
15 Ty'n-y-groes to Gwynfynydd

The walk starts (Figure 36) from the Forestry Commission car park [SH 7300 2341] on the banks of the Mawddach opposite the Ty'n-y-groes hotel, which is on the main A470 Dolgellau –Trawsfynydd road. This popular, easy walk is used by tourists visiting the Gwynfynydd gold mine. It follows Forestry Commission roads mostly through mature forest along the Afon Mawddach for about 4.5 km to the gold mine.

Locality 1 [SH 73019 23388] Looking westwards through the trees, the terraces on the opposite bank of the river are clearly visible. In late glacial or immediate post-glacial times, outwash carried down the Mawddach valley from the retreating glaciers blocked the valley at least down to its confluence with the Las and Wen valleys. Subsequently the blockage was breached and the terraces, five in all, have formed as the Mawddach gradually cut down to its present base level.

On the banks of the Mawddach about 100 m N of Locality 1 are outcrops of grey slaty beds of the Maentwrog Formation. The cleavage is practically coincident with the bedding, and it is possible to collect *Olenus gibbosus*, *Glyptagnostus reticulatus* and *Homagnostus obesus*, which indicate the *Olenus* Zone of the Merioneth Series.

Locality 2 [SH 72888 24213] The cutting here, a little north of a small stream, exposes about 6 m of the uppermost terrace. It is composed of poorly sorted and stratified cobbly gravels in a sandy silt matrix. In places the gravels have a hard ferruginous cement. Soliflucted clay with abundant shale fragments overlies the uppermost silty gravel.

Locality 3 [SH 73252 24942] About 200 m SW of the footbridge, light grey, banded silty mudstone with laminae and beds up to 12 cm thick of white, quartzose fine sandstone of the Maentwrog Formation are exposed. A sill, just over a metre thick, of grey feldspar-porphry shows perfectly concordant and sharp contacts. There are numerous exposures in road cuttings, and in the river bed north of here and at the footbridge gentle undulations in the bedding are clearly seen.

Locality 4 [SH 73583 25404] Just beyond the road fork a small anticline is exposed in a culvert on the low road. Such minor folds are common, but major folds, which disturb the regional north–south strike and the overall eastward dip, are uncommon. The rocks, with mudstone beds up to 15 cm thick, are typical of the lower part of the Maentwrog Formation.

Locality 5 [SH 73649 25881] Grey microtonalite, which is pyritic and locally altered, is exposed.

Locality 6 [SH 73597 25940] A partly filled trial level on the eastern side of the road is one of many in the area. The trial, probably for gold, followed a quartz-vein in dolerite. This area, however, is within the pyrite-rich zone surrounding the Coed-y-Brenin porphyry copper deposit (Excursion 4), and the green and blue secondary copper minerals staining the walls of the excavation show that the rock contains chalcopyrite in addition to pyrite.

Locality 7 [SH 73571 26559] Green dolerite is exposed just past a turn-off to the right which leads to the Turf mine and the porphyry copper deposit at Capel Hermon.

Locality 8 [SH 73552 26702] The exposure, due east of the old Tyddyn Gwladys gold mine, is in rocks transitional between the Gamlan and Clogau formations. Compact, grey banded siltstone, with beds of fine quartzose sandstone up to 60 cm thick, overlies 60 cm of black mudstone, which in turn overlies dark grey mudstone with thin beds of quartzose siltstone and pyrite laminae. The underlying Gamlan Formation is exposed in the river. At the southern end of the exposure a dolerite dyke, 2 m thick, intrudes the sedimentary rocks. All the rock types at this locality include much pyrite, both disseminated and in veinlets, some of which also contain chalcopyrite.

Locality 9 [SH 73750 27085] The large road cutting, opposite an old, overgrown stone building, is in rocks of the Gamlan Formation. Mostly it consists of grey siltstone with thin sandstone beds and laminae of pinkish manganiferous rock composed of spessartine and quartz. The outcrop is crossed by a low-angle fault. The fault plane shows slickensides and black manganese staining. A few metres beyond the small stream a steep normal fault is exposed. The strata on the downthrow side, which contain a thin sill, are more broken than on the upthrow side. All the rocks are heavily stained with

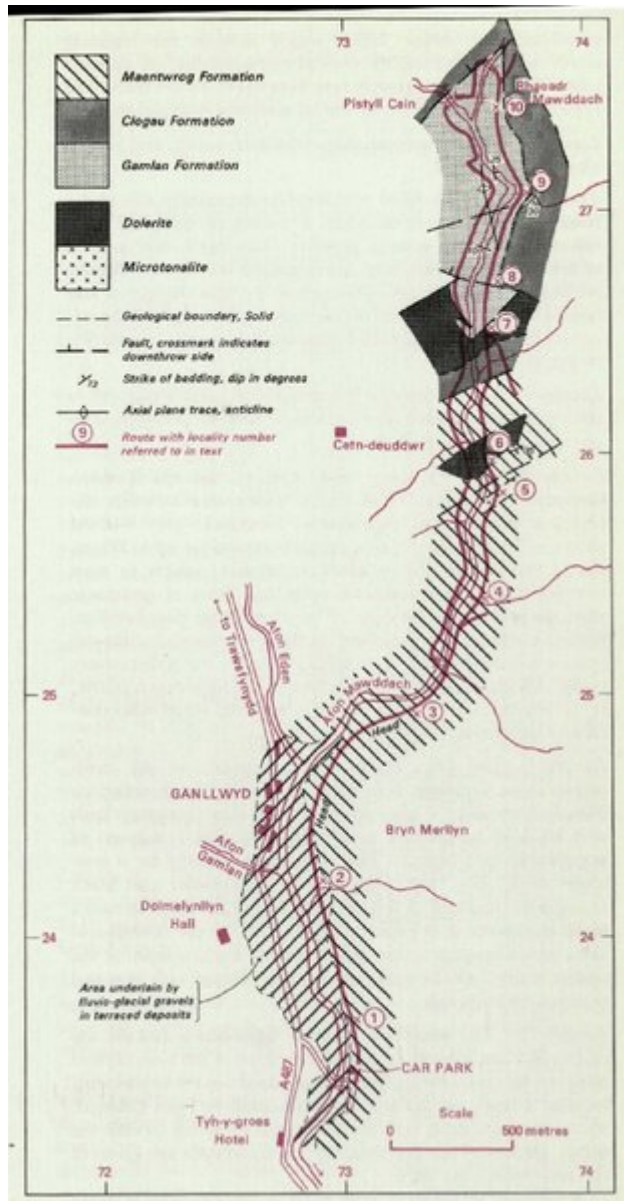
iron and manganese minerals.

Locality 10 [SH 73636 27461] The waterfalls Rhaiadr Mawddach and the top of Pistyll Cain as well as part of the ruins of the Gwynfynydd Mill can be viewed from here. A hundred metres beyond this locality a track on the left leads downhill to Pont Gilrhyd. Here, turn south to visit the mill ruins or north to visit the mine. Details of the privately owned mine area are given in the next walk (No. 16).

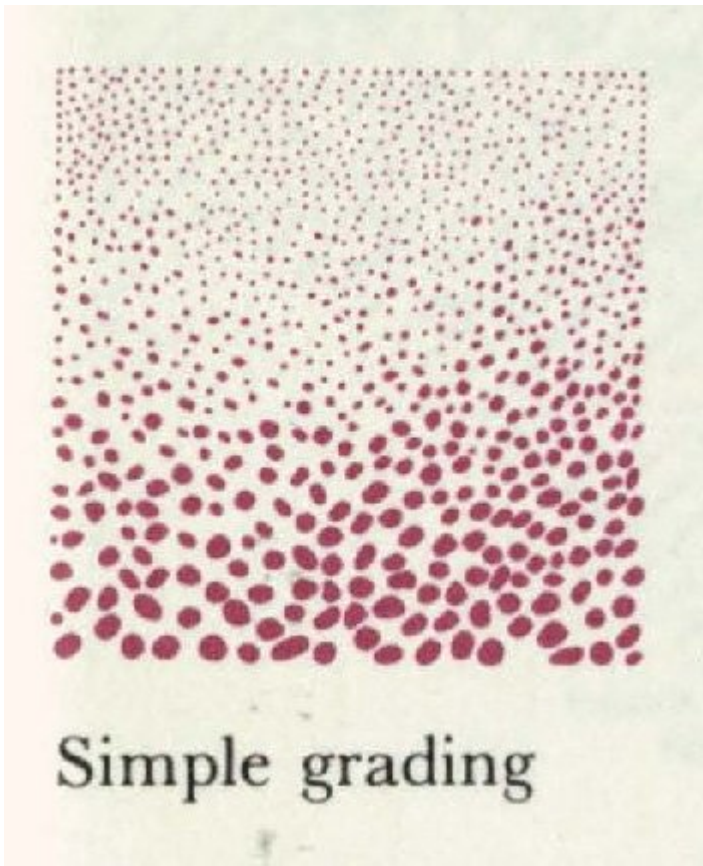
A pleasant alternative walk back to the car park is along the west bank of the river. Cross Pont Gilrhyd, then follow the path through the mill ruins to cross the bridge over the Afon Gain below Pistyll Cain. From there follow the track southwards, by-passing Ferndale by taking the short footpath on to the forestry road about 150 m S of the mill ruins. The track leads to a footbridge across the Mawddach near Locality 3.

(Figure 59) Simple grading.

References



(Figure 36) Ty'n-y-groes to Gwynfynydd (No. 15).



(Figure 59) Simple grading.