EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Name:	River Mease
Unitary Authority/County:	Derbyshire, Leicestershire, Staffordshire
SAC status:	Designated on 1 April 2005
Grid reference:	SK260114
SAC EU code:	UK0030258
Area (ha):	21.86
Component SSSI:	River Mease SSSI

Citation for Special Area of Conservation (SAC)

Site description:

Rising 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. 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 spined loach *Cobitis taenia*, bullhead *Cottus gobio*, freshwater white-clawed crayfish *Austropotamobius pallipes* and otter *Lutra lutra*.

The head of the site includes the lower reaches of the Gilwiskaw Brook which flows along a steep gradient. 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, which favours clean coarse gravels for spawning. 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.

Below Snarestone the descent becomes more gradual and the river enters a broad lowland floodplain. These middle reaches of the River Mease provide excellent habitat for spined loach *Cobitis taenia*. This largely sedentary fish is closely associated with the open sandy substrates of the river bed which act as important feeding and spawning grounds. Refuges from predators and strong river flows are very important and are provided by aquatic and marginal vegetation within the river channel.

Stands of marginal vegetation are typically dominated by common club-rush *Schoenoplectus lacustris*, floating sweet-grass, 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.



Qualifying habitats: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

• Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)

Qualifying species: The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- White-clawed (or Atlantic stream) crayfish Austropotamobius pallipes
- Spined loach Cobitis taenia
- Bullhead Cottus gobio
- Otter *Lutra lutra*

This citation relates to a site entered in the Register of European Sites for Great Britain. Register reference number: UK0030258 Date of registration: 14 June 2005

Signed: Trew Salam

On behalf of the Secretary of State for Environment, Food and Rural Affairs

