## 39 Beltingham river gravels

Theme: Heritage and mining

## Location

The river gravels are about 1 kilometre west and north of Beltingham village [NY 785 643], which is close to Bardon Mill.

## **Description**

Just northwest of the small village of Beltingham is an area of river deposits — sand, pebbles and cobbles — beside the South Tyne. They are special because they contain the waste products of lead and zinc mining in the Pennine hills.

The plant colonies that are able to grow in these contaminated situations are very rare; they are called calaminarian habitats. Beltingham river gravels are a Northumberland Wildlife Trust Nature Reserve and Site of Special Scientific Interest.

Mining of lead and its associated minerals, silver, zinc and fluorite has taken place for many centuries in the hills and valleys of the northern Pennines. The lead and other heavy metals residues, like cadmium and barium, have been flushed far downstream. These metals, which are toxic to most plants, settle into the river deposits and the soils that develop on them.

The main heavy-metal tolerant plants are in quite a small area and are spring sandwort, alpine penny-cress, sea thrift (a variant), mountain pansy and dune helleborine. The condition of this environment is fragile and needs to be constantly monitored.

## **Photographs**

(Photo 39-1) River deposits containing the waste products of lead and zinc mining. Beltingham river gravels.

(Photo 39-2) The South Tyne at Beltingham.



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(Photo 39-2) The South Tyne at Beltingham.