## 1 Akenshaw Burn

Theme: Ancient rivers, seas and life

## Location

A 5 kilometre walk northwest of Matthew's Linn car park on the shore of Kielder Water [NY 608 896].

## Description

Akenshaw Burn runs in a small valley within Kielder Forest Park. Some of the oldest Carboniferous rocks in the county are exposed in the banks of the burn.

The valley is home to willows, hazel and alder but it is within Kielder Forest and surrounding it are huge areas of mainly sitka spruce, grown for timber and planted in the mid-20th century. Before that the valley was part of a very remote hill farm, with moorland of blanket bog and acidic grassland. Roe deer are frequent visitors.

In the burn are bands of two different rocks — grey mudstones and pale brown cementstones. Cementstones are a form of limestone containing magnesium carbonate as well as calcium carbonate. Here the rocks are tilted at angles and broken by a series of geological faults.

350 million years ago the cementstones were lime-rich mud at the bottom of warm salty coastal lagoons that then evaporated. Britain was only 5 degrees north of the Equator then and the climate was much warmer. In many places the thicker cementstone beds have been quarried for local supplies of lime which were used to improve the soil.

## Photographs

(Photo 01-1) Akenshaw Burn.

(Photo 01-2) Mudstones and cementstones in the bank of the Akenshaw Burn.



(Photo 01-1) Akenshaw Burn.



(Photo 01-2) Mudstones and cementstones in the bank of the Akenshaw Burn.