



Cumbria
GeoConservation

Geotrail Guide

Fordingdale Bottom

Haweswater and Measand Falls

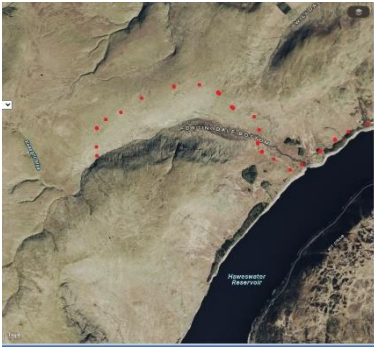
An 8 km walk west from Burnbank Village, along the NW shore of Haweswater, up past dramatic waterfalls into a remote valley to look for evidence of past glaciations.



Looking west along Fordingdale Bottom: NY
4756 1602

Route

Park at NY 50881 1611 in Burnbank village. Walk west to join the Coast to Coast path, along the north side of Haweswater. After Measands Forces take the steep footpath up the west side of the waterfalls, and up into Fordingdale valley. This is Open Access, so you can choose your own route.



Measands Lower Falls, NY 4870 1548

Measand Beck

The beck is a misfit stream, flowing in a valley which it did not excavate. Its valley is hanging above the level of Haweswater which was eroded deeply by a large glacier. Fordingdale valley shows a typical 'U-shaped' profile of a glaciated valley, with a flat floor and steep sides. It is thought to have been occupied several times by ice sheets and may have contained a glacier as late as only 12,000 years ago. Mounds of moraine made of glacial debris occur either side of the valley, taking various forms. The valley sides have been modified by periglacial processes, when the ground was still frozen. Immense amounts of meltwater were released by the melting ice, and the Measand Beck washed vast amounts of glacial debris into the main valley. These deposits formed a vast delta, which divided the valley into two lakes, High Water to the west, and Low Water to the east, with a narrow stretch of water called The Straits linking the two. On the flooding of Mardale valley to form the Haweswater Reservoir in 1936, the delta was largely drowned and cannot be seen, except in exceptionally dry years, as in 1984 & 1995.

The waterfalls mark the hanging valley.

Before starting up the steep path, reflect on the former village of Measand. Recorded from 1600, it once had a substantial population, of small holdings. There was a free Grammar School, and several farms.

This ice eroded rock, a roche moutonnee, at NY 4861 1542, shows evidence of ice erosion.



Measands Upper Falls, NY 4843 1558



The remains of the former delta can just be seen in this picture. Most of it is now flooded



Above Measands Falls



A peat moss occupies the flat valley floor of Fordingdale Bottom, NY 4825 1577, looking WNW. Scree slopes can be seen at the base of the steep south-facing slope opposite, produced by post glacial freeze-thaw action during cold periglacial conditions. It is thought that the south facing slopes may have experienced more freeze-thaw cycles than the shady north facing side. The valley shows some asymmetry.



Gullied moraine deposits on the north facing valley side, NY 4812 1584



Moraine ridge on the north valley side, NY 4756 1602. Note the scattered boulders.



A small moraine cut by the Measand Beck, shows clear evidence of glacial till. NY 4734 1586



Return by the same route. Descending past the falls, a possible fault seen across the reservoir, may have influenced the Measand Falls.

Reflecting on the flooded village.

At Measand the old road along the valley cut across the sandy promontory of the delta. Measand Beck Hall stood above the road among large sycamore trees. Stonewalled meadows stretched across the delta down to the lake.

Heaton Cooper wrote about the 'exceptional beauty of the valley now under water'. He described the Measand Falls as coming down in two tiers with several cascades between steep rocky sections.

Measand Grammar School was the only rescued building. It was dismantled, and re-erected at Walmgate Head. *Sylvia Woodhead April 2026*