

THE LAIRD'S POOL, LOCHINVER

OS Grid Reference: NC103235

Description

A dyke, about 4 m thick, of a red porphyritic rock with conspicuous pink K-feldspar phenocrysts up to 5 mm long, crosses the River Inver at the Laird's Pool (Figure 7.13), cutting Lewisian gneisses, and striking about 100°. The site can be reached easily along the maintained path on the south side of the river.

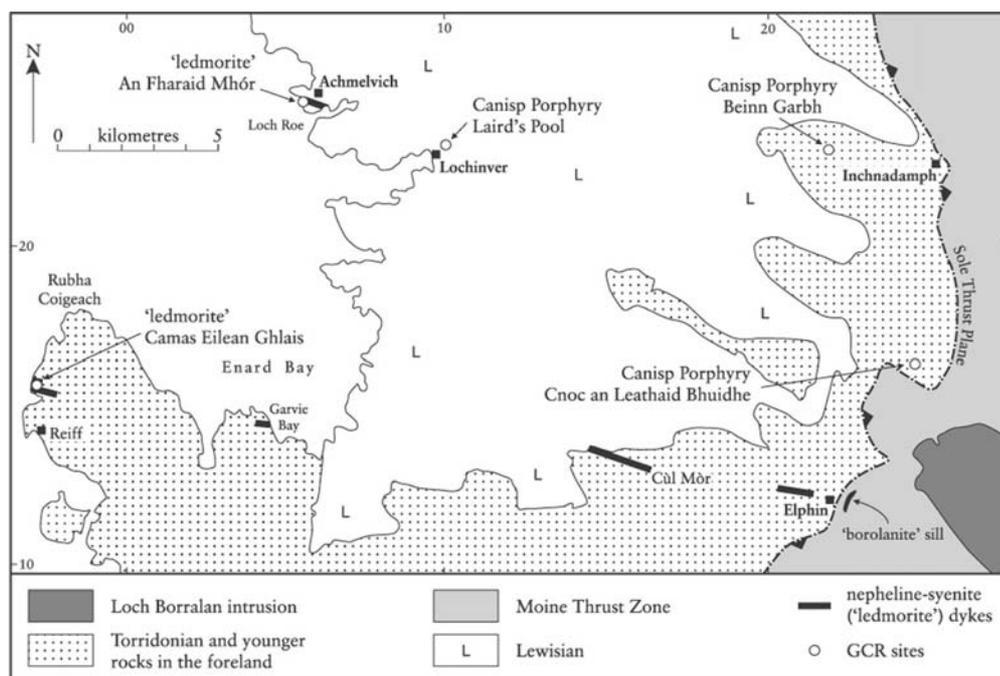


Figure 7.13: Map of western Assynt showing distribution of nepheline-syenite ('ledmorite') dykes in the Foreland and their relationship to the Loch Borralan nepheline-syenites in the Moine thrust zone. GCR sites exemplifying the 'ledmorite' dykes and the Canisp Porphyry are also shown. The full extent of the Canisp Porphyry around Beinn Garbh is shown on Figure 7.15.

Interpretation

In view of the appearance and orientation of this dyke there seems every reason to correlate the rock with the Canisp Porphyry. It therefore represents the most westerly expression of Canisp Porphyry magmatism at the surface and, like the nepheline-syenite dykes farther west at Achmelvich (see the An Fharaid Mhór GCR site report, Figure 7.13) clearly shows that the alkaline magmatism was fundamentally a product of the Lewisian Foreland and the rocks beneath. The main focus of alkaline magmatism in Assynt is therefore incidentally related to the thrust belt rather than being in some way genetically connected to it. The Canisp Porphyry cuts Lewisian rocks at a number of localities in the Foreland (see Geological Survey special sheet) where it forms dykes; in the overlying sedimentary rocks it almost invariably forms sills.

Conclusions

The Laird's Pool GCR site is the most westerly example of Canisp Porphyry. Here it occurs as a dyke cutting Lewisian gneiss, which provides evidence for the widespread character of Canisp Porphyry magmatism and its relationship with the rocks of the Foreland.