.

Purple Moor-grass-Tormentil mire is well represented across the sites, displaying a range of vegetation types related to different sub-communities and combinations of these. The sub-community characterized by Wild Angelica *Angelica sylvestris* which although dominated by tussocks of Purple Moor-grass and Sharp-flowered rush also supports a rich tall herb flora of Wild Angelica, Marsh Thistle, Common Valerian *Valeriana officinalis*, Marsh Lousewort *Pedicularis palustris*, Heath Spotted-orchid *Dactylorhiza maculata*, Sneezewort *Achillea ptarmica*, Ragged Robin *Lychnis flos-cuculi*, Marsh Pennywort *Hydrocotyle vulgaris* and Common Sorrel *Rumex acetosa*. The ferns, Hard Fern *Blechnum spicant*, and Lady-fern *Athyrium filix-femina* occur commonly, together with Royal Fern *Osmunda regalis* in the wetter areas of scrub. The Sweet Vernal-grass sub-community has a more uniform structure, Purple Moor-grass and Sharp-flowered Rush are less prominent, and associated species include Bog Asphodel, Common Cottongrass, Common Sedge, and locally Tawny Sedge *Carex hostiana*, Marsh St John's-wort, Marsh Violet *Viola palustris*, Cross-leaved Heath, Lesser Skullcap *Scutellaria minor*, Skullcap *S. galericulata* and Pale Butterwort. Both of these sub-communities support a rich bryophyte flora, including the moss *Breutelia chrysocoma*.

The Meadowsweet-Wild Angelica *Filipendula ulmaria-Angelica sylvestris* tall herb, Common Valerian-Common Sorrel *Rumex acetosa* sub-community occurs locally throughout the site. This distinctive tall-herb vegetation is dominated by Meadowsweet, with Hemlock Water-dropwort *Oenanthe crocata* reaching co-dominance in some areas. Other herb species commonly associated with this vegetation community are Marsh Thistle, and Water Mint *Mentha aquatica*. These stands Tall Herbs occurring alongside open grassland and scrub provide ideal conditions for invertebrates, birds and mammals.

Within this large complex site, the fast-flowing River Ottery provides an important corridor connecting the Culm grassland and associated habitats. The woodland and scrub bordering the river are dominated by Alder *Alnus glutinosa*, Downy Birch *Betula pubescens* and Willow Carr *Salix* spp.; with frequent clumps of Royal Fern. Of particular interest and growing on the Hawthorn scrub *Crataegus monogyna* is the rare Golden Hair lichen *Teloschistes flavicans*.

Areas of open water, although artificially created and regrettably resulting from past loss of Culm grassland vegetation, now add to the diversity of habitats encompassed by the site.

In addition the River Ottery is known to be an important refuge for Otters *Lutra lutra*, whilst the fringing Culm grasslands provide important habitats for the Marsh Fritillary butterfly *Euphydryas aurinia*, a species known to be declining in England.