Site Name: Gelli Goch Thrust Grid Reference: SH 73420031

RIGS Category: Educational & Scientific

Earth Science Category: Structural Geology and Ordovician (Ashgill) & Silurian (Llandovery)

Stratigraphy

Geology 1:50,000: BGS Sheet 149, Cadair Idris

RIGS Statement of Interest:

The site comprises an area spanning the A 487 trunk road about 2 km (1 mile) SW of Machynlleth, and includes natural exposures, a small quarry, and cuttings in the modern and former A 487 road. The key interest is the Gelli Goch Thrust, an important N-S fault zone that carried older rocks eastward over younger rocks, probably during the Caledonian Orogeny. Major thrust faults are rare in the Welsh Basin so attention is drawn to this one. The fault is not exposed at the surface but its position is inferred from the locations of different rock formations on either side, as seen at outcrop, and from landscape features. The site has excellent educational potential, notably for training in various geological mapping techniques.

Surveyed by: W.R. Fitches & R. Cave