
17 Eycott Hill

Theme: Volcanoes and molten rock

Location

17 Eycott Hill — lavas and possibly Cambrian fossils. Park in the Trust car park and walk 500 metres west to the Reserve [NY 387 295].

Description

This is a Cumbria Wildlife Trust nature reserve. It is also a Site of Special Scientific Interest because its rocks as well as its wildlife are of national importance.

So Eycott Hill is a name well-known to geologists. The rocks here, layers of lava flows, are a key chapter in the geological history of Cumbria. They erupted out of fissures and vents during the Ordovician, around 450 million years ago, as a fiery precursor to the closure of the ancient Iapetus Ocean and the impending collision of continents. The lavas are mostly a fine-grained grey rock called andesite, but some of the rocks contain holes and pink blobs; bubbles of gas in the lava which can be filled with silica. There are even older rocks on Eycott Hill; 480-million-year-old buckled mudstones that were once mud in that ancient ocean. Geologists have found primitive microscopic fossils called acritarchs, which are more common in the earlier Cambrian Period of Earth's history. That would make these the oldest rocks in Cumbria! There are younger rocks in the reserve too, 150 million years younger. Limestones from the Carboniferous lie between the hill and the road to the east. Sink holes caused by acid rainwater dissolving the limestone are the clue.

Eycott Hill's rocks (its geodiversity) have produced the varied habitats we see today. The very irregular topography, with small ridges and intervening wet depressions, is called 'knock-and-lochan' (after similar features in the Scottish Highlands). It was formed by ice sheet erosion emphasising the differences in rock strength. There are areas of rough upland pasture, rocky dry knolls and peat bogs and fens between the knolls. That variety means this is a place rich in animal and plant life. Notable are uncommon sedge species like bog-sedge and few-flowered sedge.

Photographs

(Photo 17-1) 17 Eycott Hill lava with vesicles formed by gas bubbles.

(Photo 17-2) 17 Eycott Hill.



(Photo 17-1) Eycott Hill lava with vesicles formed by gas bubbles.



(Photo 17-2) Eycott Hill.