

**Site Name: Cwm Rhiw-gam**

**Grid Reference: SN 7935 9445**

**RIGS Category:** Aesthetic, Educational & Scientific

**Earth Science Category:** Quaternary & Geomorphology

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

**RIGS Statement of Interest:**

The site displays two ridges which were constructed of rock fragments, clay and silty sand during later stages of the Ice-Age probably in part, at least, 12,900 to 11,500 years ago during the Younger Dryas glacial event. The ridges are clearly visible in the landscape and their position within a huge, high-walled rock amphitheatre (cirque) is magnificently displayed. Material that makes up the ridges is well-exposed in ravines cut by small streams, giving rare opportunity to study the interior of this type of landform. The age or ages of these features are open to question and their origin remains uncertain. They are either moraines dumped by a melting cirque glacier as it retreated up-valley as the climate warmed, or pronival ramparts formed by rock fragments falling from the cirque walls onto a stationary sloping snow-field and accumulating at its foot. These glacial features are exceptionally rare in Central Wales. The site provides excellent opportunities for Quaternary research, such as pollen analysis for dating the ridges and coring to examine the ridge-fills. This information would contribute to an understanding of the effects of global climate change on the Welsh landscape.

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