

**Site Name: Coed Cerrig-mawr Track Section**      **Grid Ref: SN 679869**

**RIGS Category:** Educational & Scientific

**Earth Science Category:** Structural Geology

**Geology 1:50,000:** BGS Sheet 163, Aberystwyth

**RIGS Statement of Interest:**

Coed Cerrig-mawr Track Section is of regional geological importance for its spectacular array of Caledonian structures. These structures are developed within dark grey mudstones of the Cwmere Formation, the lowermost unit of the Silurian succession in the Aberystwyth district, which is well exposed in a 10 m high cutting on the northern edge of a forest track below Plantation Mawr. Although sheet dip is towards the west, reflecting a position on the western flank of the Machynlleth Inlier, the Cwmere Formation at this locality has been folded into a spectacular series of small-scale anticlines and synclines. The folds are upright with wavelengths of only a few metres and exhibit either a horizontal or only gentle plunge. These folds are cut by a closely spaced cleavage that generally dips steeply towards the west and displays refraction through more arenaceous lithologies in the Cwmere Formation as well as fanning around the fold hinges. Cleavage intensity also increases adjacent to several steeply dipping faults that cut the Cwmere Formation. Some faults are clearly brittle, being characterized by thin brecciated zones containing fragments of country rock. Other faults appear to be associated with narrow zones of high intensity deformation and may therefore be more ductile structures, perhaps akin to shear zones. All fault zones are characterized by variable degrees of brown and green mineral staining.

**Surveyed by:** R. Mathews