

CNOC AN LEATHAID BHUIDHE

OS Grid Reference: NC235154

Description

The exposure at this locality is poor and the main interest is in the structural implications. The Geological Survey (Peach *et al.*, 1892) mapped a sill of Canisp Porphyry cutting the Pipe Rock on the slopes of Cnoc an Leathaid Bhuidhe to the west of Loch Awe (Figure 7.15). The outcrop extends towards the Sole Thrust but is obscured in poorly exposed ground to the west of Loch Awe. There is no sign of the sill to the east of Loch Awe, where Salterella Grit, Fucoïd Beds and Durness Group dolomitic limestones both above and below the Sole Thrust are exposed. Unfortunately, in the critical area, the loch itself and surrounding bog intervene so that possible truncation of the dyke by the Sole Thrust cannot be proved.

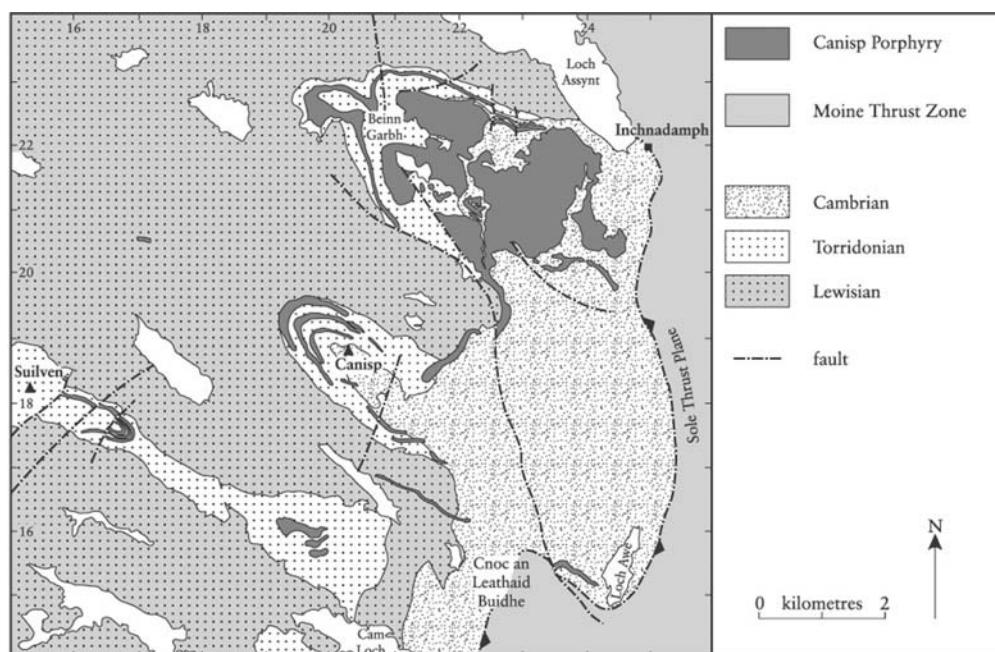


Figure 7.15: Distribution of sills and dykes of Canisp Porphyry in the Foreland. The dyke at the Laird's Pool, Lochinver, is farther to the west (see Figure 7.13). Only faults that affect Canisp Porphyry are shown. (After the Geological Survey special sheet for Assynt, 1923.)

Interpretation

The relationship of this Canisp Porphyry sill to the surrounding rocks suggests, but does not prove, that its emplacement preceded all movements on the Sole Thrust. However, the very widespread development of Canisp Porphyry in the Foreland, and its complete absence from the thrust sheets to the east, strongly suggests that this phase of magmatism occurred early in the history of the alkaline magmatism in Assynt.

Conclusions

The Cnoc an Leathaid Bhuidhe GCR site covers ground in which a sill of Canisp Porphyry approaches most closely the Sole Thrust from the west (in the Foreland), but is not exposed in the thrust zone to the east, providing evidence that Canisp Porphyry magmatism preceded movements on the Sole Thrust. Taken together with the absence of the porphyry from the thrust belt, this suggests that its emplacement pre-dated all thrust movements in Assynt.