
27 Dufton Pike

Theme: Earthquakes and folded rocks

Location

27 Dufton Pike — Cross fell inlier. There is parking in Dufton village. The Pike is a 6 kilometre return hike [NY 700 266].

Description

From the A66 near Appleby they look like three green pyramids lined up in a row. On a geological map they are multiple broken slivers in harlequin colours

Dufton Pike and its neighbours, Knock Pike and Murton Pike, are distinctive pointed hills which contrast with the horizontal layers of the Pennine plateau behind. The hills are part of the Cross Fell 'inlier', a 25 by 2 kilometre area of older rocks peeping through younger Carboniferous and Triassic strata. The inlier is made up of slices of the three major Lake District rocks: older Ordovician sedimentary rocks, younger Ordovician volcanic rocks and Silurian sedimentary rocks, all broken up by geological faults. On a map they appear to be a detached part of the Lake District but below the surface they are connected to it. The volcanic rocks are lavas and tuffs (ejected ash and rock fragments). While their origins are volcanic, disappointingly these conical Pikes are not volcanoes. They stand out as steep-sided peaks simply because of movements and dislocations in the Earth's crust and because all the Pikes are harder than the surrounding rocks.

Older Cumbrian rocks like these have experienced three major episodes of mountain building and each of these events re-activated old fault lines. Mountain building (called an orogeny) happens at continental scales over millions of years. The first episode called the Caledonian Orogeny was between 490 and 390 million years ago. The second, the Variscan Orogeny, affected Britain around 290 million years ago. The third, the Alpine Orogeny, began 65 million years ago and is still happening now. The Alps and Himalayas are still growing despite being eroded by frost and ice. The notorious Helm Wind (the only named British wind and a strong northeasterly) blows down the escarpment here. Wheatear and buzzards are a common sight and near the summit are areas of bilberry (help yourself).

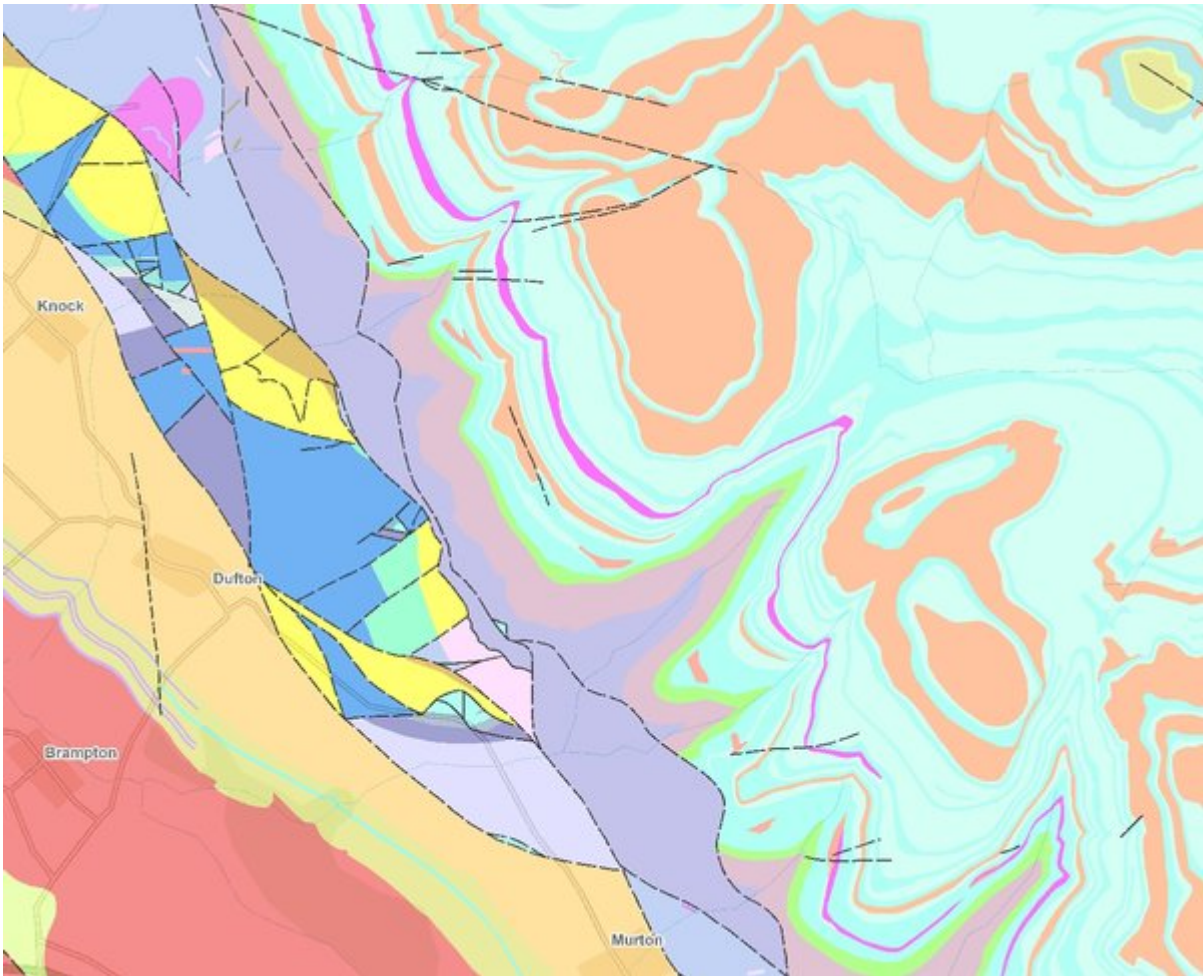
Photographs

(Photo 27-1) 27 Dufton Pike and Murton Pike viewed from Knock.

(Photo 27-2) 27 Dufton Pike.



(Photo 27-1) Dufton Pike and Murton Pike viewed from Knock.



(Photo 27-2) Dufton Pike.