26 Causey Pike

Theme: Earthquakes and folded rocks

Location

26 Causey Pike — Iapetus Suture — Causey Pike Fault. There is off-road parking at Stoneycroft. It is a 5 kilometre strenuous hike to the summit [NY 219 209].

Description

It was probably Alfred Wainwright who said you get the best views from little fells. That works for geology too.

Climb Barrow or Ard Crags and look over at Causey Pike. Filling the view from east to west is a formidable ridge. From Causey Pike's distinctive knoll it runs over Scar Crags, Sail, Wandope and Whiteless Pike. Just south of the crest of the ridge is a major break in the Earth's crust, a geological fault, but not a normal one. It is a thrust fault; one where older rocks to the north have been pushed up over younger ones to the south. While different in age the rocks either side of the fault belong to the same geological period, the Ordovician. They are Skiddaw Group mudstones and sandstones and have suffered quite a bit of pressure and heat over their 480 million years. The Causey Pike Fault is huge, it extends more than 45 kilometres from Ennerdale in the west to Cross Fell in the east, and dislocates rocks by as much as two kilometres. For a closer look, take the footpath up Causey Pike from Uzzicar and walk along it!

Just like the Skiddaw Group rocks it divides, this fault and others just to the north, have a complex story. The faults may have originated when huge volumes of sediment being deposited along the margins of the ancient Iapetus Ocean slumped to the deeper sea bed. 70 to 80 million years later a major episode of mountain building re-activated weaker slide-zones in the slumps and moved them again. After enduring such cataclysmic events perhaps it's not surprising that these rocks look so bent, broken and cleaved.

Photographs

(Photo 26-1) 26 The line of the thrust fault just south of the summit of Causey Pike.

(Photo 26-2) 26 Causey Pike.

(Photo 26-1) The line of the thrust fault just south of the summit of Causey Pike.

(Photo 26-2) Causey Pike.