

## What will I see?

Some of the oldest Carboniferous rocks in the county. They appear as alternating 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 in Akenshaw Burn they are tilted at angles and broken by a series of geological faults.

## How old is it?

They are around 350 million years old. The new formal name for these rocks is the Ballagan Formation, after a place in the Campsie Fells north of Glasgow, but in Northumberland they used to be called the Cementstone Group.

# Did you know?

That the cementstones were once limey mud at the bottom of warm salty lagoons that then evaporated. In many places the thicker cementstone beds have been quarried for local supplies of lime which was used to improve the soil.

### Why it is here?

When they were deposited the environment in Northumberland was a mixture of estuaries and coastal lagoons. We were only 5 degrees north of the Equator then and the climate was much warmer.

## And wildlife?

And wildlife? Akenshaw Burn runs in a small valley with deciduous trees (willows, hazels, alder) but it is surrounded by Kielder Forest with huge areas of 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. Look out for roe deer.

### Where is it?

In Kielder Forest Park, in a valley which runs into Kielder Water. You can walk or cycle to Akenshaw Burn from the car park at Matthew's Linn, it's approximately 6 kilometres one way.



#### Want to know more?

- NNP Geodiversity Audit
- Onshore GeoIndex
- iGeology
- Geological history of Northumbria
- Carboniferous rocks



