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## 33 Echo Crag

**Theme:** Climate and landscape change

### Location

On a footpath just off a minor road south of the Military Road, the B6318 north of Hexham and east of Wall [NY 935 691].

### Description

Just south of the Military Road is a flat outcrop of Carboniferous sandstone with little or no soil or grass covering it. It looks as if it has been scraped clean by a massive road-planing machine. This, and the scratches in it, make it a very special bit of that sandstone that has helped geologists understand what our landscape has experienced.

The flat surface of the sandstone and the scratches are evidence that the area was eroded by a thick fast moving ice sheet only 20,000 years ago. The scratches that glaciers and ice sheets make are called glacial striae. They show the direction of movement — generally west-north-west to east-south-east. Some of the scratches here appear to accentuate sedimentary features in the sandstone.

This ice sheet was moving from Scotland and Cumbria across Northumberland and as it did so it scraped, bulldozed and carried billions of tons of rock, clay and sand with it. Stones and pebbles at the base of the moving ice literally “sand-papered” the bedrock beneath and gouged grooves into it.

This is pasture land with only a thin soil but look for pineapple weed growing in the joints of the bedrock; it smells like pineapple.

### Photographs

(Photo 33-1) Sandstone bedrock eroded and scratched by an ice sheet.

(Photo 33-2) Sandstone bedrock eroded and scratched by an ice sheet.



*(Photo 33-1) Sandstone bedrock eroded and scratched by an ice sheet.*



*(Photo 33-2) Sandstone bedrock eroded and scratched by an ice sheet.*