## **Luban Croma**

[NC 281 135]

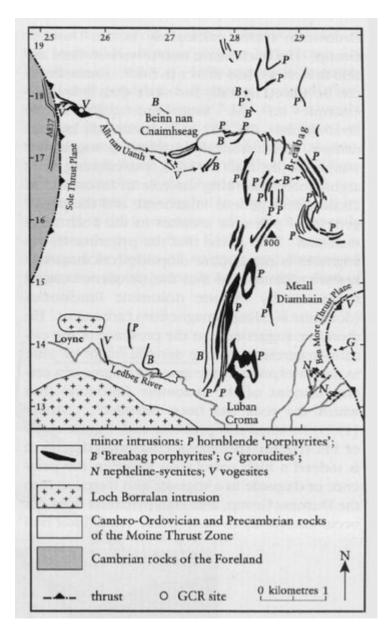
## Description

The site is a relatively accessible and representative part of a large area of barren, well-exposed ground to the north of the Loch Borralan intrusion (Figure 7.16). It is largely composed of Cambrian Pipe Rock, with some Fucoid Beds, cut by a large number of sills mainly of 'hornblende porphyrite'. Sabine (1953) provided a map of this part of Assynt which forms the basis of (Figure 7.16). This shows the distribution of 'hornblende porphyrites', vogesites (see below), nepheline-syenite dykes representing outliers of the Loch Borralan mass, and a localized hypabyssal rock, which Sabine called the 'Breabag Porphyrite'. The latter occur as sills, 3–9 m thick, cropping out in a narrow belt about 5 km x 1.5 km between the Ledbeg River and the ridge of Breabag (Figure 7.16). All save one example (perhaps not *in situ*, according to Sabine) of this petrographical type occur in the Sole thrust sheet, i.e. below the Ben More Thrust. In hand specimen they have superficial similarities to fine-grained Canisp Porphyry but in section they prove to be microdiorites, with glomeroporphyritic aggregates of feldspar and phenocrysts of hornblende, set in a matrix of K-feldspar with a little quartz. Sabine's map gives a good impression of the variety of hypabyssal intrusive rocks found in this part of Assynt.

## Interpretation and conclusions

The Luban Croma GCR site represents the wide variety of minor intrusions that can be demonstrated in this part of Assynt, including 'hornblende porphyrites' and a spatially restricted variety known as the 'Breabag Porphyrites'. It is possible that this variant provides a relative age-marker, because, like the 'grorudites', they must have been emplaced prior to movements on the Ben More thrust plane.

References



(Figure 7.16) Distribution of sills and dykes between the Luban Croma and Allt nan Uamh sites, north of the Loch Borralan intrusion. (After Sabine, 1953, fig. 8.)