NWHG Ref. 010 — Foinaven

Location, grid reference and photograph

The Foinaven site occupies a vast mountainous area extending for over 15 km from the head of Loch Eriboll to Loch Stack, Grid Ref. [NC 383 527]–[NC 327 460].

(Figure 15) Imbricates in Cambrian quartzite, Foinaven., BGS Photo P571776 — K M Goodenough.

GCR site reference, block, volume and notified feature of SSSI?

GCR Ref. N/A, Moine Block, Vol. 34. Notification proposed for Foinaven SSSI.

Description and geological significance

The Foinaven site contains some of the most continuous exposure of thrusts in the British Isles and includes the type example of duplex structure. It contains exceptional examples of thrust structures in the Moine Thrust Belt, including classic examples of duplexes involving Cambrian quartzites and subsidiary dolomitic shales (Fucoid Beds). Near three-dimensional exposures of thrust geometry are some of the best to be found in Europe.

Accessibility

Access is very limited due to the remote and mountainous nature of this area, requiring a very long walk over difficult and arduous terrain by suitably equipped and experienced people. No all abilities access.

Conservation

Low conservation requirement due to scale and location of site area.

Visibility and "clarity"

The visibility is excellent and the key features are very clear to geological specialists, once the respective locations have been accessed The visual impact is high and the site area is truly dramatic and inspiring to both specialists and the lay-public.

Interpretation and interpretation potential

The site area is commonly used by geology students and researchers to illustrate the range and complexity of structural geometries which can result from repeated imbrications and ramp-flat thrust surfaces in addition to providing excellent sections across parts of the Moine Thrust Belt. There are no interpretation panels, and such a panel would, due to the scale and remote location of the site area, not be appropriate. Nonetheless, such an important area should certainly be included in a future Geopark guide and may merit the development of a guided walk for the general public as well as for specialists. Considerable potential as an educational resource.

Key references

BOYER, S.E. & ELLIOTT, D. 1982. Thrust systems. Bulletin of the American Association of Petroleum Geologists, 66, 1196–1230.

BUTLER, R.W.H. 2009. Foinaven. In Mendum, J. R., Barber, A. J., Butler, R. W. H., Flinn, D., Goodenough, K. M., Krabbendam, M., Park, R. G. & Stewart, A. D. (eds) Lewisian, Torridonian and Moine rocks of Scotland. Geological Conservation Review Series, 34, Joint Nature Conservation Committee, Peterborough, 261–267.



(Figure 15) Imbricates in Cambrian quartzite, Foinaven., BGS Photo P571776 — K M Goodenough.