

Date notified: 15 May 1997

File ref: NY 01/10

County: Cumbria **Site Name:** **River Ehen (Ennerdale Water to Keekle Confluence)**

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

Local Planning Authority: Lake District Special Planning Board, Copeland District Council, Cumbria County Council

National Grid Reference: NY 070157

Length of River SSSI: 13.5 km

Ordnance Survey Sheet 1:50,000: 89 **1:10,000:** NY 01 SW, NW, NE

Date Notified (Under 1981 Act): 1997

Other Information:

The site interest includes the following species listed in the EC Habitats & Species Directive (92/43/EEC):

Freshwater mussel *Margaritifera margaritifera* Annex II, V

Margaritifera margaritifera is also protected under Schedule 5 of the Wildlife and Countryside Act 1981, as amended.

Parts of this site lie within the Lake District National Park and the Lake District Environmentally Sensitive Area.

This site adjoins Ennerdale Water SSSI.

Description and Reasons for Notification:

The River Ehen is on the western fringe of the Lake District. It forms the outfall from Ennerdale Water and flows some 20 km before reaching the Irish Sea at Sellafield. For much of its upper length the River Ehen is classed as an oligotrophic, or nutrient-poor, river flowing over bryophyte-dominated substrates of shingle, pebbles and rock. Above Ennerdale Bridge the catchment is largely composed of acidic rocks of the Borrowdale Series and Skiddaw Slates. Downstream from Ennerdale Bridge the river is slightly enriched by streams flowing from Limestones and Millstone Grits of the Carboniferous Series.

Between Ennerdale Water and the confluence with the River Keekle at Cleator Moor the Ehen meanders across a narrow floodplain with extensive areas of riparian woodland and trees. This stretch of the river supports outstanding populations of the freshwater mussel *Margaritifera margaritifera*. Collectively, this is the largest known population of this species in England and the only one showing recent recruitment. It is the third largest population in Britain.

An important feature of this stretch of the Ehen is the amount of tree shade along the banks. Bankside shade appears to be of great importance for the mussels. Along with the oligotrophic

status of the river, the shade from direct sunlight helps to reduce the amount of algal growth in the channel. This would otherwise dominate the river bed and make it unsuitable for the mussels.

Margaritifera margaritifera has a complex lifecycle with part of the juvenile stage dependent on attachment for a short period to young salmon or trout. Later juvenile stages involve burial within the gravel beds of the river. For these reasons, maintenance and successful recruitment of the mussel populations is dependent on the well-being of the whole river system.