

Date Notified: 17 February 1989

File ref: SE 34/6

County: West and North Yorkshire **Site Name:** East Keswick Fitts

District: Leeds and Harrogate

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

Local Planning Authority: Leeds City Council and Harrogate Borough Council

National Grid Reference: SE 352460 **Area:** 12.0 (ha) 29.6 (ac)

Ordnance Survey Sheet 1:50,000: 104 **1:10,000:** SE 34 NE & NW

Date Notified (Under 1981 Act): 1989 **Date of Last Revision:** –

Other Information:

This is a new site.

Description and Reasons for Notification:

East Keswick Fitts lies along the valley of the River Wharfe 12.5 km north of Leeds and 9 km south-east of Harrogate. The meandering river cuts into the deposits of alluvium and gravel within its floodplain, providing shallows and earth cliffs up to 30 feet tall. This site is of particular value to invertebrates, one of only four such sites so far identified in West Yorkshire.

The river deposits have various degrees of stability with constantly shifting beds of sand and shingle. Some of the more stable beds support scattered willow scrub merging into denser alder woodland near the river banks.

Willow and an extensive bed of great pond-sedge *Carex riparia* occupy the marsh, but give way to reed swamp *Phragmites australis* in the wettest places. Great willow-herb *Epilobium hirsutum*, meadowsweet *Filipendula ulmaria* and occasional blunt-flowered rush *Juncus subnodulosus* are also found, while areas of unimproved neutral grassland contain great burnet *Sanguisorba officinalis*, ragged robin *Lychnis flos-cuculi* and common figwort *Scrophularia nodosa*. Woodland of ash, oak and hawthorn scrub cover the drier valley sides.

The site is of special interest for its invertebrate fauna, supporting an assemblage of species typical of the margins of northern English rivers, with the addition of a number of nationally and regionally rare species, including ones at the northern and southern limits of their range. It has an exceptional diversity of microhabitats for invertebrates within a relatively small area.

The fauna of the marginal silt, sand and shingle deposits includes the following rare or localised species – the flies *Platypalpus subtilis*, *Thereva lunulata*, *Hilara woodi* and *H. rivale* and the beetles *Aegialia sabuleti* and *Clivina collaris*. It is the richer of the two examples of this habitat on the Wharfe and the best known example of this habitat in any river in Yorkshire. The shifting nature of these deposits maintain the open conditions essential for this community of invertebrates.

Other local species of invertebrates are associated with the riparian cliffs. Although the bee and wasp community of the riparian cliffs have not been studied, the nationally rare conopid fly *Myopa tessellatipennis* which is recorded from the site, is a parasite in the nests of solitary bees.

The pond weed *Potamogeton* spp., in the river itself supports the nationally rare and declining reed beetle *Macroplea appendiculata* in galls on the plants' roots, and the locally uncommon banded demoiselle damselfly *Callopteryx splendens* also occurs in this stretch of the river.

Other nationally or locally uncommon invertebrates are associated with the old willows along the river marsh, and with the litter of the adjacent sedge and reed dominated marshland, including the leaf feeding but *Orthotylus virens* at its southernmost British locality and various dead wood inhabiting beetles, including *Bibloporus minutus* at its northern most locality.

Operations likely to damage the special interest

Site name: East Keswick Fitts, SSSI

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Ref. No.	Type of Operation
1	Cultivation, including ploughing, rotovating, harrowing, and re-seeding.
2	The introduction of grazing and changes in the grazing regime (including type of stock, intensity or seasonal pattern of grazing and cessation of grazing).
3	The introduction of stock feeding and changes in stock feeding practice.
4	The introduction of mowing or other methods of cutting vegetation and changes in the mowing or cutting regime (including hay making to silage and cessation).
5	Application of manure, fertilisers and lime.
6	Application of pesticides, including herbicides (weedkillers).
7	Dumping, spreading or discharge of any materials.
8	Burning and changes in the pattern or frequency of burning.
9	The release into the site of any wild, feral or domestic animal*, plant or seed.
10	The killing or removal of any wild animal*, including pest control.
11	The destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, hedge, dead or decaying wood, fungus, leaf-mould and turf.
12	The introduction of tree and/or woodland management+ and changes in tree and/or woodland management+.
13a	Drainage (including the use of mole, tile, tunnel or other artificial drains).
13b	Modification of the structure of watercourses (eg rivers, streams, springs, ditches, dykes, drains), including their banks and beds, as by re-alignment, re-grading and dredging.
13c	Management of aquatic and bank vegetation for drainage purposes.
14	The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).
15	Infilling of ditches, dykes, drains, ponds, pools or marshes.
16a	The introduction of freshwater fishery production and/or management and changes in freshwater fishery production and/or management, including sporting fishing and angling.
20	Extraction of minerals, including shingle, sand and gravel, topsoil, subsoil, and spoil.
21	Construction, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, or the laying, maintenance or removal of pipelines and cables, above or below ground.
22	Storage of materials on the site.
23	Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling.
24	Modification of natural or man-made features.
26	Use of vehicles or craft likely to damage or disturb the fauna.
27	Recreational or educational activities likely to damage the fauna.
28	The introduction of game or waterfowl management and changes in game and waterfowl management and hunting practices.

* 'animal' includes any mammal, reptile, amphibian, bird, fish or invertebrate.

+ including afforestation, planting, clear and selective felling, thinning, coppicing, modification of the stand or underwood, changes in species composition, cessation of management.