## 19 Lumsden Law

Theme: Volcanoes and molten rock

## Location

800 metres, northeast of Ramshope Lodge on the A68 [NT 722 052]. It is a rough hike to the top.

## **Description**

When you drive up to Scotland on the A68, just after Catcleugh reservoir and before Carter Bar, there is a big flat-topped hill to the east. It's called Lumsden Law. Geologists think it could be a volcanic "plug"; that is lava that solidified in the neck of a volcano.

This volcano erupted about 345 million years ago, so it's Carboniferous and younger and different in composition to the Devonian lavas of the Cheviots. While there are lots of volcanic rocks of this age in Scotland there are very few like them south of the border. Lumsden Law was formed in a similar way and around the same time as the rock that Edinburgh Castle stands on.

During this period of the Carboniferous in southern Scotland and here at Lumsden Law, there was a lot of volcanic activity — the molten magma cooled to produce a rock called a basalt. You can see the rock close-up in an old quarry on the Law's western flank. A broken face will show some quite large crystals in a darker fine-grained matrix, a texture called porphyritic.

The basalt in the quarry has a rich covering of several different lichens. From the Law there is a fine view westwards across the A68 into Northumberland Wildlife Trust's largest nature reserve, Whitelee Moor. The higher ground of Whitelee has some of the best blanket bog in England and below is upland heather heath.

## **Photographs**

(Photo 19-1) Lumsden Law.

(Photo 19-2) Lumsden Law basalt rock with lichens.



(Photo 19-1) Lumsden Law.



(Photo 19-2) Lumsden Law basalt rock with lichens.