

COUNTY: Leicestershire
Staffordshire
Derbyshire

SITE NAME: River Mease

DISTRICTS: North-west Leicestershire
Lichfield
South Derbyshire

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

Local Planning Authorities: North-west Leicestershire District Council
Lichfield District Council
South Derbyshire District Council

National Grid Reference: SK360144 - SK195148 **Area:** 21.86 (ha) 54.02 (ac)

Ordnance Survey Sheet: 1:50,000: 128 **1:10,000:** SK21SE SK31SW
SK31SE SK11SE

Date Notified (under 1981 Act): 16 August 2000

Reasons for notification

The River Mease represents a lowland clay river supporting nationally significant populations of spined loach *Cobitis taenia* and bullhead *Cottus gobio*, two internationally notable species of native freshwater fish with a restricted distribution in England.

Description

Rising at 130 metres above sea level in the Coal Measures of north-west Leicestershire, the River Mease flows approximately 25 kilometres westwards across a largely rural and agricultural landscape to its confluence with the River Trent at Croxall. The river forms an eastern tributary of the Trent and flows throughout its course across alluvial soils overlying bands of Sherwood Sandstone and Mercia Mudstone. Of special interest are the resident populations of two of the UK's smallest freshwater fish species, spined loach *Cobitis taenia* and bullhead *Cottus gobio*, which occur in association with a diverse freshwater fish community. As a relatively un-modified lowland river, the River Mease contains a diverse range of physical in-channel features, including riffles, pools, slacks, vegetated channel margins and bankside tree cover, which provide the conditions necessary to sustain populations of both spined loach and bullhead.

The head of the site includes the lower reaches of the Gilwiskaw Brook which flows along a steep gradient across bands of interbedded mudstones and sandstones. Due to the fast-flowing nature of the river, aquatic vegetation is sparse and marginal vegetation restricted to stands of floating sweet-grass *Glyceria fluitans* but these sections provide valuable habitat for bullhead *Cottus gobio*, a bottom-dwelling native fish which favours clean coarse gravels for spawning and is often found where flows are consistently strong and sediment deposition minimal. Populations of bullhead also occur in the lower reaches of the Mease where river substrates are finer but woody debris lying within the river channel becomes more important in providing suitable breeding habitat.

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Below Snarestone the descent becomes more gradual and the river enters a broad lowland floodplain. The slow-moving river meanders tightly across floodplain deposits, occasionally exposing underlying sandstones and fluvial sands and gravels. These middle reaches of the River Mease provide excellent habitat for a nationally significant population of spined loach *Cobitis taenia*. Confined in its UK range to a limited number of catchments in central and eastern England, this largely sedentary fish is closely associated with the open sandy substrates of the river bed which act as important feeding and spawning grounds. As a small fish, refuges from predators and strong river flows are very important and this is provided by aquatic and marginal vegetation within the river channel. Stands of marginal vegetation are typically dominated by common club-rush *Schoenoplectus lacustris*, *Glyceria fluitans*, reed canary-grass *Phalaris arundinacea*, branched bur-reed *Sparganium erectum*, greater pond sedge *Carex riparia* and bulrush *Typha latifolia*. Submerged aquatic vegetation becomes more varied on the lower reaches of the river with river water-crowfoot *Ranunculus fluitans*, common water-crowfoot *R. aquatilis*, blunt-leaved pondweed *Potamogeton obtusifolius*, fennel pondweed *P. pectinatus*, arrowhead *Sagittaria sagittifolia* and yellow water-lily *Nuphar lutea* becoming increasingly frequent.

Bankside tree cover is very variable but an important feature of the river channel as submerged root systems of larger trees provide important in-channel cover for fish and provide woody debris to the watercourse in the form of fallen branches. In many places the river is largely open, flanked by semi-improved pasture and arable land adjacent to the bank edge. Where tree cover is present, banks are frequently lined with alder *Alnus glutinosa*, ash *Fraxinus excelsior* and various species of willow *Salix* spp. including good numbers of large pollarded crack willow *Salix fragilis*. Some sections of bank are flanked by dense scrub dominated by hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa*.

Additional interest is provided by populations of freshwater white-clawed crayfish *Austropotamobius pallipes* and otter *Lutra lutra*, both animals with a restricted distribution within the East Midlands and which receive special legal protection.

Other Information

This is a new site.

Spined loach *Cobitis taenia* and bullhead *Cottus gobio* are both listed on Annex II of the Council Directive (92/43/EEC) on the Conservation of Natural Habitats and of Wild Flora and Fauna.

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